Government of Nepal

Ministry of Forest and Environment (MoFE)

Ministry of Industry, Commerce and Supplies (MoICS)

And

Department of Environment (DoE)

Nepal Clean Air for Prosperity (CAP) Project

Stakeholder Engagement Plan (SEP)

November 2025

Contents

Executive Summary

The Government of Nepal (GoN), with support from the World Bank, is implementing the Nepal Clean Air for Prosperity (CAP) Project to address the severe air pollution affecting the Kathmandu Valley and Terai region. The project aims to reduce emissions from key industrial sources in a cost-effective manner while improving public health and strengthening the nation's air quality monitoring, governance, and enforcement systems. The project includes four components. Component 1 is designed to provide technical capacity and financial incentives to SMEs for promoting cleaner technologies and fuels operating boiler and policy endorsement, monitoring and enforcement on industrial pollution abatement. Component 2 will upgrade monitoring system and enhance decision support system through setting of emission and air quality standards and stricter enforcement of pollution standards for improved air quality. Component 3 is for project management, monitoring and capacity building and component 4 entails Bank's contingent financing mechanisms available to governments to gain rapid access to Bank financing to respond to a crisis or emergency.

The SEP of Nepal CAP Project is designed in alignment with the World Bank's Environmental and Social Framework (ESF), and particularly Environmental and Social Standard (ESS) 10 on Stakeholder Engagement and Information Disclosure. The SEP ensures a participatory, transparent, and inclusive approach to engage stakeholders, manage feedback, and operate an accessible grievance redress mechanism. Based on the project design and nature and potential risks, the SEP identifies three key stakeholder groups: (i) Affected Parties, including small and medium enterprises (SMEs) adopting cleaner energy, nearby communities, industry workers, and waste-affected municipalities; (ii) Other Interested Parties, such as government ministries and departments, financial institutions, and technology vendors; and (iii) Disadvantaged and Vulnerable Households, including women and indigenous-owned enterprises, small remote businesses, and marginalized workers. Stakeholder engagement activities will include public meetings, consultations, workshops, publications, media outreach, and updates through websites, with special efforts to engage these stakeholders and vulnerable groups through focused, small-group interactions in local languages.

The SEP will be implemented by the by Project Implementing Units (PIUs) at Ministry of Industry, Commerce and Supplies (MoICS) and Department of Environment (DoE) under Ministry of Forests and Environment (MoFE) for Component 1 and Component 2 respectively. Social and environmental specialists at these units will support SEP activities throughout the project lifecycle. A two-tier Grievance Redress Mechanism (GRM) will be in place at each PIU to address stakeholder concerns promptly and effectively, including provisions for escalating unresolved issues and addressing cases of sexual exploitation and abuse or sexual harassment (SEA/SH) through a specialized survivor-centric approach. Participating Financial Intermediaries (FI) of the project will also be required to maintain GRM systems consistent with the project's framework.

The total estimated budget for SEP implementation is NPR 50.9 million. The PIUs will review and update the SEP biannually to reflect evolving stakeholder dynamics and project developments. The PIU will provide quarterly report on GRM performance: grievances received and resolved.

Abbreviations and Acronyms

AEPC	Alternative Energy Promotion Center
AQM	Air Quality Monitoring
AQMS	Air Quality Monitoring Station
CAP	Clean Air for Prosperity
CERC	Contingency Emergency Response Component
CNI	Confederation of Nepalese Industries
DoC	Department of Customs
DoE	Department of Environment
DoFSC	Department of Forests and Soil Conservation
DoLOS	Department of Labor and Occupational Safety
DoTM	Department of Transport Management
DPs	Development Partners
E&S	Environment and Social
EA	Environmental Assessment
ESCP	Environment Social Commitment Plan
ESF	Environmental and Social Framework
ESMF	Environmental Social Management Framework
ESIA	Environment and Social Impact Assessment
ESIRT	Environment and Social Incident Report Template
ESS	Environmental and Social Standard
E & S	Environmental and Social
FCDO	Foreign, Commonwealth & Development Office
FGDs	Focal Group Discussions
FI	Financial Intermediary
FNCCI	Federation of Nepalese Chambers of Commerce and Industry
GESI	Gender Equality and Social Inclusion
GFP	Grievance Focal Point
GHG	Green House Gases
GoN	Government of Nepal
GRM	Grievance Redress Mechanism
ICIMOD	International Centre for Integrated Mountain Development
IGP-HF	Indo-Gangetic Plain-Himalayan Foothills

INGO	International Non-Government Organization
IP	Indigenous People
LMP	Labour Management Procedures
MoALD	Ministry of Agriculture and Livestock Development
MoEWRI	Ministry of Energy, Water Resources, and Irrigation
MoF	Ministry of Finance
MoFE	Ministry of Forests and Environment
MoHA	Ministry of Home Affairs
MoHP	Ministry of Health and Population
MoICS	Ministry of Industry, Commerce and Supply
MoITFE	Ministry of Industries, Tourism, Forests and Environment
NA	Not Applicable
NBSM	Nepal Bureau of Standards and Metrology
NEA	Nepal Electricity Authority
NEFIN	Nepal Federation of Indigenous Nationalities
NGO	Non-Government Organization
NPC	National Planning Commission
PIU	Project Implementation Unit
PSC	Project Steering Committee
SEA/SH	Sexual Exploitation, Abuse/Sexual Harassment
SEP	Stakeholder Engagement Plan
SPFD	Science-Policy and Finance Dialogue
WB	World Bank

1 Introduction/Project Description

The Government of Nepal (GoN), with support from the World Bank, is implementing the Nepal Clean Air for Prosperity (CAP) Project to address severe air pollution in the Kathmandu Valley and Terai region. The project focuses on cost-effective emission reductions from key industrial sources that significantly impact public health. Additionally, it aims to enhance air quality monitoring, governance, and enforcement nationwide. The CAP Project's primary objectives are to (1) accelerate and cost-effectively reduce emissions from targeted industrial and commercial sources that are primary contributors to air pollution in the Kathmandu Valley and Terai region and (2) strengthen air quality monitoring, governance, and enforcement in the country.

1.1 Project Components

The project will have the following four core components:

Component 1: Adopting cleaner production technologies to reduce PM$_{2.5}$ emissions: Component-1 will support enterprises (industrial and commercial) to adopt cleaner technologies, including boilers and furnaces operating on cleaner fuels. The project will focus predominately on small and medium enterprises (SMEs) that operate boilers and furnaces using fossil fuels (coal, diesel, and oil), as well as inefficient boilers and furnaces using biomass. The clean technology adoption survey carried out during the project preparation identified food and beverage, textile, chemical, pharmaceutical, steel, hospitality, and hospitals as the main category of industries that operate boilers. The project will target these industries, in addition to the other industries that operate boilers on fossil fuels.

The project aims to support SMEs in adopting cleaner production (combustion) technologies through three distinct interventions: 1. Support switching to electric boilers and furnaces, either by replacing an existing boiler or installation of a new one; 2. Support enterprises that are unable to convert to electric boilers, to adopt pellet boilers or furnaces, either through new installation or retrofitting existing equipment with necessary modifications to the heating systems, fuel handling and loading mechanisms and efficient emission control devices; and 3. Support the installation of efficient emission control devices (bag filters, wet scrubbers, etc.) in industries that could not convert to electric boilers or pellet boilers (due to technical and/or financial constraints). The project will not support cyclone separators/filters (currently the most common emission control system for biomass and wood-fired boilers), which have proven to be ineffective in reducing PM2.5.

Component 1 has three sub-components: 1.1: Building MSME readiness for clean technology adoption through comprehensive knowledge, awareness and technical support to help selected enterprises identify, install, and operate cleaner technologies and fuels, and secure financing provided under Subcomponent 1.2. This will support enterprises to conduct technical and financial viability studies and prepare Detailed Project Reports for the conversion of boilers to operate on cleaner fuels. Qualified technical and financial expert will be hired by the project implementing agency for this purpose. They will also provide support to the PFIs for carrying out the loan appraisals. In additional, this subcomponent will support clean technology awareness campaigns and outreach with industrial enterprises, and vendor engagement programs to mobilize both enterprises and technology providers toward the project objectives. Comprehensive training and capacity building programs for the staff of implementing agencies and other stakeholders, including boiler operating enterprises and technology providers, will also be carried out through this subcomponent.

Subcomponent 1.2: Financing clean technology adoptions - will provide financial incentives to eligible enterprises through Financial Intermediaries (FIs), supporting their transition to cleaner technologies. All three technology options; electric boilers/furnaces, pellet-based systems, and emissions-control equipment; will be financed at market interest rates but with extended repayment periods. A dedicated financing mechanism will be established under this subcomponent, involving a Handling Bank (HB) and multiple Participating Financial Institutions (PFIs), operating under the oversight of Nepal Rastra Bank (NRB). The PIU-MoICS – throughout the duration of the project, will be supported by a Clean Industry Implementation Team (CIIT), comprising of diverse experts such as industrial engineering, energy-efficiency, environmental and social risk management, management, gender, and stakeholder engagement.

Subcomponent 1.3. Monitoring and quality control assurance – will support the policy, monitoring, and

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enforcement for industrial pollution abatement. This subcomponent will establish a comprehensive monitoring and verification system led by Department of Industry (DoI) and Department of Labour and Occupational Safety (DoLOS) to ensure the successful adoption and proper functioning of cleaner technologies in enterprises. This subcomponent will also finance two Performance-Based Conditions (PBC). The first PBC (PBC-1) will allow industries to claim terminal depreciation on replaced fossil fuel boilers and furnaces, eliminating tax liability and freeing up cash for clean technology investments. The second PBC (PBC-2) will support the introduction of 20 percent rebate on applicable corporate income tax for five years for firms installing clean technology equipment, directly reducing tax liability and boosting profitability to incentivize cleaner technology solutions.

Component 2: Strengthening Air Quality Management through enhanced monitoring and enforcement. Component-2 will strengthen the GoN's air quality management by reinforcing regulatory foundations, enhancing institutional capacity for enforcement, and improving monitoring of existing pollution sources.

Component 2 has three sub-components: 2.1 Strengthen air quality monitoring and information systems[1] will support the upgrade and expansion of the MoFE/DOE-managed air quality monitoring network across Nepal and build the capacity of DoE, provincial environmental ministries, the private sector, and universities to improve data quality and coverage and information dissemination to policymakers and the public. These activities will include: (a) repairing and upgrading of existing particle measurement sensors and infrastructure (including shelters and auxiliaries like safety-, security-, and climate control features); (b) expanding the network with five new AQM monitoring stations; (c) building capacity of MoFE/DOE staff and private sector vendors on Standard Operating Procedures and Quality Assurance/Quality Control (QA/QC) protocols to maintain and manage the AQ network; (d) conducting source apportionment study and building sustainable capacity for this practice; (e) enhancing the existing air quality laboratory to achieve data quality objectives; (f) providing public access to air quality data and health messaging; (g) enhancing data management features for accessibility, automatic validation and data security that ensures data is accessible, interoperable, and reusable; (h) adding monitoring capacity for unregulated pollutants including volatile organic compounds, carcinogen polycyclic aromatic hydrocarbons; (i) enhancing monitoring capacity of greenhouse gas emissions, black carbon, and short-lived climate pollutants; (j) designing and conducting an extensive stack emissions monitoring campaign for industrial sources (such as cement, boilers, furnaces, and brick kilns) to support emission data collection, reduction monitoring, and enforcement. Based on the improved data systems, the project will strengthen DoE's capacity to provide data-driven public health recommendations that help individuals, schools, and public officials take protective actions to reduce exposure and protect public health. This sub-component will seek the collaboration of local universities to train future engineers and technicians, and to build air quality and emission monitoring training capacities. Universities will also be engaged to support source apportionment studies and passive sampling and delivering training workshops for the private sector.

Sub-component 2.2- Strengthening industrial emissions enforcement, governance and regulations. It will finance the following activities: (i) strengthening emission standards and (ii) strengthening enforcement capacity.

Sub-component 2.3 National and Regional AQM Planning, Coordination, Partnership and Policy Assessment. The project will support DoE's partnership with academic institution. The project will finance the development of a national emission inventory, conduct source apportionment analysis and explore other opportunities for collaboration between DoE and the academic institutions such as managing air quality monitoring stations; performing periodic updates of the national inventory to inform policy and action plans; conducting training or facilitating knowledge exchanges, and conducting policy assessment studies.

Component 3. Project management, monitoring, and capacity building. This component will support the establishment of the Project Implementation Units (PIUs) at MoICS and DoE, respectively. This component will finance the costs associated with the key project staff, day-to-day-functioning of the PIUs,

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[1] Strengthening 30 existing air quality monitoring stations in Nepal, through installing power supply and communication infrastructure and upgrading an adequate number of stations to monitor additional pollutants, such as black carbon dioxide(BC), Sulfur Dioxide (SO2), Nitrogen Oxide (NOX), and Ozone (O3). This will also include expanding up to five new AQM monitoring stations to ensure equitable coverage of the monitoring network depending on population exposure, industrial concentration, trans boundary air pollution etc.

office set up and equipment, and other project costs. In addition, this component will also finance consultancies/service-providers to support day-to-day implementation of the project activities, coordination and monitoring and evaluation.

Component 4: Contingency emergency response component (CERC): The CERC is one of the Bank's contingent financing mechanisms available to governments to gain rapid access to Bank financing to respond to a crisis or emergency. Following an eligible crisis or emergency, the Borrower may request the Bank to re-allocate project funds to support emergency response and reconstruction. This component would draw from the uncommitted credit resources under the project from other project components to cover emergency response. A CERC Annex to the Project Operations Manual (POM) will detail out the provisions for activating and implementing CERC, including operational, fiduciary, E&S, and technical detail.

1.2 Project Location

The proposed project will be implemented Kathmandu Valley, IGP-HF of Terai (plain) area and existing and planned AQMS encompassing Koshi, Madesh, Bagmati, Gandaki, Lumbini, Karnali and Sudurpaschim covering total area of Nepal.

2 Objective/Description of SEP

The Nepal CAP project is being prepared under the World Bank Environment and Social Framework (ESF). The overall objective of this SEP is to define a program for stakeholder engagement, including public information disclosure and consultation throughout the entire project cycle. The SEP outlines the ways in which the NCAP will communicate with stakeholders and includes a mechanism by which people can raise concerns, provide feedback, or make complaints about the project and any activities related to the project. The SEP specifically emphasizes methods to engage groups considered most vulnerable and that are at risk of being left out of project benefits.

For the purposes of this SEP, as defined in the World Bank ESF, "stakeholder" refers to individuals or groups who:

(i) are impacted or likely to be impacted directly or indirectly, positively or adversely, by the project (also known as **'affected parties'**); and,

(ii) may have an interest in the project (**'interested parties'**) and include individuals or groups whose interests may be affected by the project and who have the potential to influence the project outcomes in any way.

Its specific objectives are as follows:

- To establish a methodical approach for stakeholder engagement, enabling the Nepal CAP project to identify stakeholders and build and maintain positive relationships, particularly with project-affected parties throughout the project life cycle.
- To incorporate views of stakeholders into project design and enhance the project's environmental and social sustainability.
- To promote and facilitate effective, inclusive engagement with project-affected and other interested parties throughout the project lifecycle on issues that may impact them.
- To ensure timely, understandable, accessible, and appropriately formatted disclosure of project information on environmental and social risks and impacts to stakeholders.
- To provide project-affected parties with accessible and inclusive channels to raise issues and grievances, enabling the Nepal CAP project to respond to and address them effectively

The SEP has been consulted with relevant stakeholders. It will be disclosed in Nepal by MoICS and DoE and on the World Bank website. The SEP is a "**living document**" that will be updated as the project progresses. If there are materially significant changes to the SEP, the document will be re-disclosed in country and on the World Bank website.

3 Stakeholder identification and analysis per project components

3.1 Methodology

For the CAP Project, the following stakeholders have been identified and analyzed per project component. These stakeholders include affected parties (as defined in section 3.2), other interested parties (as defined in section 3.3) and disadvantaged/vulnerable individuals or groups (as defined in section 3.4).

3.2 Affected Parties

They include population in the project area that may be directly impacted by the project activities and/or have been identified as most susceptible to the change associated with the project, and who need to be closely engaged in identifying impacts, as well as in decision-making on mitigation and management measures. Specifically, the following individuals and groups fall within this category.

Table 3.1: List of possible project-affected parties by components

Components of the Nepal CAP project	Possible Affected Parties
Component 1: Accelerating Cleaner Production in Targeted Enterprises	• Small and medium Industries/enterprises interested in cleaner energy adoptions. • Local community residing adjacent to the interested industries/enterprises • Industry workers • Industrial District Management • Affected Municipalities in waste management
Component 2: Enhancing Air Quality Monitoring, Policy Setting, Enforcement Capacity, and Regional Cooperation	• Municipality, hospitals, national parks, university premises housing AQM stations • Local community residing adjacent to air quality monitoring stations
Component 3: Project Management, Monitoring, and Learning	NA
Component 4: Contingency Emergency Response Component (CERC)	• The CERC is one of the Bank's contingent financing mechanisms available to governments to gain rapid access to Bank financing to respond to a crisis or emergency Following an eligible crisis or emergency, the Borrower may request the Bank to re-allocate project funds to support emergency response and reconstruction. Related stakeholders for this component will be determined later and reflected in the CERC Annex included in the POM.

3.3 Other interested parties

Other interested parties are individuals or groups interested in the project for various reasons, including professional, economic, political, social, or environmental concerns. These stakeholders extend beyond the directly affected communities and encompass a broader range of entities. The table below provides a detailed list of these interested parties, highlighting their relevance and potential involvement in the project.

Table 3.2: List of possible interested parties categorized by components

Interested parties	Interest in the project
International Level	
Environmental I/NGOs and Activists, NGOs working on IPs and Human rights, Gender Activists	• Understanding the project's impacts, the effectiveness of mitigation measures, and associated opportunities.
Development partners and Agencies (DPs)	• Project management and replicability, technical expertise and lessons learned
ICIMOD	• Technical support to IGP-HF countries in transboundary air quality management.
World Health Organization	• Provides research and publishes guidelines based on the evidences
Academics and researchers	• Possible research work at the project site to provide scientific knowledge of the project's risks, impacts and opportunities.
Federal Level	
Parliament	• Constitutional body that approves Fiscal Year Budget Bill with "Green Tax". • Approves and amends Finance Act and Income Tax Act
OPMCM (Cabinet)	• Primary executing body of Nepal for formulating, approving and enforcement of industrial emission standards. • Approves DoE organogram for increasing AQM staff.
National Planning Commission,	• Ensuring alignment of Nepal CAP project with National Industrial Policy, 2022 and national development goals.
Ministry of Federal Affairs and General Administration (MoFAGA)	• Primary executing agency in initiating recruitment process for Government staffs.
Nepal Rastra Bank (NRB)	• Provides access to multiple Partner Financial Institutions (PFIs) with line of credit
Department of Printing (DoP)	• Primary Government agency for publishing Parliament ratified Acts, Cabinet approved emission standards, custom tariffs for public disclosure and enforcement in Nepal Gazette.
Ministry of Forest and Environment (MoFE)	• Primary executing agency for formulation, implementing and enforcing environmental protection policies. • Performs Air Quality Science-Policy and Finance Dialogue (SPFD) meetings with the IGP-HF countries. • Ensures compliance with environmental regulations
Ministry of Industry, Commerce and Supply (MoICS)	• Primary executing agency in formulating, implementing and enforcing industrial development policies • Supports in policy formulation, monitoring, and enforcement on industrial pollution abatement • Ensure an enabling environment for the cleaner energy adoption in the industries
Department of Environment (DoE)	• Leading agency in environmental monitoring and enforcement of environmental regulations • Support in formulating and enforcing policies for the environment protections
Department of Industry (DoI)	• Ensure implementation, monitoring and enforcement of policies on industrial pollution abatement
Department of Customs (DoC)	• Facilitate in import of cleaner technologies and impose custom duty
Department of Labor and Occupational Safety (DoLOS)	• Ensure implementation, monitoring and enforcement of labor policies

Department of Transport management (DoTM)	• Enforce and monitor pollution standards for vehicles
Alternative Energy Promotion Center (AEPC)	• Support and promote the use of renewable energy technologies and energy efficiency to meet energy needs
Nepal Electricity Authority (NEA)	• Responsible for electrical energy distribution and construction and operation of feeder lines
Nepal Bureau of Standards and Metrology (NBSM)	• Provide service for lot certification and pre-shipment inspection, as well as laboratory recognition
Ministry of Finance (MoF)	• Facilitate funding agreements with international donors • Formulate, implement and enforce policies in green production
Industrial District Management	• Ensure an enabling environment for the cleaner energy adoption in the industries within its jurisdiction
Banks and Financial Institutions	• Interest in designing and piloting a viable credit line for cleaner fuel based and pellet manufacturing SME establishment and improvement
Boiler vendors and Suppliers	• Supply and installation of cleaner boilers, furnace and kilns
FNCCI and CNI	• Convene and convince industries to adopt cleaner industrial technologies and processes
Chambers of Commerce and business associations	• Explore potential business opportunities unveiled by the project activities
Labor Trade Unions	• Advocate for labor rights
NGOs with a focus on E&S Gender issues, IPs and Dalit rights issues	• Represent interests of different interested parties and vulnerable groups
Media (Federal to Local level)	• facilitate information dissemination, accountability transparency, stakeholder interest, project publicity, and amplifying local community concerns.
Nepal Federation of Indigenous Nationalities (NEFIN)	• Represent interests of Indigenous groups
Tribhuvan University/Kathmandu University	• Support DoE on connecting science to policy on broader air quality management agenda
Academic institutions such as universities and think tanks	• Research/study opportunities for the students on various issues related to the impact of air pollution
Provincial Level (Koshi, Madhesh, Bagmati, Gandaki, Lumbini, Karnali and Sudurpashmin Province) and Local Levels	
Provincial Ministry of Industry, Tourism, Forest and Environment	• Ensure an enabling environment for the cleaner energy adoption in the industries within its jurisdiction • Formulating, monitoring and enforcement of ambient air quality and sectoral air quality standards aligning national standards • Issuing permits and "No Objection" as per the provincial laws • Compliance monitoring on E&S risks and impacts of industries on its jurisdiction
Provincial Social Development Ministry	• Social impacts (positive and negative) of the project activities and contribution to the social development of the project
Local levels	• Manage waste generated from boiler replacement in the landfill sites operated by the Local Levels • Monitoring of national and provincial ambient and sectoral air quality standards • Support DoE in establishing and operating of air quality monitoring stations • Managing various E&S risks and impacts triggered by the project, including managing, inquiries and grievances. • Issuing permits and "No Objection" as per the local laws

Provincial Planning Commission	• Economic development and development planning in industrial and internalization of air pollution issues in development planning
Provincial Ministry of Industry, Tourism, Forest and Environment	• Formulating, monitoring and enforcement of ambient air quality and sectoral air quality standards aligning national standards • Possible impacts on E&S include forest-tree clearance, management of compensatory tree plantation, and leasing of forest land. • Issuing permits and "No Objection" as per the provincial laws • Compliance monitoring on E&S risks and impacts of industries on its jurisdiction
Elected officials from the affected municipalities	• Managing various E&S risks and impacts triggered by the project, including hearing of complaints and grievances. • Issuing permits and "No Objection" as per the local laws
Other communities residing in the area not directly affected by the project	• E&S risks, benefits, and opportunities unveiled by the project
Chambers of Commerce and business associations (FNCCI and CNI provincial and local level chapters)	• Business opportunities unveiled by the project activities
Mass Media (FM/community radios, newspapers, TV channels, and social media, including Facebook and Twitter, among others)	• Provide information and news about the project to their listeners, • Accountability for project/public funds • Represents public interest
District offices such as the District Administration Office, District Coordination Committee, Division Forest Office, Land Revenue Office, Land Survey Office	• Maintaining law and order, managing disputes, and facilitating land acquisition and compensation payments • Coordinating development activities in the district

3.4 Disadvantaged/vulnerable individual and groups

Within the Project, the vulnerable or disadvantaged groups may include but are not limited to the following:

Table 3.3: List of disadvantaged/vulnerable groups categorized by components

Components of the Nepal CAP Project	Disadvantaged/vulnerable individuals or groups	Possible barriers to information and project benefits
Component 1: Accelerating Cleaner Production in Targeted Enterprises		
Subcomponent 1.2: Incentives provided through a dedicated financing mechanism to promote cleaner technologies and fuels	• Enterprises headed/owned by women or IPs • Smaller enterprises esp. located in remote areas • Women workers of the participating enterprises • PWDs, IP and Dalit workers in enterprises	• Lack of timely information on project activities and benefits • Unable to meet FI screening criteria • Unable to participate in consultations organized by the project due to location, timing and social and financial conditions
• Component 2: Enhancing Air Quality Monitoring, Policy Setting, Enforcement Capacity, and Regional Cooperation		

Components of the Nepal CAP Project	Disadvantaged/vulnerable individuals or groups	Possible barriers to information and project benefits
Sub-component: 2.1 Strengthen air quality monitoring	• IPs, including Dalits, Children, Elderly, People with disabilities residing near new expansion of AQMS	• Lack of timely information on project activities and benefits • Unable to participate in consultations organized by the project due to location, timing and social and financial conditions
Component 3: Project Management, Monitoring, and Learning	• NA	• NA
Component 4: Contingency Emergency Response Component (CERC)	• Related disadvantaged/vulnerable groups for this component will be determined later and reflected in the CERC Annex in the POM	• Possible barriers to information and project benefits for this component will be identified later

 As the project progress, vulnerable groups within the affected community will be further confirmed, included, and consulted with, as necessary. The SEP incorporates 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.

4 Stakeholder Engagement Program

4.1 Summary of Preliminary Stakeholder Consultation

For the preparation of this project, and the preliminary stakeholder engagements were carried out with MoICS and DoE on February 23, 2025 at their respective offices and with private pellet manufacturing SME on April 25, 2025 through phone conversation. In April 2025, there were dedicated consultations with female led-enterprises to assess the challenges they face in accessing financing and gage their interest in the project. A joint consultation work was conducted in the on July 30, 2025 for discussion on NCAP Environmental and Social risk management documents ESMF, SEP and LMP. The meeting participants included representatives from MoICS, MoFE, DoE, DoI and DoLOS government officials as well as independent environmental experts/consultants working in industrial sector. The comments and suggestions provided during the preliminary consultations informed project design. Once the documents were in an advanced draft, they were consulted with various stakeholders. Consultations were held separately by MoICS on November 4, 2025 and DoE on November 24, 2025. Both MoICS and DOE will disclosed the ESMF and SEP on their website.

The table below provides a brief summary of consultations during project preparation. Minutes of consultations of the ESMF and SEP are included in Annex 10 of this document.

Table 4.1: Summary of preliminary consultations during project preparation

Date	Stakeholders	Key Issues raised/discussed by the stakeholders	Responses by project (if any)
February 23, 2025	MoICS (Environmental Inspector)	• Project should focus on larger industries such as cement industries that are the major emitter of air pollutant rather than focusing on SMEs	• These stakeholders will also be taken into account in the future.
February 23, 2025	DoE (Undersecretary-Pollution section and Environmental Inspector)	• DoE is upgrading existing AQMS through its own budget and may not require project investment for upgrading of existing AQMS stations and therefore project needs to invest on establishment of additional AQMS • Challenge lies in operation and maintaining of AQMS rather than in upgrading and expansion of AQMS and therefore, operational and maintenance responsibility needs to be linked with the provincial government environment ministry and local level	• Project will support in expansion and upgrading of AQMS and DoE laboratory • Project will include capacity building trainings for operation and maintenance of AQMS for provincial government environmental ministry and local levels having AQMS
April 22, 2025	Women-led Enterprises	• Barrier to credit • Reliability of electricity supply	• The project will offer three different financing schemed

		• Prohibitively high costs of loans	• The project offers different options to transition to clean energy solutions
April 25, 2025	Pellet manufacturing SME	• Project should identify the adequacy of biomass raw materials for establishment of new pellet industry such that the industry should be established near to the community, collaborative, leasehold or private forest for cheap pellet manufacturing	• Identified issues will be integrated in the project design
June 30, 2025	Representatives from MoICS, DoI DoE, DoLOS and Independent Environmental Experts/Consultants	• Project has stressed on the industrial fuels as the principal contributor for PM2.5 pollution in Nepal and has discarded other prominent sources/contributor such as forest fire, transport sector, domestic sector. Therefore, the background of the project needs to be revised. • The literature presented in the Environment and Social baseline of the ESMF is referred only to World Bank sources and completely lags the GoN study documents. Revision or addition of GoN study outcomes needs to be presented in the baseline of the ESMF. • The rationale of the project needs to be clear so that the GoN implementing parties can convince the SMEs in cleaner energy adoption. There should be some incentives for such SMEs transforming the boilers which are currently functioning smoothly. • While Small and Medium Enterprises (SMEs) have expressed willingness to access financing through Financial Intermediaries (FIs), it is important to assess this arrangement thoroughly. This includes evaluating SMEs' capacity to meet FI requirements, understanding potential barriers to access,	• This project is designed to initiate the transformation in adopting cleaner fuel technology in industrial sector and therefore background is presented accordingly. Industrial emissions have been identified as number one source in our detailed analysis. Other major air pollution sources (such as transport and cooking with biomass) will also be supported in future. • Relevant GoN literature will be included in the ESMF and will be revised accordingly. • The World Bank, in coordination with GoN implementing agencies, will organize a discussion meeting for the project design. • All the national legal requirements need to be fulfilled for the execution of project activity. EPA, 2019, EPR, 2020 and the WB ESF 2018 process shall be followed for any activities in the protected areas and prior required clearance from concerned agency needs to be received before execution. The exclusion criteria listed in ESMF will be revised allowing upgrading of existing AQMS in national parks. • Categorization of project affected parties for component 2 will be revised by including municipality, hospitals, national parks and university housing AQM stations. • The implementing GoN agencies MoICS, DoE and DoI will review the ESMF, SEP and LMP and will jointly finalize the E&S documents with the World Bank Team.

		and ensuring that adequate technical and financial support mechanisms are in place to facilitate the transition. A detailed assessment is necessary to confirm whether this approach is feasible, inclusive, and aligned with the project's objectives. • The air quality monitoring station operated by DoE are in national parks, the protected areas and therefore the exclusion criteria for bidding upgrading of such stations needs to be excluded from the exclusion criteria list or conditional requirement such as getting approval from concerned agency needs to add. • The air quality monitoring stations are generally operated in the municipality, hospital, national parks, and university premises. Therefore, these institutions are to be categorized as project affected parties for component 2 project activities. • Personnel Protective Equipment is not the ultimate measure/solution in mitigating Occupational, Health and Safety risks and impacts. Suggested including hazard identification, risk assessment, hierarchy of control preventive approach to mitigate Occupational, Health and Safety risks and impacts. • As the Labor Act of Nepal does not include a provision for annual renewal of labour contracts, this requirement should be revised accordingly. • If the project is to comply with the Labor Act of Nepal, the hiring of primary suppliers must be done	

		through labour organizations that are officially certified to supply labour. This means that only those labour supply agencies that are registered and recognized by the relevant government authority should be engaged. Ensuring compliance with this provision helps safeguard workers' rights, maintain legal standards, and reduce risks associated with informal or unregulated labour supply chains. • Please include the legal requirement of labour audit in policies and procedures section of LMP. • The documents to be finalized and publicly disclosed.	
November 4, 2025	Key agencies and stakeholders. The full list included in Annex 10	• Project design and objective of the project • Key E&S risks of the project • Purpose of the ESMF • Other factors contributing to Air quality – forest fires, coal • Whether the project considered other sources of cleaner energy • Reliability of energy • Challenges of revenue generation • Role of small scale forest-based enterprises • Detail check for assessing environmental and social risk for credit extension is also included in the ESRM	• The project will offer 3 different financing scheme and different options to transition to cleaner energy sources. It will support industries that chooses cleaner technologies. • Project will provide grant in up-front capital cost • Project focuses on SMES< but will not support brick industries • Fis will screen enterprises, including for E&S • This project is just a start in air quality management • Academic institutions will be involved
November 13, 2025	Key agencies and stakeholders. The full list included in Annex 10	• Need to strengthen documents on air pollution sources • Need for strong regional cooperation • Need for strong enforcement policies • Sustainable air quality monitoring • Upgrade of monitoring stations	• The main goal of the project is to improve the air quality standards of Nepal • The project is of small scale and potential E&S risks from implementation of this component is minimal • DoE will improve the ESMF and SEP document addressing the project relevant comments and suggestions received from the stakeholders

		• Strong communication with a broad range of stakeholders • Ensure strong enforcement	• Enforcement of air quality monitoring standard process is broadly discussed and will be critically discussed • Communication and information sharing is part of Stakeholder engagement and is part of the project design

4.2 Summary of project stakeholder needs and methods, tools, and techniques for stakeholder engagement

The Stakeholder Engagement Plan below outlines the engagement process and methods, including sequencing, topics of consultations, and target stakeholders during project implementation. The World Bank and the Borrower do not tolerate reprisals and retaliation against project stakeholders who share their views about Bank-financed projects.

Table 4.2 SEP: Summary Table

SEP Summary Table for Component 1					
Project Stage	**Target Stakeholder**	**Topic of Consultation/Message**	**Methods Proposed**	**Responsibility**	**Frequency**
Implementation	• Boilers, furnace, kilns-based industries/enterprises • Parliamentarians • OPMCM • National Planning Commission • MoF • MoITF • DoE, DoC, DoI, DoLOS • NEA • Industrial District Management • Affected Municipalities • Community members in the project areas • IP and Dalit organizations, women groups, local youths • FNCCI, CNI and sectoral	• To engage effectively and provide feedback in policy, strategy and law-making process and enforcement in the federal structure of governance for industrial pollution abatement • To provide information on the provisions made in Finance Act and Income Tax Act on Green Tax. • To provide information on the industrial emission standard and national ambient air quality standard (NAAQS) for industrial pollution abatement. • To provide information about project activities and opportunities • To inform/train on ESMF, GESI, GRM, SEA/SH complaints process, LMP, SEP and other E&S documents	• Public meetings, workshops. consultations, one-to-one meeting upon request, letters, emails • Information dissemination through leaflets, info boards, public notice, project websites, use of different media, FM Radios, Mobile Group Messages • Use Nepali as well as local languages while providing information and during consultations. • Exposure visits/Trainings During Multi-stakeholder forums • Well-functioning GRM system • GRM mechanism built in into FI's ESMS	• PIU-MOICS • FIs	Intensive outreach during grant cycle Minimum 1 yearly each formal stakeholder consultation with Province, and local level and When needed in community and settlement

Project Stage	Target Stakeholder	Topic of Consultation/Message	Methods Proposed	Responsibility	Frequency
	• industry organizations • Trade Unions • Tribhuvan University, Kathmandu University and recognized research organizations	• To arrange or/ensure potential applicants outreach, • To facilitate the grant application process to the interested parties • Provide project updates and receive feedback. • Explain contractor ESMP			

SEP Summary Table for Component 2

Project Stage	Target Stakeholder	Topic of Consultation/Message	Methods Proposed	Responsibility	Frequency
Implementation	• National Planning Commission • MoITF, DoE, DoI, DoTM, NBSM • NEA • AEPC • ICIMOD, AEPC, • Affected Municipalities • FNCCI, CNI and sectoral industry organizations • Tribhuvan University, Kathmandu University and recognized research organizations	• To engage effectively and provide feedback in policy, strategy and law-making process and enforcement in the federal structure of governance • To provide information on the industrial emission standard for industrial pollution abatement and national ambient air quality standard (NAAQS). • To provide information about project activities and opportunities • To inform/train on ESMF, GESI, GRM, SEA/SH complaints process, LMP, SEP and other E&S documents • Provide project updates and receive feedback. • Explain contractor ESMP	• Email/ letter correspondence • Circulars • Consultation Meetings • Workshops • Information dissemination through leaflets, info boards, project websites, use of different media, FM Radios, Mobile Group Messages • Use Nepali as well as local languages while providing information and during consultations.	PIU - MOICS PIU-DoE	Minimum 1 yearly formal stakeholder consultation with Province, and local level and When needed in community and settlement

4.3 Proposed strategy to incorporate the views of vulnerable groups

The project will seek the views of the vulnerable groups listed in Table 3.3. The following measures presented in table 4.3 will be taken to remove obstacles and enable full participation/access to information.

Table 4.3: Strategy to incorporate the views of vulnerable groups

Vulnerable stakeholder	Methods proposed	Responsibility	Frequency
	• Use of female facilitators	PIU-MOICs FI through ESMS PIU-DoE	During the preparation of E&S

Women-owned/managed enterprises Women workers of the participating enterprises Women residing near the enterprises and new AQMS	• Suitable time and locations as devised by the vulnerable groups • Ensure culturally appropriate consultations • FGDs, formal and group meetings • One-to-one meeting upon request • Phone conversations		documents/technical documents As and when needed throughout the project cycle
IP-owned/managed enterprises IP workers in enterprises IPs residing near the enterprises and new AQMS	• Use local IP facilitators to hold small group meetings in local IP languages, explaining materials and assisting with feedback, grievances, and information for those with language or literacy issues. • Suitable time and locations as suggested by the IPs • Ensure culturally appropriate consultations • Scheduled community consultations • FGDs, formal and group meetings • One-to-one meeting upon request • Phone conversations	PIU-MOICs FI PIU-DoE	During the preparation of E&S documents/technical documents As and when needed throughout the project cycle
Dalit--owned/managed enterprises Dalit workers in enterprises Dalits residing near the enterprises and new AQMS	• Use local facilitators to hold small group meetings, explaining materials and assisting with feedback, grievances, and information for those with language or literacy issues. • Suitable time and locations as suggested by the Dalits • Ensure culturally appropriate consultations • Scheduled community consultations • FGDs, formal and group meetings • One-to-one meeting upon request • Phone conversations	PIU-MOICS FI PIU- DoE	During the preparation of E&S documents/technical documents As and when needed throughout the project cycle

Vulnerable employees such as PWDs	• Use local facilitators to hold small group meetings, explaining materials and assisting with feedback, grievances, and information for those with language or literacy issues. • Suitable time and locations as suggested by the vulnerable employees • Ensure culturally appropriate consultations • Scheduled consultations • FGDs, formal and group meetings • One-to-one meeting upon request • Phone conversations	PIU-MOICS FI	During the preparation of E&S documents/technical documents As and when needed throughout the project cycle

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5 Resources and responsibilities for implementing activities

5.1 Implementation arrangement and resources

The Nepal CAP Project will oversee the implementation of stakeholder engagement activities. The entities and individuals responsible for carrying out stakeholder engagement activities are described below:

Table 5.1: Stakeholder engagement entities and individuals

Responsible person	Responsibilities
PIU - MoICS Joint Secretary- Industrial Technology and Planning Division	• Take a lead role in the implementation of the SEP for Component-1, including the functioning of the GRM in an inclusive and transparent manner, organization of periodic meaningful consultations with the stakeholders and vulnerable communities, and ensuring timely disclosure of project-related information • Preparing and approving the annual budget for the SEP implementation and managing, monitoring and supervising the overall implementation of the SEP, including securing required financial resources and other logistics • Updating the SEP to accommodate any changes and take corrective actions immediately as and when required. • Coordinate the SEP activities among the provincial agencies, Local Levels and other project stakeholders. • Preparation and dissemination of quarterly SEP implementation reports
PIU - DoE Deputy Director General	• Take a lead role in the implementation of the SEP for Component-2, including the functioning of the GRM in an inclusive and transparent manner, organization of periodic meaningful consultations with the stakeholders and vulnerable communities, and ensuring timely disclosure of project-related information • Preparing and approving the annual budget for the SEP implementation and managing, monitoring and supervising the overall implementation of the SEP, including securing required financial resources and other logistics • Updating the SEP to accommodate any changes and take corrective actions immediately as and when required. • Coordinate the SEP activities among the provincial agencies and Local Levels. • Preparation and dissemination of quarterly SEP implementation reports
Social Specialist at PIU- MOICS and PIU-DOE	• Support NPM of PIU-MOICS and PIU-DOE for SEP and GRM implementation. The Social Specialist to serve as the focal point on SEP and GRM • Manage process documentation, stakeholder database, commitment registers, training, and capacity building • Update SEP for changes and take immediate corrective actions the SEP • Coordinate the SEP activities with provincial agencies and Local Levels. • Support preparation and dissemination of quarterly SEP reports • Lead implementation of SEA/SH risk mitigation measures in documents like SEP, LMP, Environment and Social Management Plan (ESMP)/Environment and Social Code of Practice (ESCoP) prepared for the project components • Conduct regular consultations in safe and enabling spaces. • Ensure that issues related to Gender and GBV, SEA/SH are covered in consultation sessions and E&S safeguards documents.

Responsible person	Responsibilities
Environmental Specialist at PIU-MOiCS and PIU-DOE	• Contribute to consultation process • Advise on technical environmental issues • Help address concern or grievances related on environmental issues • Provide back stop support to social specialist on SEP and GRM implementation.

5.2 Budget (To be finalized with the project)

A tentative budget for implementing the stakeholder engagement plan over the project period is NRs 50,900,000 (US$ 368,840). Nepal CAP Project will review this plan every six months to determine if any changes to stakeholder classification or engagement are required. If so, the plan will be updated, and a new revision will be redisclosed, with corresponding budget. The detailed budget breakdown is provided in Annex 2.

6   Grievance Redress Mechanism (GRM)

A Grievance Mechanism is a system designed to handle grievances, queries, suggestions, feedback, and concerns from project-affected parties and the general public, including those related to the project's environmental and social performance, to be submitted and responded to in a timely manner. This GRM will also incorporate specific procedures to address SEA/SH allegations/complaints/grievances that may arise from project activities in participating municipalities and provinces.

6.1   Description of the grievance redress mechanism

MoICS, and DoE have existing grievance management systems and focal points, as mandated by Nepal's Good Governance framework (2008 Act and 2009 Rules) in addressing the grievances within their scope area. However, to ensure project related grievances, concerns and complaints of project stakeholders including beneficiaries are promptly addressed, a project-specific GRM, an extension of the institutional structures, will be set up. The project GRM will not impede the existing GRM at MoICS and DoE, but will build on it and tailor the design to project needs. Mechanism will be established to uptake the project related grievances through multiple intake points into the project GRM system.

The GRM will have a single level model in both PIU-MOICS and PIU-DOE to receive and address component-wise project-related feedback and grievances. The GRM at PIU-MOICS will oversee the project related grievances for Component 1 including that of FI and GRM at PIU-DOE will oversee the project related grievances for Component 2. GRM at both the PIUs will have multi-entry point to uptake the grievances and once the project related grievance is registered, it will be channelized into the project GRM. Both PIUs will include information about their GRM as part of their general reporting to the Project Steering Committee (PSC).

The social specialist at PIU-MOICS and the environmental and social specialist at PIU-DoE will act as a GRM and SEA/SH and GBV focal person. These specialists will receive additional training to receive, register, and facilitation resolution of the SEA/SH complaints. The SEA/SH allegations will be recorded in the survivor's own words, will be anonymous and receive consent of the survivor to collect and share information. A guidance note on SEA/SH incident response will be developed.

The GRM is required to assess and address grievances within fifteen (15) days. If the complaint is not satisfactorily resolved at this stage, it escalates to the second level.

Every FI will be required to have a grievance mechanism as part of its ESMS. The Fis' ESMS will be screened for compliance with the ESF, including for the SEA/SH requirements. There will be a protocol in place to manage SEA/SH grievances. All grievances that come to FI will be screened through the FI ESMS. If no resolution for a grievance is found, it will then be passed on to the responsible PIU GRM. FI will regularly report on the number of grievances received and resolved per the agreed actions in the project Environmental and Social Commitment Plan.

Once a grievance is resolved, the complainant receives a formal closure notification summarizing the actions taken and the final decision. If the complainant remains dissatisfied or if a grievance remains unresolved , they will be informed about the appeal process and legal recourse as per the Government of Nepal's grievance policies. Additionally, the complainant has the right to legal recourse at any time during the process.

The grievance hearing process is designed to systematically address complaints and issues raised by stakeholders. It ensures transparency, inclusivity, and fairness in resolving grievances within a specified timeframe. The project GRM is explained in the table 6.1 below.
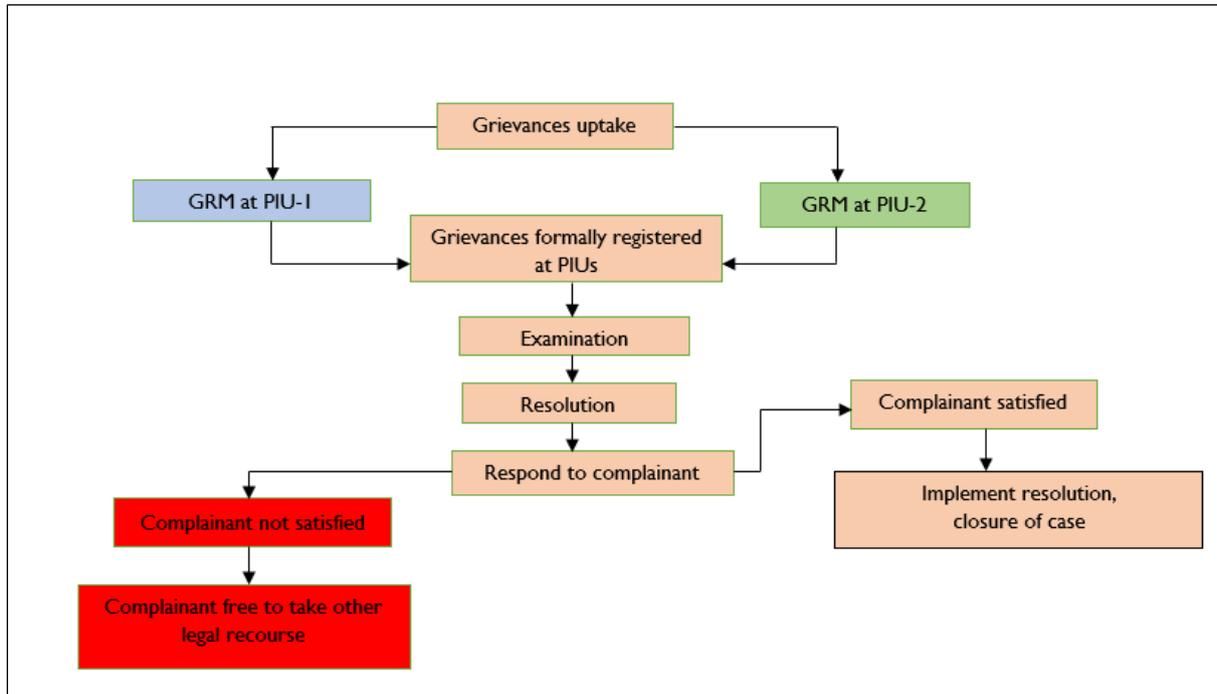
Figure 1: Flow chart of Grievance redress mechanism

Table 6.1: Illustrative table on GRM steps

Step	Description of Process	Time Frame	Responsibility
GRM implementation structure	• GRM will be established at PIU - MOICS and PIU- DoE-. GRM at MoICS/DoI will oversee the project related grievances for Component 1 including that of FI and GRM at DoE will oversee the project related grievances for Component 2. The social specialist will act as a GRM and SEA/SH and GBV focal person. This GRM is required to assess and address grievances within fifteen (15) days. FI ESMS will include the GRM for resolving grievances that come from participating enterprises. If grievances are not resolved by the ESMS they will be re-directed to the PIU MOICS GRM.	15 days	PIU-MOICS PIU-DOE
Grievance uptake	Grievances can be submitted via the following channels: • Verbally: face-to-face, phone call • written: complaint box, mail (letters) • project email, website • SMS • Judicial Committee of participating municipalities (Project related grievances will be forwarded to the respective PIUs)	Regular	PIU-MOICS PIU-DoE
Sorting, processing	A digital grievance register will be maintained, and any complaint received is forwarded to each GRM, logged in the register, and categorized according to the following complaint types: 1) **Nature of grievances** (Social, environmental, technical, financial, or administrative., 2) **Severity of the issue**: Minor, moderate, or critical. 3) **Stakeholder involvement:** Individual complaint, community issue, or institutional concern. 4) **Urgency:** Cases requiring immediate action versus those that can follow a standard resolution process	Upon receipt of a complaint	GRM focal points at PIU-MOICS and PIU- DOE
Acknowledgment and follow-up	• Receipt of the grievance is acknowledged to the complainant by a unique grievance number from designated GRM handling officer . GRM officers will update the periodic status of grievances. • Once a grievance is resolved, the complainant receives a formal closure notification summarizing the actions taken and the final decision. If the complainant remains dissatisfied, they are informed about the appeal process and legal recourse as per the Government of Nepal's grievance policies	Within 2 days of receipt	GRM Focal Person at PIU-MOICS and PIU-DOE
Verification, investigation, action	• The head of the GRM leads the investigation of the complaint.	Within 10 working days	PIU-MOICS and PIU-DOE

	● Evidence is gathered, and relevant stakeholders are consulted to assess the validity of the complaint. ● The resolution is communicated to the complainant by the project grievance focal person or the responsible authority at the respective level		
Monitoring and evaluation	Data on complaints are collected in the grievance registry/database and reported to the World Bank.	Quarterly to WB from both PIUs on respective components	PIU-MOICS and PIU-DOE/ WB
Provision of feedback	Feedback from complainants regarding their satisfaction with complaint resolution is collected through follow-up surveys, direct interviews, or feedback forms.	Quarterly	PIU-MOICS PIU-DOE
Training	Training needs for staff/consultants in the PIUs, Contractors, and Supervision Consultants are as follows: **1. Training for PIUs Staff and Consultants** **Understanding the GRM Framework**: Overview of grievance handling procedures, roles, and responsibilities. **Grievance Documentation & Record-Keeping**: Training on maintaining grievance registries, recording complaints, and updating databases. **Investigation & Verification Techniques**: Methods for investigating complaints, gathering evidence, and ensuring transparency. **Stakeholder Engagement & Communication**: Best practices for interacting with complainants, conducting meetings, and responding effectively. **Legal & Policy Framework**: Understanding national laws, environmental and social safeguards, and donor policies related to grievances. **Monitoring & Reporting**: Training on data collection, analysis, and preparing periodic grievance reports **2. Training for Contractors/Vendors** **Awareness of GRM Process**: Understanding how the grievance redress system works and its role in addressing complaints. **Handling Worker & Community Grievances:** Procedures for resolving labor-related and community concerns effectively. **Health, Safety, and Environmental (HSE) Complaints**: Addressing worker safety, pollution, and environmental issues. **Reporting Mechanisms:** Guidelines for documenting and reporting grievances to the PIUs. Training will be done as soon as the project is effective and follow -up trainings will be done prior the initiation of activities through FIs under Comp1.2. and before installation of AQM equipment under Comp 2. The trainings can be delivered in person or virtually		PIU-MOICS PIU- DOE

Appeal Process	• The GRM Focal Person will formally notify the complainant about the resolution of the GRM within 7 days after the date of the notification. • If the complainant accepts the resolution, the GRM focus person will take a written statement of such acceptance and will immediately take necessary actions to implement the agreed resolution. • If a grievance remains unresolved, legal action may be pursued in accordance with the laws and provisions of the Government of Nepal.	15 days	PIU-MOICS PIU-DOE

6.2   SEA/SH GRM

The SEA/SH risk assessment for Nepal CAP Project is low. If any allegations of SEA-SH are registered through the project-level GRM, there will be a protocol developed on how to manage SEA/SH complaints. The GRM SEA/SH focal point will receive additional training on how to receive and manage such allegations.

The Grievant can file a written or verbal complaint, or a representative can file a complaint after receiving the survivor's consent. Grievances can be filed to the SEA/SH gender focal point at the project implementation units (PIUs). Complaints will be anonymous and written using the words of survivor. Once the SEA/SH protocol/ guidance is in place, it will inform on proper management of such cases. The incident is reported to the World Bank within 24 hours using ESIRT through the incident originating PIUs. .

7 Monitoring and reporting

The E&S specialists from each PIUs will monitor the SEP throughout the Project lifecycle to determine the effectiveness of the SEP, including the methods being used and the accuracy of the mapping results. Additionally, a robust mechanism will be established within the project to systematically review received grievances. This process will not only aim to address individual complaints effectively but also to identify recurring issues or systemic problems. Analysis of these grievances will inform necessary adjustments and course corrections in the project design and implementation strategies, ensuring that stakeholder concerns are meaningfully integrated and the project remains responsive and adaptive to its context.

7.1 Summary of SEP monitoring and reporting (including indicators)

The SEP will be monitored through qualitative progress reports and quantitative metrics linked to results indicators on stakeholder engagement and grievance performance. To ensure desired outcomes, the SEP will be monitored throughout the project lifecycle to determine its effectiveness, including methods used and the accuracy of the mapping results.

SEP reporting will include the following:

(i)   Progress reporting on the ESS10-Stakeholder Engagement commitments under the Environmental and Social Commitment Plan (ESCP)

(ii)   Cumulative qualitative reporting on the feedback received during SEP activities, in particular

(a) issues that have been raised that can be addressed through changes in project scope and design and reflected in the basic documentation such as the Project document, and E&S instruments, as needed.

(b) issues that have been raised and can be addressed during project implementation.

(c) issues that have been raised that are beyond the scope of the project and are better addressed through alternative projects, programs or initiatives and

(d) issues that cannot be addressed by the project due to technical, jurisdictional or excessive cost-associated reasons. Meeting minutes summarizing the attendees' views can also be annexed to the monitoring reports.

(iii)   Quantitative reporting based on the indicators is included in the SEP. An illustrative set of indicators for monitoring and reporting is included in <u>Annex 3</u>.

7.2 Reporting back to the stakeholder group

Information dissemination about AQ and clean technology is a key project design. The SEP facilitate this information dissemination and reflect inquiries and grievances that come through the project-level GRM. The stakeholder engagement will be regularly reviewed and updated as necessary to ensure effective communication with different stakeholders.

The PIUs E&S specialist, with support from the PIUs project staff, will summarize internal reports on public grievances, enquiries, and related incidents, together with the status of implementation of associated corrective/preventative actions, every month. The PIU-MOICS and PIU-DOE will prepare a quarterly y Report, which will provide detailed information on

- Stakeholder consultations organized in the review period, including questions and concerns raised by the participants and the response from the Project

- List of Project-related information disseminated to the stakeholders, including the distribution of updated FAQs or Response Report ("You Ask We Answer")
- Number of grievances recorded during the review period, their nature and categorization, the number of solved grievance and their implementation status, number of closed grievances, and unsolved grievance and their status.
- An analysis of the trend and nature of the grievance received during the review period and the recommendation of a set of probable corrective and preventive actions to minimize grievance of a specific nature.

The quarterly SEP reports will be disseminated through both PIU-MOICS and PIU-DOE, in Project Steering Committee meetings, periodic consultations with project beneficiaries and stakeholders throughout the project period.

Table 7.1: SEP reporting back to stakeholder

Stakeholders	Subjects	Means of communication
• Boilers, furnace, kilns-based industries/enterprises • National Planning Commission • MoFE • MoICS • MoF • MoITF • DoE, DoC, DoI, DoLOS • NEA • Industrial District Management • Affected Municipalities • Community members in the project areas • IP and Dalit organizations, women groups, local youths • FNCCI, CNI and sectoral industry organizations • Trade Unions • Tribhuvan University, Kathmandu University and recognized research organizations	• Status of PM2.5 emissions from industrial sources after project interventions • Status of air quality monitoring and information system after project interventions • Status of governance, regulatory reforms, policies and enforcement in air quality management system • Status update on activities initiated and implemented for regional collaboration for transboundary air quality in IGP-HF region • Businesses benefitted through project through adoption of clean energy technologies • • Provide project updates and receive feedback. • Project GRM and E&S risk management activities implementation status	• Sharing project updates and reports through emails, meetings, project websites • Project leaflets and brochures • Electronic publications as well as dissemination of hard copies • Virtual consultations • Workshops

Annex 1: Template to capture minutes/recording of consultation meetings

Date, place, and No. of participants	Summary of issues concerns/feedback	Response of Project	Agreed Follow-up Action/Next Steps

Date:
Place:
Total participants:
  Male:
  Female:			

Annex 2: Tentative budget for a five-year period

S N	Item	Quantity	NRs (@ 138 per US$)	Time/ years	Total Cost		Remarks
					NRS	**US$**	
1	**Administrative cost**						
1 a	Travel cost of Staff	40 round trip	50,000	Quarterly	2,000,000	14,493	20 travel each for PIUs
1 b	Communications for consultant and staff	-	Lump sum		400,000	2,898	@ NRs 200,000 each for PIUs
	Sub-total				**2,400,000**	**17,391**	
2	**Events**						
2 a	Periodic stakeholder consultations - Meetings/workshops/FGDs (Cost of venues, refreshments etc.)	20	250,000	Six-monthly	5,000,000	36,232	Six monthly stakeholder consultation program for 5 years to be organized by PIUs.
2 b	Logistical support for IP, Dalits, and other vulnerable groups for attending consultations		Lump Sum		1,000,000	7,246	@ NRs 500,000 each for PIUs
2 c	Individual and group consultations		Lump Sum		1,000,000	7,246	@ NRs 500,000 each for PIUs
	Sub-total				**7,000,000**	**50,724**	
3	**Communication Campaign**						
3 a	Development of communication tools, methods, and materials (Newspaper advertisements, brochures, leaflets, information booklets, posters, display boards, websites etc.)		Lumpsum		400,000	2,898	@ NRs 200,000 each for PIUs
3 b	Awareness raising programs, resources & resource persons		Lumpsum		1,000,000	7,246	@ NRs 500,000 each for PIUs
3 c	Communication and coordination/facilitation (telephone, email)		Lumpsum		400,000	2,898	@ NRs 200,000 each for PIUs
	Sub -total				**1,800,000**	**13,042**	
4	**Trainings**						

S N	Item	Quantity	NRs (@ 138 per US$)	Time/ years	Total Cost		Remarks
					NRS	US$	
4 a	Training on social/ environmental issues and OHS for PIUs and FI staff	10	250,000	Yearly	2,5000,000	18,116	1 training each per year for 5 years to be organized by PIUs.
4 b	Training on gender-based violence (GBV), SEA/SH for PIUs and FI staff	10	250,000	Yearly	2,5000,000	18,116	1 training each per year for 5 years to be organized by PIUs.
	Sub- total				**5,000,000**	**36,2324**	
5	**Beneficiary survey**						
5 a	Mid- project perception/ satisfaction survey	4	1,250,000	Two times over 5 years project period	5,000,000	36,232	2 satisfaction survey each for project to be conducted by PIUs
5 b	Periodic monitoring	20	500,000	Six-monthly	10,000,000	72,464	2 periodic monitoring yearly each for PIUs for 5 years
	Sub- total				**15,000,000**	**108,696**	
6	**Grievance redress system**						
5 a	Meetings, documentation, and record keeping/databases and reporting	-	Lumpsum		500,000	3,623	@ NRs 250,000 each for PIUs
5 b	Logistics for meetings for communications with complainants and other stakeholders	-	Lumpsum		400,000	2,898	@ NRs 200,000 each for PIUs
5 c	GRM implementation monitoring	40	200,000	Quarterly	8,000,000	57,971	Quarterly monitoring for 5 years for PIUs
5 d	Training and orientations for staff on GRM management	10	100,000	Yearly	1,000,000	7,246	1 training per year for 5 years to be organized by PIUs.
5 e	GRM communication materials		Lumpsum		400,000	2,898	@ NRs 200,000 each for PIUs
	Sub-total				**10,300,000**	**74,636**	
7	**Other Expenses**						
7 a	Documentation of stakeholder activities	20	100,000	Quartelry	2,000,000	14,493	for 5 years to be organized by PIUs

S N	Item	Quantity	NRs (@ 138 per US$)	Time/ years	Total Cost		Remarks
					NRS	US$	
7 b	Data storage and analysis		Lumpsum		400,000	2,898	@ NRs 200,000 each for PIUs for one time data acquisition and storage
7 c	Report Preparation	40	100,000	Quarterly	4,000,000	28,986	Cost for Quarterly report preparation for 5 years for PIUs
7 d	Miscellaneous		Lumpsum		3,000,000	21,739	@ NRs 1,500,000 each for PIUs
	Sub-total				**9,400,000**	**68,116**	
	Grand total				**50,900,000**	**368,840**	

Annex 3: Monitoring and reporting of the SEP

Key evaluation questions	Specific Evaluation questions	Potential Indicators	Data Collection Methods
GRM. To what extent have project-affected parties been provided with accessible and inclusive means to raise issues and grievances? Has the implementing agency responded to and managed such grievances?	• Are project-affected parties raising issues and grievances? • How quickly/effectively are the grievances resolved?	• Number of grievances that have been (i) opened, (ii) opened for more than 30 days, (iii) resolved, (iv) closed, and (v) number of responses that satisfied the complainants, during the reporting period disaggregated by category of grievance, gender, age, and location of complainant • Usage of GRM and/or feedback mechanisms • Requests for information from relevant agencies. • Use of suggestion boxes placed in the villages/project communities. • . • Number of Sexual Exploitation, and Abuse/Sexual Harassment (SEA/SH) cases reported in the project areas, which were referred for health, social, legal and security support according to the referral process in place. (if applicable) • .	Records from the implementing agency and other relevant agencies
Stakeholder engagement impact on project design and implementation. How have engagement activities made a difference in project design and implementation?	• Was there interest and support for the project? • Were there any adjustments made during project design and implementation based on the feedback received? • Was priority information disclosed to relevant parties throughout the project cycle?	• Active participation of stakeholders in activities • Number of actions taken in a timely manner in response to feedback received during consultation sessions with project-affected parties. • Number of consultation meetings and public discussions where the feedback and recommendation received is reflected in project design and implementation. • Number of disaggregated engagement sessions held, focused on at-risk groups in the project.	Stakeholder Consultation Attendance Sheets/Minutes Evaluation forms Structured surveys Social media/traditional media entries on the project results
Implementation effectiveness. Were stakeholder engagement activities effective in implementation?	• Were the activities implemented as planned? Why or why not? • Was the stakeholder engagement approach inclusive of disaggregated groups? Why or why not?	• Percentage of SEP activities implemented. • Key barriers to participation identified with stakeholder representatives. • Number of adjustments made in the stakeholder engagement approach to improve projects' outreach, inclusion and effectiveness.	Communication Strategy Periodic Focus Group Discussions Face-to-face meetings and/or FGDs with Vulnerable Groups or their representatives

Annex 4: Grievance form

Grievance Form

Grievance registration no.	
Date of registration	

Details of complainant: ☐ **(Tick the box for anonymity)**

Name:

First Name	Middle name	Last name

Gender:

☐ Male ☐ Female ☐ Others

Address:

Province	District	Municipality	Ward No.	Name of place

Contact details:

Primary mobile no.		Email	
Secondary mobile no.		Facebook	

Preferred mode of contact: _____

Brief description of grievance

Mode of submission of grievance:

☐ Verbal ☐ Written ☐ Complaint Box ☐ Phone ☐ Email ☐ Others

Signature of Complainant

Signature of Grievance Officer

Annex 5: Sample Grievance Closure Form

Grievance Closure Form
Resolution

Grievance Number	
Grievance registered date	

Describe the steps taken to resolve the grievance

Describe the resolution

Department:
Mode of communication for reply (meeting/ written/ verbal/ display):
Date closed:

Signatures
Complainant: Project representative: Date:

Annex 6: Resolution notification form

RESOLUTION NOTIFICATION FORM		
Grievance Number:		
Grievance Date:		
Resolution Date:		
GRM Level		
RESOLUTION		
On Behalf of Nepal CAP Project	**On Behalf of Nepal CAP Project**	**On Behalf of Complainant**
Prepared By	Verified By	Received By
Name	Name	Name
Date	Date	Date
Signature	Signature	Signature

Annex 7: Incident report/documenting form

Note: this form is to be filled by the designated GBV focal person of the GRM with complete sensitivity and non-biasness towards the survivor and the incident

PART 1

SURVIVOR INFORMATION

1. CASE NUMBER: (assign the Survivor a case number or incident number for confidentiality according to local coding protocols)

2. DATE AND TIME OF THE REPORT:

3. SURVIVOR AGE (DATE OF BIRTH):

4. SEX: FEMALE   MALE   OTHER (Please specify)   RATHER NOT SAY

5. SUMMARY OF INCIDENT: (A brief summary of the incident without disclosing survivor's personal information)

PART 2

INFORMATION ON SERVICE PROVIDERS

Please indicate the organization and the time of the referral from the time the incident was reported. The survivor was referred to the following services.

1. Legal counselling/support

2. Psychosocial counselling

3. Shelter

4. Medical support

5. Police

6. Child helpline/children service providers: Child Helpline: 1098

7. OCMC (One Stop Crisis Management Centre)

8. Other

STATUS OF THE CASE

In coordination with the referred service provider, please provide information on the status of the case and accordingly document it 'CLOSED' in the GM

Annex 8: Consent of release for information

Note: *The purpose of this form is to obtain the Survivor's permission to share their information about the incident with other authorized organizations/individuals. The survivor should be informed about the authorized organization/individuals (WB, project Manager, Service providers) to whom the information will be disclosed*

I, _____, give my permission for (Name of Organization) to share information about the incident I have reported.

I understand that in giving my authorization, I am giving (Name of Organization) permission to share the specific case information from my incident report with the PIC of the project/World Bank/Service Providers, so that I can receive the best possible care and assistance with safety and as per my need. I understand that the information will be treated with confidentiality and respect and shared only as needed to provide the assistance I need and request. I understand that releasing this information means that a person from the referred service provider may come to talk to me.

Signature or thumb print of the survivor:

Signature or thumb print of the parent/guardian (if survivor is under 16):

Annex 9: Environmental and Social Incident Reporting Tool (ESIRT)
(Form B & C)

Part B: To be completed by Borrower

B1: Incident Details

Date of incident intake by the project/GM:	Date Reported to PIU:	Date Reported to WBG:
Reported to project/GM by: ☐ Survivor ☐ Third party ☐ Other: _____ **Is a record of this incident in GM?** Yes ☐ No ☐	**Reported to PIU by**: ☐ GM operator ☐ Directly, by Survivor ☐ Directly, by third party ☐ Other: _____	**Reported to WBG by**: ☐ PIU ☐ Directly, by Survivor ☐ Directly, by third party ☐ Other: _____

B2: Incident type (please check all that apply) See Appendix 1 for definitions
Sexual exploitation ☐ **Sexual abuse** ☐ **Sexual harassment** ☐

B3: Provide the following details from the GM record	
Age of survivor (if recorded in GM):	Have the national legislation or mandatory reporting requirements been followed? Yes ☐ No ☐
Sex of survivor (if recorded in GM): Male ☐ Female ☐ Other ☐	Was the survivor referred to service provision?[2] Yes ☐ No ☐
Is the survivor employed by the project (as indicated by the survivor or complainant and reported in the GM)? Yes ☐ No ☐	Is the alleged perpetrator employed by the project (as indicated by the survivor or complainant and reported in the GM)? Yes ☐ No ☐

B4: Basis for further action	
a. Has the complainant provided informed consent to lodge a formal complaint? Yes ☐ No ☐	c. Has the survivor provided informed consent to be part of an investigation into misconduct? Yes ☐ No ☐
b. Does the employer have a suitable administrative process and capacity in place to investigate misconduct relating to SEA/SH in a survivor-centered way? Yes ☐ No ☐	d. Has the complaint been filed anonymously or through a third party? Yes ☐ No ☐
If the answer to any of these questions is no, has the GM assessed the risks and benefits of carrying out an investigation into the alleged misconduct, taking into account the survivor's safety and wellbeing? Yes ☐ No ☐	
Will an investigation into misconduct be undertaken in addition to an investigation into adequacy of project systems, processes or procedures? Yes ☐ No ☐	

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[2] When a complaint is filed by a third party, or the survivor has not reached out to the project, the project may not be able to confirm this information. In these cases, it may not be advisable for the project GM to attempt to reach the survivor, as this may jeopardize confidentiality, safety, and agency. Projects may attempt to find safe ways to pass information indirectly (such as through broad efforts to inform) about services available.

Annex 10 : Incident Types

Incident Type	Example
Sexual Exploitation: Any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another. In Bank financed operations/projects, sexual exploitation occurs when access to or benefit from a Bank financed Goods, Works, Non-consulting Services or Consulting Services is used to extract sexual gain.	• A community member is promised employment on the World Bank financed project site in exchange for sex • A member of the project team connecting water lines to homes requests a sexual favor for access to water connection • A project worker denies passage of a woman through the worksite unless she performs a sexual favor
Sexual Abuse: Actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions. In Bank financed operations/projects, sexual abuse occurs when a project related worker (contractor staff, subcontractor staff, supervising engineer) uses force or unequal power vis a vis a community member or colleague to perpetrate or threat to perpetrate an unwanted sexual act.	• A project worker abuses a community member • A project worker has a sexual relationship with a child • A project worker befriends a child, supporting her and/or her family in exchange of sexual favors • A project worker stays in the cafeteria after dinner and sexually assaults a kitchen staff member • A project worker touches an administrative staff member's body. • A supervisor for a subcontractor asks his female colleague to join him for a business dinner with the main contractor. After dinner he asks her to entertain "the boss" in his room as an appreciation for the contract and her work.
Sexual Harassment: Any unwelcome sexual advance, request for sexual favor, verbal or physical conduct or gesture of a sexual nature, or any other behavior of a sexual nature that might reasonably be expected or be perceived to cause offence or humiliation to another, when such conduct interferes with work, is made a condition of employment, or creates an intimidating, hostile or offensive work environment. In Bank financed operations/projects, sexual harassment occurs within the context of a subcontractor or contractor and relates to employees of the company experiencing unwelcome sexual advances or requests for sexual favor or acts of a sexual nature that are offensive and humiliating among the same company's employees.	• A worker sends sexually explicit text messages to a coworker • A colleague leaves an offensive picture that is sexually explicit on a co-worker's desk • A project worker asks all female employees to great him with a kiss on the cheek every day before work. • A project worker compliments his co-worker's body. • A project worker continuously invites a co-worker out for drinks or dinner after being told that they are not interested.

Annex 10: CONSULTATIONS RECORDS

Nepal Clean Air and Prosperity Project (NCAP)
ESMF and SEP Meeting Notes on Project Component 1 Organized by Ministry of Industry,
Commerce and Supplies (MoICS) at Hotel Basera
November 4, 2025

Discussion Summary

Objective of the consultations: to introduce the project to interested parties, discuss project design and environmental and social impacts, and proposed mitigation measures described in Environmental and Social Management Framework (ESMF) and Stakeholder Engagement Plan (SEP). ESMF and SEP were prepared for this project.

List of Stakeholders (Component 1 led my MoICS)

- Ministry of Industry Commerce and Supplies
- Nepal Electricity Authority
- Federation of Forest Based Indutries and Trade, Nepal (FenFIT)
- Shiva Baba Fabric Pvt. Ltd.
- Nepal Dana Udhyog Sangh
- Federation of Community Forestry Users Group, Nepal (FeCoFUN)
- Federation of Nepalese Chambers of Commerce and Industry (FNCCI)
- Nepal Rastra Bank (NRB)
- Department of Labour and Ocuupational Safety (DoLOS)
- Janda Devi Nepal Energy Pvt. Ltd.
- Department of Industry (DoI)
- Saria Biomass Energy Pvt. Ltd.
- Special Economic Zone Authority
- Khowpa Ceramics Pvt. Ltd.
- Confederation of Nepalese Industries (CNI)
- Federation of Nepal Brick Industries
- Industrial Zone Management Limited
- Business Oxyzen Private Equity Ventures
- Department of Environment
- Municipal Association of Nepal (MuAN)
- Alternate Energy Promotion Centre (AEPC)

Environmental and Social Framework (ESMF)
- NCAP project is planned to be implemented with support from World Bank. The primary objective of the project is improvement of air quality in the project intervention areas. The priority area for project intervention are Kathmandu Valley and Terai.
- The project has basically two components. Component 1-Accelerating Cleaner Production in targeted enterprises which will be implemented by MoICS and Component 2- Strengthening Air Quality Monitoring planned to be implemented by Department of Environment (DoE).
- The project objective is commendable. However, shifting to electric boilers is challenging because of high energy demand and unstable electricity supply. Electricity supply and voltage fluctuation is the major concern for switching towards electric boilers. Though boilers are

cheap but demands high energy and therefore the cost of production may be higher due to frequent power-cut.

- Forest fires are major contributors to air pollution in Nepal. Women groups are operating bio-mass based small enterprises that produces bio-briquettes that contributes in forest fire control. The project also needs to support these types of small enterprises that are using forest bio-mass as raw material so that forest fire can be minimized.

- Has project considered bio-briquettes as cleaner energy source? Will project only support existing industries/enterprises in operation or will also support new industries?

- The industries in eastern terai use burned Mobil in the industry which contributes in air pollution. It is mainly practiced by Dalmot (Snaks) and Aluminum industries. This needs to be immediately controlled.

- Large industries currently reliant on coal are the primary sources of air pollution and should gradually transition to using bio-briquettes and pellets to reduce emissions.

- The Government of Nepal (GoN) should promote operating shared tunnels for 10-15 industries for promoting transformation towards clean energy. Presently, the brick Kilns operating clean tunnel are financially in debt due to market insecurity. Government should support such industries for promoting and opting cleaner technology. GoN should provide subsidies/ financial incentives for such brick factories for transforming towards cleaner air technology.

- The project objective is excellent but until mechanism for revenue generation from carbon is not established then transformation towards cleaner technology may not materialize as expected.

- The presented documents do not spell on carbon calculation. Internationally, there is industrial practice for monthly, bi-yearly and yearly carbon calculation. It would be better if the project also includes carbon auditing.

- In the recent GIZ-funded program, unreliable electricity supply forced industries that had previously switched to electric boilers to revert to diesel-powered ones. Due to the instability of the power supply, these industries must also maintain diesel generators as backup even after transitioning to electric boilers.

- The industries who have opted briquettes/pellets have reported 50% increase in efficient cost production.

- The adoption towards cleaner technology can be made only through bulk intervention. GoN should make policy intervention for bulk transformation towards cleaner energy adoption in Special Economic Zone.

- The cost for coal and rice husk is way cheaper than electricity and pellets specially in the terai areas adjoining India. Therefore, at present market condition, switch towards cleaner technology may be feasible in mid-hill but may not be feasible in terai areas. Therefore, policy intervention is required for adoption of cleaner air technology in terai areas.

- There are 19-20 private equity and venture capitals in Nepal that can invest in various sectors apart from Banks. These private organizations are investing in new-start ups as well small and medium enterprises. GoN should take energy-mix policy for market security of small enterprises, women groups, alternative energy producers that are manufacturing pellets and bio-briquettes.

- Sustainable supply of alternative and renewable energy for industries and market security for alternate energy producers needs to be materialized for the transformation towards cleaner energy

- There are 2500 small scale forest-based enterprises in Nepal. Few entrepreneurs are also planning to start forest-based enterprises that convert soft woods through seasoning and treatment to hard woods for furniture. But the requirement of IEE/EIA have delayed in start of

operation. It is recommended to remove the requirement of IEE/EIA for operating such enterprises as this sort of enterprises doesn't cause significant environmental impact.

- IEE/EIA is required for capital increase of any enterprises and this provision directly contribute towards cost escalation as well time delay in completion of same project that required additional investment. This sort of policy will hamper investment companies bringing Foreign Investments. Therefore, such provisions should be revised.
- NRB has endorsed ESRM guideline to bank and financial institution in 2018 which was further revised in 2022 to assess the environmental and social risk during credit lending. It also included exclusion criteria where financing is restricted to sector having significant environment and social risks (from NRB representative)
- Detail check for assessing environmental and social risk for credit extension is also included in the ESRM (from NRB representative))
- NRB supervisors review on the compliance of E&S risk mitigation while Bank portfolio review (from NRB representative).
- Central Banks worldwide and NRB major guiding policy is Basel Framework which guides the bank financing or investment based on risk assessment (from NRB representative).
- Incentivizing greener technology through lower interest cannot be made until green sector is proved to be less risky. However, other ways such mandatory credit investment in green sector through policy review can be done. Further, private sector are independent on credit investment based on the risk assessment.
- To ensure a reliable electricity supply, the project should prepare regional and seasonal electricity demand projections. These projections must be developed in consultation with the Provincial and Local Offices of the Nepal Electricity Authority (from NEA representative).
- DoE is the implementing government agency for component 2 and this component covers air quality monitoring. DoE is currently operating 30 monitoring stations but due to lack of technical capacity, required equipments DoE is lagging in operating all the stations. NCAP will support upgrading of existing monitoring stations as well installation of new monitoring stations, strengthening air quality monitoring capacity and establishment or upgrading of DoE laboratory. DoE is also planning to organize stakeholders' consultation program and is currently mapping the stakeholders.

Response from Ram Chandra Poudel, SDE, MoICS (E&S Focal Person) on ESMF

- The project will help replace old traditional boilers with electric ones. It will also support industries that choose cleaner technologies, such as using pellets or briquettes instead of traditional fuels. In addition, the project will provide technical and financial support for installing pollution control equipment.
- Project will provide grant in up-front capital cost for installation of transformers, transmission lines, auxiliary electric equipment's to those industries transforming to electrical boilers
- Policy for mandatory use of pellet/bio-briquettes in boiler industry will possibly be addressed by GoN in future.
- Terminal depreciation will be provided to those enterprises shifting to cleaner energy boilers that will contribute in additional investment capital for such enterprises/industries. Additionally, project has proposed Income Tax Exemption for next five years to those enterprises/industries shifting to cleaner technology and this is one of the performance-based criteria of the project.
- The hydro-energy production is increasing and adequate electrical energy for industries is available. However, there is problem in transmission and distribution system, voltage fluctuation. The project has also planned to support upgrading of feeder lines, dedicated lines, transformers, backup supply in dense industrial area. MoICS will coordinate with NEA for reliable supply of electrical energy.

- Project is targeted in supporting SMEs but will not support brick industries

Stakeholders Engagement Plan
- The SEP should include awareness programs for target enterprises so that all of them get proper information.
- Stakeholders from the education sector; such as universities, research institutions, and research experts; should also be part of these engagement programs.
- It would be better to include specific women's groups, NGOs, and community-based organizations (like FECOFUN) as relevant stakeholders through proper stakeholder mapping.
- In principle, the GRM is good, but experience shows it has not worked as expected. The existing GRM systems in the GoN should be linked with the project's GRM to make them more effective.
- These type of stakeholder consultations should also be organized at the provincial level.
- Since local municipalities are concerned about clean air, these programs should, where possible, reach the ward level.
- The project documents should show coordination and cooperation among the three levels of government during implementation

Response from Ram Chandra Poudel, SDE, MoICS (Focal Person) on Stakeholder Engagement Plan

- Academic institutions are in the Project Sterring Committee (PSC), the apex body of the project. Participation of academic institution is ensured in PSC meeting, budget approval and multi-sectoral meetings
- MoICS has conducted assessment on boiler operating enterprises and will provide the report to relevant stakeholders as project goes into implementation.
- The project GRM is formed to address the project related grievances. The Good Governance Act has provisioned focal person in every government office to handle grievances under its jurisdiction.
- Project will directly coordinate and collaborate with local units in the course of project implementation.

Response from Krishna Bahadur Raut, Secretary, MoICS for overall concerns and suggestions
- Nepal's total installed power capacity is expected to reach 5,500 MW by 2027, and the NEA is implementing programs to increase electricity consumption. Switching to electric boilers will therefore be both sustainable and effective. The GoN also follows an energy-mix policy to ensure national energy security. The energy-mix policy will help secure markets for pellet and bio-briquette manufacturers that use cleaner technologies.
- The GoN promotes private investment for sustainable growth. Since last fiscal year, it has introduced innovative start-up credit programs offering loans at only 3% subsidized interest.
- MoICS has suggested to MoFE that IEE/EIA requirements for industrial upgrades should be based on risk levels rather than project cost thresholds.
- A 20% subsidy on total capital investment is currently under discussion as part of ongoing project planning.
- MoICS will hold joint discussions with the World Bank, Nepal Rastra Bank (NRB), and the Ministry of Finance (MoF) to determine a base rate for long-term industrial loans.
- About 10–15 years ago, NRB offered 3–4% lower interest rates for the manufacturing sector compared to consumption loans. The current policy favors consumption loans, so MoICS will consult stakeholders to review interest-rate policies for the manufacturing sector.

- The MoFE is looking into the forest fire issues through other programs The NCAP project focuses on promoting cleaner technologies and strengthening air-quality monitoring systems only.
- MoICS will enhance industrial monitoring to ensure compliance and sustainability.
- The GoN plans to allow industries in Industrial Management Districts and Special Economic Zones to install rooftop solar panels to ensure energy security during power outages.
- To reduce pollution from coal and husk, the GoN will use both incentives and penalties. Under the Industrial Enterprise Act and related laws, custom duty for machinery using cleaner fuels is fixed at 1%. MoICS will propose further exemptions on machinery and equipment imports for energy-conversion industries in the next fiscal year.
- A carbon-trading mechanism exists but is not yet in operation. The GoN plans to formally adopt a carbon-trading policy soon to promote low-emission industries.
- The project is still in the preparatory stage, and stakeholder mapping will be completed before implementation.
- Since most SMEs fall under provincial and local governments, these authorities will be engaged and coordinated once the project implementation is confirmed.

Nepal Clean Air and Prosperity Project (NCAP)
ESMF and SEP Meeting Notes on Project Component 2 Organized by Department of Environment (DoE) at Hotel Basera
November 13, 2025

Objective of the consultations: to introduce the project to interested parties, discuss project design and environmental and social impacts, and proposed mitigation measures described in Environmental and Social Management Framework (ESMF) and Stakeholder Engagement Plan (SEP). ESMF and SEP were prepared for this project.

List of stakeholders (Component 2 led by DoE)

- Ministry of Forest and Environment (MoFE)
- Department of Environment (DoE)
- Department of Roads (DoR)
- Department of Agriculture and Livestock (DoAL)
- Federation of Nepal Cottage and Small Industries (FNCSI)
- Nepal Electricity Authority
- Central Department of Environmental Science, Tribhuvan University

- International Centre for Integrated Mountain Development (ICIMOD)
- World Health Organization (WHO)
- Kathmandu Metropolitan City (KMC)
- Lalitpur Metropolitan City (LMC)
- Chandragiri Municipality
- Air Pollution Researcher and Experts

Issues and Suggestions

- Strengthening of project documentation on air pollution sources: traffic, dust, waste burning, agriculture residue, forest fires, indoor pollution, and transboundary pollution.
- Nepal should have strong cooperation with India for controlling transboundary air pollution issues.
- Nepal should brand its green energy with India during bilateral cooperation for promoting use of cleaner energy
- Strong enforcement policies need to be enacted to control burning of solid waste, agriculture residue, burning of tires during revolution
- Apart from upgrading and maintenance, sustainability of air quality monitoring stations needs to be ensured
- Alternatively, low-cost sensors such as locus sensors can be installed and data can be integrated in the DoE database.
- Suggest to upgrade the monitoring stations that can provide air monitoring data based on source (local/regional/transboundary).
- The project should clearly reflect the coordination mechanism between all three level of governments. Since, local government are one of the responsible government units, their capacity development in air quality monitoring and enforcement needs to ensured.
- The project should clearly specify the activities that will be implemented for and through local units.
- How can the project be linked with the local unit labour desk so that labours can be linked in the project's employment opportunities.
- The ESMF should incorporate the possible risks from floods/landslides/slope stability as some of the monitoring stations are in flood plain and slope area
- ESMF should also incorporate possible accidental risks from fencing of monitoring stations. Local level sensitization can be proposed as the mitigation measures and sensitization program needs to be included in project.
- The ESMF needs to include GESI issues and possible measures to address the issues.
- Possible interested parties suggest different meanings therefore suggested to use appropriate words such as responsible party as this the responsibility of government
- The stakeholder list should aslo include NDRRMA, SMEs, health sector, scrap dealers, farmers, ICIMOD, security agencies, and special groups.
- Special engagement plan needs to be prepared for engagement with special groups such as scrap dealers, cleaning group etc.
- Leaflet of success stories dissemination to the stakeholders for awareness raising may be helpful
- Communication through local units will be more impactful
- GRM should be functional throughout the project. 15 days timeline to address all types of grievances may not be feasible or appropriate.
- Ensure strong enforcement against burning practices; consider long-term and real-time enforcement.

- Resources needs to be allocated for research, education, awareness, and local-level communication.

Response from Deepak Gyawali, Under Secretary, DoE
- The main goal of the project is to improve the air quality standards of Nepal
- The project is of small scale and potential E&S risks from implementation of this component is minimal
- DoE will improve the ESMF and SEP document addressing the project relevant comments and suggestions received from the stakeholders
- Enforcement of air quality monitoring standard process is broadly discussed and will be critically discussed in coming days

Response from acting Secretary, MoFE
- All the stakeholders are requested to provide written comments to the DoE through email or other feasible sources
- DoE is responsible for endorsing air quality standards and monitoring only. There are other sectoral agencies that looks into different sectors contributing to the air pollution.
- Regional issues/transboundary issues required diplomatic approach and GoN is continuously engaged in addressing transboundary issues through diplomatic approach.
- MoFe and DoE will coordinate with concerned government agency for inclusion environmental parameters for local unit evaluation

The environment sector requires coordination and collaboration with provincial and local governments and therefore federal government entities is committed in coordination and collaboration with provincial and local governments.