

Environmental and Social Management System – Public Summary
For
Battery Energy Storage System (BESS) Projects

CEECOIC

About this ESMS Summary

This document provides a summary of CEECOIC's Environmental and Social Management System (ESMS). The ESMS sets out our company's approach to identifying, assessing, and managing environmental and social risks across all our investments. It explains our key policies, standards, and commitments to protect people and the environment, and describes how we engage with communities, comply with national and international requirements, and ensure responsible project development. This summary is intended to give stakeholders, including local communities and the public, a clear and accessible overview of how we manage environmental and social matters in our projects.

1. Introduction

1.1 Background

Founded in 2016, China Energy Overseas Investment Co., Ltd. (“CEECOIC” or the “Sponsor”) is a wholly owned second-tier subsidiary of China Energy Engineering Group Co., Ltd. (“CEEC” or the “Guarantor”) and a professional platform to engage in overseas investment on behalf of CEEC.

To address power shortages, enhance energy stability and advance renewable energy development in Uzbekistan, CEECOIC is actively expanding its portfolio of Battery Energy Storage System (BESS) projects in the region. In support of this mission, CEECOIC’s investment platform and asset management entity, China Energy Overseas Investment (Hong Kong) Co., Limited (the “CEECOIC HK” or the “Borrower”)¹ is seeking a corporate loan from the Asian Infrastructure Investment Bank (AIIB).

1.2 Environmental and Social Management System

To ensure compliance with the AIIB Environmental and Social Framework (AIIB ESF)² and translate its provisions into actionable processes and practices for corporates, CEECOIC aims to establish AIIB ESF-aligned Environmental and Social Management Systems (ESMS) at both the corporate and project levels.

The corporate-level ESMS provides a structured framework to:

- Screen potential project opportunities to exclude those with unacceptable environmental and social (E&S) risk.
- Avoid, minimize and manage potential E&S impacts through site selection, engineering designs, and managerial measures proposed in Environmental and Social Impact Assessments (ESIA).
- Ensure adequate supervision of projects during the term of the loan agreement.
- Comply with both local regulations and AIIB ESF requirements.
- Conduct mandatory E&S monitoring, reporting, and periodic reviews to track performance and mitigate emerging risks.

The ESMS will be maintained throughout implementation and is expected to be fully incorporated into CEECOIC’s business processes.

The corporate-level ESMS will serve as a comprehensive framework to guide project-level implementation. Each project slated for AIIB financing is required to prepare a customized

¹ CEECOIC HK does not engage in industrial operations and primarily focuses on financial-related affairs. Throughout the project lifecycle, E&S management responsibilities are jointly overseen by CEECOIC and the Project Companies.

² AIIB ESF integrates good international practice on environmental and social planning and management of risks and impacts into decision-making on, and preparation and implementation of, bank-supported Projects. The latest version of AIIB ESF was approved on June 26, 2024.

ESMS at the subproject level, aligning with the and AIIB ESF and the CEECPOC ESMS at the corporate level.

1.3 Approach Adopted for ESMS

Before being introduced to international E&S standards, CEECOIC had already established and implemented an ESMS in accordance with Chinese legislation and regulations. By comparing the existing ESMS with the AIIB ESF, CEECOIC identified multiple key E&S gaps requiring supplementation and upgradation to align with international best practices. This process aims to enhance the comprehensiveness and effectiveness of its environmental and social management system, ensuring full compliance with both domestic laws and AIIB's sustainability requirements.

1.4 Review and Update of ESMS

CEECOIC will systematically update the Corporate ESMS based on project-level monitoring findings and policy change through the following process:

- **Review Basis:**
 - Project Companies' periodic monitoring reports (quarter/semi-annual/annual) and corrective action plans.
 - Identification of recurring non-conformances across multiple projects.
 - Material changes in MDB E&S standards.
- **ESMS Update and Review Process:**
 - Prepare revised ESMS documents with tracked changes.
 - Distribute draft updated ESMS to CEECOIC departments and relevant Project Companies for 10-day review.
 - Log all received feedback in the ESMS revision register.
 - Submit the final draft to ESG Committee for approval.

1.5 ESMS Structure

ESMS primarily encompasses three parts: ESMS Manual, ESMS Management Procedures, and E&S Preliminary Risk Screening tool.

ESMS Document	Key Component
ESMS Manual	• E&S Policy and Exclusion List • E&S Screening and Categorization • General Principles on E&S Risk Management • Emergency Preparedness and Response Mechanism

	• Stakeholder Engagement Mechanism • Monitoring and Reporting • Institutional Arrangement and Capacity Building
ESMS Management Procedures	• General EHS Management Framework • Land Acquisition and Involuntary Resettlement Management Procedure • Indigenous Peoples Management Procedure • Biodiversity Management Procedure • Climate Change Management Procedure • Contractor Management Procedure • Supplier Management Procedure • Gender Impact Management Procedure • Stakeholder Engagement Procedure • Chance Find Procedure • Monitoring and Review Procedure • Capacity Building and Training Management Procedure
E&S Preliminary Risk Screening tool	E&S Preliminary Risk Screening tool for Solar Power Sector E&S Preliminary Risk Screening tool for Wind Power Sector E&S Preliminary Risk Screening tool for BESS

2. Sub-Project Description

2.1 Components of the Sub-Project

The BESS facilities will perform the following key functions:

- Energy Storage and Dispatch: Store electrical energy from power grid during off-peak periods and dispatch operating reserves during grid congestion, such as when power demand exceeds supply.
- Frequency Stabilization: Help maintain grid stability by providing power reserves to balance fluctuations between power demand and supply.

A description of the components of a BESS project is provided in the table below.

TABLE 1 PROJECT COMPONENTS OF BESS

No.	Component	Sub-component
1	BESS facility	Battery Assembly
		Power conversion system (PCS)
		Battery management system (BMS)
		Energy management system (EMS)
2	Transformer Substation	Intelligent transformer
		Main voltage transformer
		Distribution station
3	Transmission System	Overhead Transmission Lines (OTL)
		Transmission towers
4	Auxiliary Facilities	Access roads
		Administration and utility building
		Domestic wastewater treatment facility
		Hazardous waste storage room
		Emergency fuel tank
		Firefighting water tank
		Stormwater drainage network

2.2 Rationales for Selection of Sub-projects

The Chirchiq BESS, Adolat BESS, and Navoi BESS are preliminarily slated for financing through the AIIB corporate loan due to their sectoral sustainability, strategic location, and minimal impact on the local environment and communities. Specifically:

- The BESS are designed to support energy storage, dispatch and stabilize frequencies of power grid.
- No encroachment upon any nationally designated natural reserves, protected land, cultural heritage, or internationally acknowledged key biodiversity land;
- Do not involve any critical habitats or indigenous people communities;
- Do not trigger any physical resettlement;
- Minimized risks from air emissions, wastewater discharge, land disturbance, and soil/groundwater contamination.
- Highly automated BESS operations ensure safer working conditions with reduced labor needs, thereby minimizing disruption to local communities.

Given the above E&S considerations, the BESS are classified as **Category B** projects³ in accordance with the AIIB ESF.

2.3 Brief Overview of Project Sites

2.3.1 Chirchiq BESS

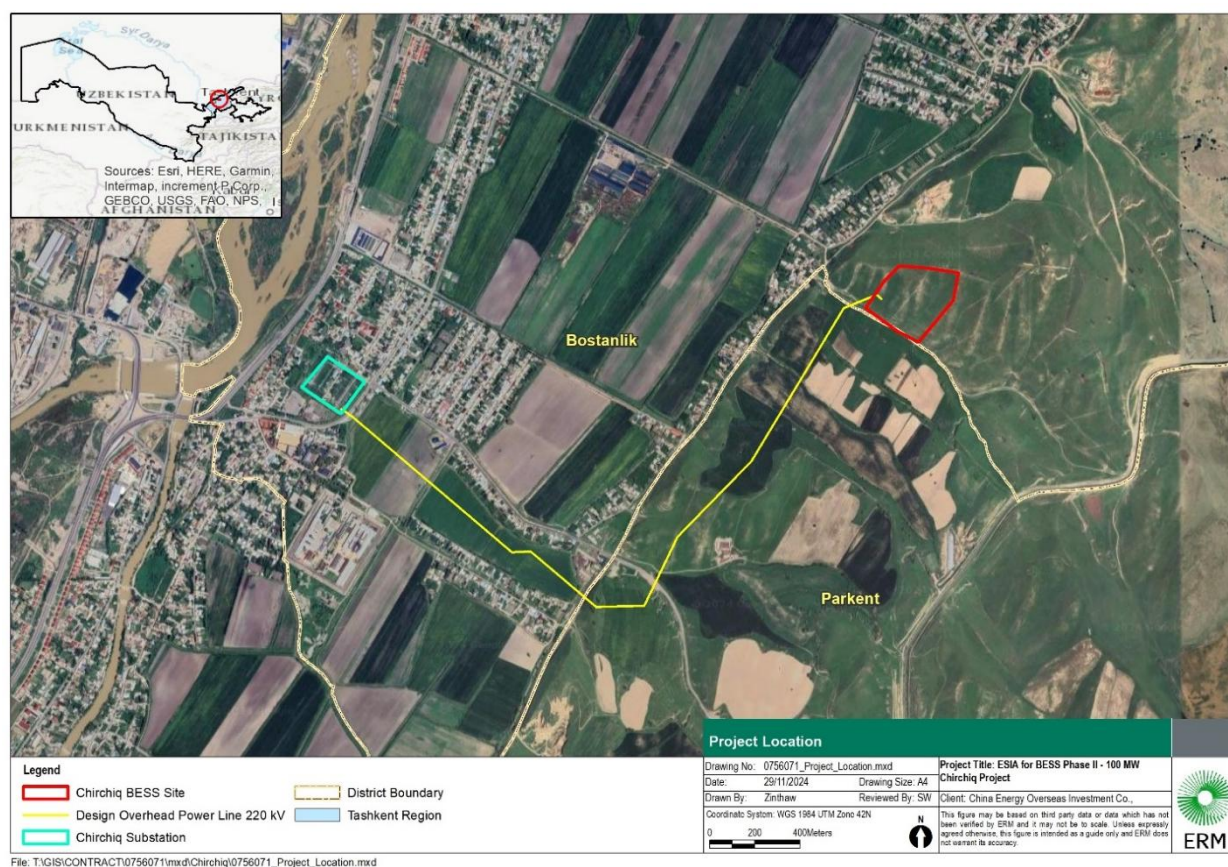
The Chirchiq BESS primarily consists of a 100 MW BESS facility and a 3.4 km 225 kV Overhead Transmission Lines (OTL). Situated in the northwestern part of Bostanlik district, Tashkent region, the Chirchiq BESS facility is designed to connect to an existing substation located 2.2 km away.

The Bostanlik district and Parkent district are located in Tashkent region, situated in the eastern part of the country near the foothills of the western Tien Shan mountains. With Chirchiq River flowing through, Bostanlik district plays a critical role in the hydrology and water resources of Uzbekistan. The two districts span both mountainous terrain and valleys, offering great environmental and ecological values. The reserved land for the Chirchiq BESS facility site covers an area of 8.6 ha.

The location of the planned BESS facility, OTL and the existing substation are illustrated in **Figure 1** below. The closest residential areas to the Project are Boyterak and Karamanas Mahalla Fuqarolar Yig'ini (MFYs), with the nearest distance being approx. 250 m to the BESS facility, and approx. 50 m to the OTL.

³ A Project is categorized B if: (i) it has a limited number of potentially adverse environmental and social impacts; (ii) the impacts are not unprecedented; (iii) few if any of them are irreversible or cumulative; (iv) they are limited to the project area; and (v) they can be successfully managed using good practice in an operational setting.

FIGURE 1 PROJECT LOCATION OF CHIRCHIQ BESS



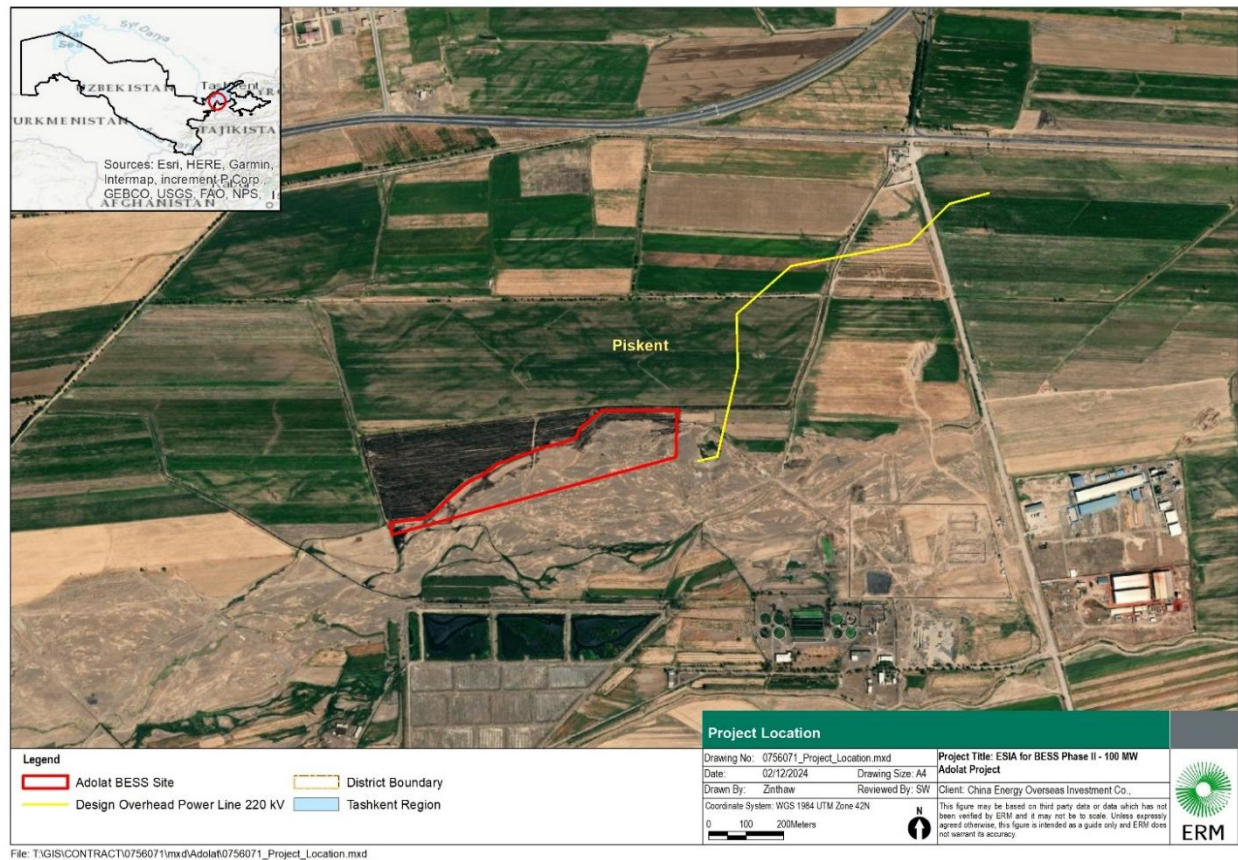
2.3.2 Adolat BESS

The Adolat BESS primarily consists of a 100 MW BESS facility and a 1.25 km 225 kV OTL. Situated in the central-western part of Piskent district, Tashkent region, the Adolat BESS is designed to integrate with the existing power grid, transmitting electricity to a substation 5.8 km from the proposed facility.

The Piskent district is in the southeastern part of Tashkent region, nestled in the foothills of the western Tien Shan Mountain range. The district's terrain is characterized by a combination of low-lying plains, rolling hills, and mountainous areas. The reserved land for the BESS site covers an area of 8.13 ha.

The location of the proposed BESS facility, OTL and the existing substation are illustrated in **Figure 2** below. The closest residential area to the Project is the Guliston MFY, with the nearest distance being approx. 1.1 km to the proposed BESS facility and the OTL.

FIGURE 2 PROJECT LOCATION OF ADOLAT BESS



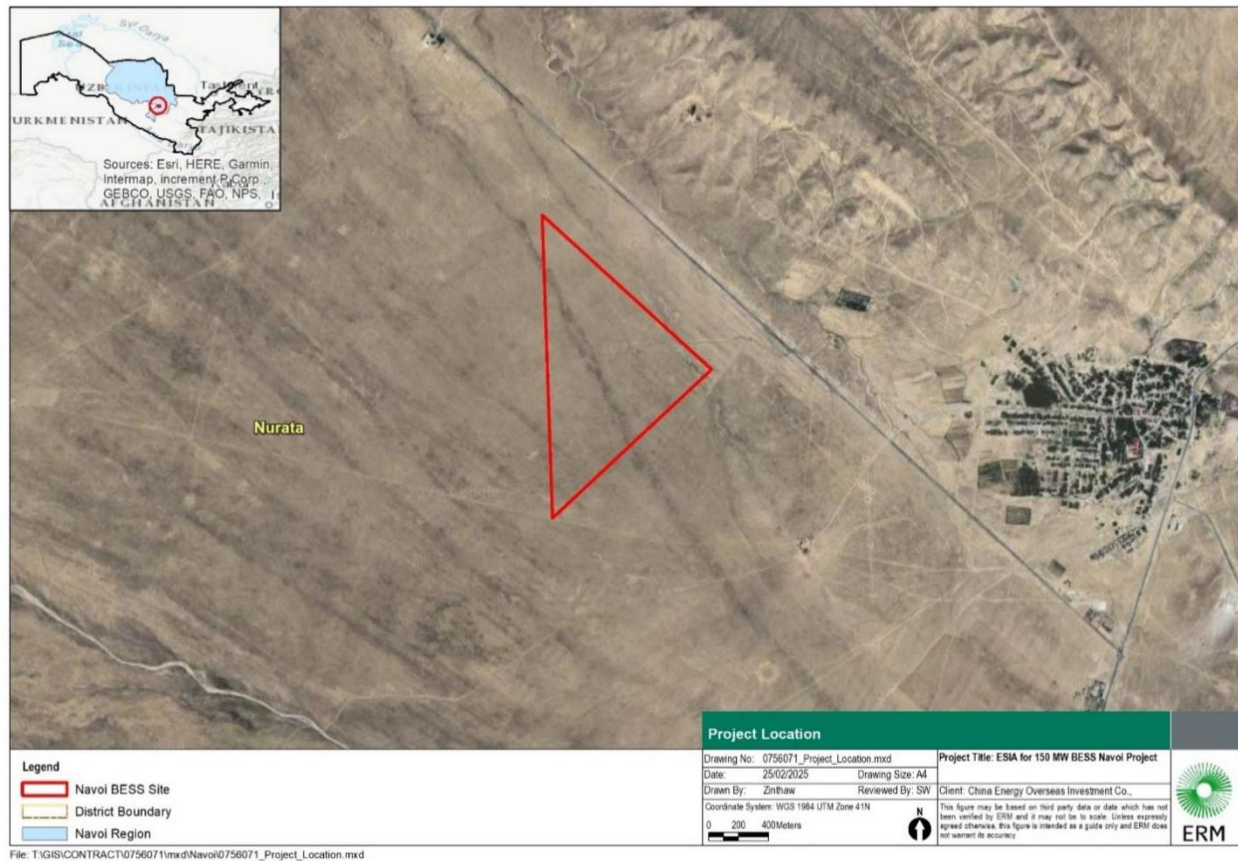
2.3.3 Navoi

The Navoi BESS comprises a 150 MW facility and a 220 kV substation, situated in the southwestern Nurata District of Navoi Region, Uzbekistan. The substation serves as a high-voltage transformer unit, converting medium voltage (35 kV) to high voltage (220 kV).

The Nurata district is in the southeastern part of the Navoi Region, Uzbekistan. The northern and western parts of Nurata are occupied by deserts and steppes, while the southern and eastern parts are mountains, pastures and irrigated lands. The planned BESS and the substation will occupy approximately 3.3 ha and 10.4 ha, respectively.

The reserved BESS Site land is shown in **Figure 3** below. The nearest residential area to the Project is Dehibaland, with the nearest distance being approx. 1.8 km east of the proposed BESS facility and the substation.

FIGURE 3 PROJECT LOCATION OF NAVOI BESS



2.4 Project Implementation Schedule

Construction of the Chirchiq BESS and Adolat BESS started in February 2025 and is expected to be put into operation by December 2025.

Construction of Navoi BESS is scheduled to start in February 2026 and is anticipated to span a period of 12 months. Navoi BESS is expected to be put into operation by February 2027.

2.5 Project Implementation Arrangements

During the construction phase, both the Chirchiq BESS and Adolat BESS projects are expected to peak at 290 construction workers each in October 2025, while the Navoi BESS anticipates a similar workforce of around 290 workers in October 2027. Over 60% of the workers will be recruited from Uzbekistan. Additionally, 21 management-level personnel will be deployed to each project to ensure effective oversight and coordination. Each project will have at least one E&S personnel assigned by the Project Company to oversee E&S management throughout the project lifecycle. Contractors are required to deploy their own E&S personnel to implement the project owner's requirements.

The operational workforce for each project will consist of five people per shift: one IT personnel and four general officers. Three shifts will be deployed. In total, around 10-15 workers will be present at each BESS site during operation.

Each project will require construction contractors to engage around six security personnel to guard equipment and materials in the temporary construction areas and warehouses. During operation, each sub-project plans to engage qualified security personnel from the National Guard, and at the same time to establish contact with the local police system.

3. Environmental and Social Policies and Regulations

3.1 ES Policy

3.1.1 Environmental Policy

1. Implement Environmental Management Throughout the Project Lifecycle.
 - a) Comply with applicable national and local laws/regulations governing E&S matters, including permitting requirements relevant international conventions, global standards, and project-specific E&S obligations.
 - b) Identify and prioritize objectives, targets, and performance indicators for environmental sustainability, social responsibility, and occupational health and safety.
 - c) Assess and mitigate environmental impacts, social risks, and health/safety hazards across all operations.
 - d) Define clear roles and responsibilities for ESHS accountability at all organizational levels.
 - e) Monitor and report on environmental performances to drive continuous improvement, prevent repeated adverse incidents and maintain transparent communication with stakeholders;
 - f) Implement training programs on national regulation and Good International Industry Practices (GIIP) to enhance environmental awareness and compliance knowledge of the project workforce.
2. Conserve the land and biodiversity.
 - a) Apply the mitigation hierarchy principle throughout the project lifecycle with the goal of achieving no net loss of biodiversity;
 - b) Avoid conducting projects on sites of local, regional, and international biodiversity importance⁴ critical habitat or other high biodiversity areas and ecological functions;
 - c) Assess dependencies, impacts, risks and opportunities of CEECOIC's activities on biodiversity, natural resources and ecosystem services, to identify and control potential impacts on local traditional communities;
 - d) Prepare a Biodiversity Management Plan based on assessment results and include specific mitigation measures for each project phase;
 - e) Monitor and report biodiversity performances toward achieving no net loss of biodiversity;
 - f) Promote biodiversity conservation and responsible use of natural resources among workers and stakeholders.

⁴ National and international protected areas, Important Bird Areas (IBA), Key Biodiversity Areas (KBAs), Alliance for Zero Extinction (AZE) sites, Ramsar sites (Wetlands of International Importance), known congregatory sites, and unique or threatened ecosystems.

3. Drive the Energy Transition and Adapt to Climate Change
 - a) By practising renewable businesses, CEECOIC contributes to global decarbonization efforts by reducing dependency on fossil fuels and lowering greenhouse gas emissions;
 - b) Assess potential long-term and short-term physical risks induced by climate change on CEECOIC's assets. Implement measures to increase the resilience of our business activities to evolving climate threats.
4. Preserve air, water and soil quality and control noise impacts
 - a) Integrate GIIP into the project lifecycle to effectively manage air, water and soil quality, as well as noise impacts, to ensure compliance with all relevant national regulations and standards and AIIB ESF's requirements.
 - b) Conduct soil rehabilitation as necessary to restore impacted areas, thereby promoting ecological balance and ensuring sustainable development.
5. Minimize waste generation and promote responsible waste management practices.
 - a) Prevent and minimize waste generation by optimizing processes.
 - b) Develop and implement a waste management plan that adheres to the waste hierarchy approach: prevent, reuse, and recycle where possible, and lastly dispose.
 - c) Reduce and ultimately phase out the use of substances of concern.

3.1.2 Social Policy

1. Provide a sound employment relationship for employees and create a fair employment environment.
 - a) Provide clear and understandable written terms of employment made available to employees in a timely manner.
 - b) Provide timely payment for work and adequate periods of rest.
 - c) Ensure employment based on the principles of equal opportunity, fair treatment and nondiscrimination with respect to any aspect of the employment relationship.
 - d) Comply with national law relating to workers' organizations and collective bargaining.
 - e) Establish an accessible, understandable and transparent Grievance Redress Mechanism for raising workplace concerns, including gender-related concerns and a suitable system designed to inform employees of the GRM at the time of hiring, and which is made easily accessible to them.
 - f) Strictly prohibit any form of child labor and forced labor.
2. Promote safe and healthy working conditions, and the health of employees.

- a) Identify, assess and manage health and safety risk and performance at workplace, including construction safety and road safety.
 - b) Document and report on accidents, diseases and incidents, and implement effective measures to prevent accidents, injuries and disease, including providing free personal protective equipment and facilities appropriate to their work (e.g., hygiene, rest, eating facilities) to employees.
 - c) Where accommodation services are provided, provide adequate accommodations for employees, including separate and safe accommodations for female employees.
 - d) Establish reporting mechanism at workplace for employees to report work situations that they believe are not safe or healthy and remove themselves from situations which they have reasonable justification to believe present a danger to their life or health.
 - e) Provide relevant information and training to employees regarding health and safety and emergency preparedness.
3. Proactively establish and maintain relationships with communities and ensure community health and safety.
- a) Consult as early as possible with affected communities, disclose information on project activities and impacts, take their concerns into account during project life cycle.
 - b) Assess health and safety risks to project-affected communities, implement effective measures to prevent accidents, injuries and disease. Provide relevant training to affected communities on preventive and emergency preparedness and response measures to avoid, or where avoidance is not feasible, to minimize adverse risks and impacts of the Project on their health and safety.
 - c) Assess and appropriately manage the risks of adverse impacts on communities that may result from temporary project-induced labor influx.
 - d) When engaging security personnel, assess risks posed by these security arrangements to persons within and outside the project site. Apply the principles of proportionality and good international practice, and comply with applicable law relating to hiring, rules of conduct, training, equipping, and monitoring security workers. Provide appropriate training on matters of the use of forces and risks relating to GBV.
4. Establish requirements for prequalification, terms of contracts and requirements of monitoring which to be strictly implemented, to ensure contractors' and suppliers' E&S management and performance are in line with CEECOIC's E&S Policy.
5. Where feasible, to actively explore project alternatives through optimized planning and site selection to avoid or minimize involuntary resettlement.

- a) Where avoidance of involuntary resettlement is not feasible, enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to pre-project levels.
 - b) Address differential impacts of involuntary resettlement upon vulnerable groups (including women) and improve the overall socioeconomic status of the displaced poor and other vulnerable groups.
 - c) Provide sufficient resources to enable the persons displaced by projects to share in project benefits.
6. Design and implement Projects in a way that fosters full respect for indigenous peoples' identity, dignity, human rights, economies and cultures, and to ensure that they:
- a) Have full opportunities to participate in consultations of projects that affect them.
 - b) Do not suffer adverse impacts as a result of projects.
 - c) Receive culturally appropriate social and economic benefits as a result of projects.
7. Conserve and avoid impacts on cultural resources⁵ during project life cycle.
- a) Before the development of any new project or significant changes in scope of project activities, screen and evaluate potential risks and impacts of cultural heritage.
 - b) When avoidance of impacts on cultural resources is not feasible, develop management plans for mitigating and monitoring impacts upon cultural resources.
 - c) Develop Chance Find Procedure, which include a pre-approved management and conservation approach for cultural resources that may be discovered during site preparation or implementation of projects.
8. To ensure the thorough implementation of the E&S Policy by Project Companies, following measures should be taken:
- a) Organize training: Conduct regular training sessions to ensure that all employees have a basic understanding of the Policy and able to implement in operational activities.
 - b) Policy publicity: Enhance employee awareness by posting relevant policy documents in prominent locations at project sites.

⁵ Cultural resources include movable or immovable objects, sites, structures, groups of structures and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance, as well as graveyards and individual grave sites. Cultural resources may be located in urban or rural settings and may be above or below ground or under water. Their cultural interest may be at the local, provincial, or national level, or within the international community.

- c) Supervision and implementation: Project Companies and the General Administration Department of CEECOIC shall assume supervisory responsibilities to ensure the implementation of the policy and promptly correct any deviations.

3.2 Local Laws and Regulations

Key cross-sectoral documents

- 2019 Concept of Environmental Protection in the Republic of Uzbekistan until 2030
- 2013 Law on Environmental Control
- 2000 Law on State Ecological Expertise and 2018 Regulation on Ecological Expertise
- 2021 Law on Environmental Audit and 2015 Regulation on Environmental Audit
- 2000 Law on Environmental Inspection
- 2020 Resolution on Further Improvement of the Environmental Impact Assessment Mechanism
- 2014 Regulation on the Procedure for the Development and Agreement of Draft Environmental Standards
- Constitution of Uzbekistan

Energy and Climate Change

- Green Economy Transition Strategy (2019-2030)
- Concept Note for Ensuring Electric Supply in the Republic of Uzbekistan for 2020-2030
- Strategy for Innovative Development of the Republic of Uzbekistan for 2019-2021
- Strategy for the Development of Electric Networks in the Republic of Uzbekistan until 2025
- Law on the Rational Use of Energy (amended in April 2020)
- Nationally Determined Contributions (ratified in 2018)
- 2050 Roadmap to Carbon-Neutral Electricity Sector in Uzbekistan
- Power Sector Masterplan to 2030
- 2020 Resolution on Approval of General Technical Regulations of Environmental Safety
- 2018 Decree on Approval of Rules for Protection of Power Grid Facilities
- 2007 Sanitary Norms and Rules to Ensure Safety for People Living near High Voltage Power Transmission Lines

Biodiversity

- Strategy for Biodiversity Conservation in the Republic of Uzbekistan (2019 – 2028)

- Convention on Biological Diversity
- 1998 National Strategy and Action Plan on Biodiversity Conservation
- 1992 Law on Nature Protection
- 2004 Law on Protected Natural Territories (Updated in 2014 and amended in 2022)
- 1997 Law on Protection and Use of Flora (updated in 2016)
- 1997 Law on Protection and Use of Fauna (updated in 2016)
- Law on Conservation and Use of Wildlife

Air quality

- 1996 Law on Ambient Air Protection (amended in 2019)

Waste

- 2002 Law on Waste (amended in 2018 with Decree No. 5580)
- 2023 Resolution on Actions Aimed at Improving the Environmental Situation in Certain Industries, Reducing the Negative Impact of Waste on the Environment and Public Health, and the Effective Use of Alternative Energy Sources

Water

- 1993 Law on Water and Water Use (amended in 2021)
- 2022 Resolution on Actions for Implementation of the Project “Conservation and Management of Lakes, Wetlands and Coastal Territories as a Basis for Supporting Sustainable Life on Degraded Landscape of the Aral Sea Reservoir Landscape” with Participation of the United Nations and Global Environmental Fund Development Programs

Social legislation and regulation

Human rights

- New edition of the Labour Code (2022 edition replacing original 1995 Labour Code)
- 2019 Law of the Republic of Uzbekistan on Protection of Women Against Oppression & Violence (amended in 2021)
- 2020 Law on Employment of the Population
- 2008 Law on Guarantees of Child's Rights
- 2018 Resolution on Additional Actions to Eliminate Forced Labour in the Republic of Uzbekistan
- 2019 Resolution on Approval of the List of Professions and Jobs that Negatively Affect Women's Health and in which it is not Recommended to use Women's Labour

Land rights

- 1998 Land Code (amended in 2010 and 2021)
- 2021 Decree on Measures to Ensure Equality & Transparency in Land Relations, Reliable Protection of Land Rights & Their Transformation into a Market Asset
- 1998 Law on State Land Cadastre
- 2007 Resolution on Actions to Increase Employment and Improve the Activities of Labour and Social Protection Bodies
- Civil Code of the Republic of Uzbekistan (amended in 2022)
- Presidential Decree No UP-5495. Decree «On measures on Measures on Cardinal Improvement cardinal improvement of Investment Climate investment climate in the Republic of Uzbekistan.
- 2011 Appendix No. 2 to the Resolution of the Cabinet of Ministers No 146, Regulation on the Procedure for Compensation for Losses of Landowners, Users, Tenants and Owners, as well as Losses of Agricultural and Forestry Production.
- 2019 Resolution No. 911 of the Cabinet of Ministers on the Procedure for withdrawal of land plots and compensation to owners of immovable property located on the land plot.
- 2022 Law No 781 on procedures for the withdrawal of land plots for public needs with compensation.

3.3 AIIB ESP and ESSs

This ESMS primarily references the relevant requirements stipulated in AIIB Environmental and Social Framework (2024)

AIIB ESF (2024) is a system that supports the Bank and its clients in achieving environmentally and socially sustainable development outcomes. The ESF is comprised of an Introduction, an aspirational Vision Station, the Environmental and Social Policy (ESP), and a Glossary.

More specifically, the ESP comprises mandatory E&S requirements for each Project and is accompanied by:

- (a) Three associated mandatory E&S Standards (ESSs):
 - a) ESS1: E&S Assessment and Management;
 - b) ESS2: Land Acquisition and Involuntary Resettlement; and
 - c) ESS3: Indigenous Peoples.
- (b) An E&S Exclusion List .

3.4 Good International Industry Practices

- Performance Standards on Environmental and Social Sustainability, International Finance Corporation (IFC), 2012.

- Environmental, Health, and Safety (EHS) Guidelines: General EHS Guidelines, World Bank Group, 2007.
- Environmental and Social Management System Implementation Handbook, IFC, 2016.
- Stakeholder Engagement: A Good Practice Handbook for Companies Doing Business in Emerging Markets, IFC, 2007.
- Guidance Note: UNDP Social and Environmental Standards (SES)-Stakeholder Engagement, United Nations Development Programme,
- Good Practice Note: Addressing Grievances from Project-Affected Communities, IFC, 2009.
- Greenhouse Gas Protocol, World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD), 2020.
- The Voluntary Principles on Security and Human Rights, Voluntary Principles Initiative, 2000.
- Good Practice Handbook: Use of Security Forces: Assessing and Managing Risks and Impacts, IFC, 2017.

4. Anticipated Environmental and Social Impacts of BESS Projects and Mitigation Measures

4.1 Construction Phase E&S Impacts and Mitigation Measures

Potential E&S Impacts	Mitigation Measures
Air	- Dust suppression via constant watering on road pavements, construction sites (especially near receptors and OTL sites). - Erecting screens/barriers around dusty activities or site boundaries (at least as tall as stockpiles). - Covering or fencing stockpiles to prevent wind erosion.
Water	- Construct shallow swales/ditches to direct runoff toward infiltration areas, avoiding direct flow into south boundary water channels. - Store construction materials (especially hazardous substances) in designated, elevated areas to prevent washout during rain.
Noise	- Use low-noise equipment to reduce noise at the source. - Provide PPE (e.g., earplugs) for on-site workers and ensure proper use during construction activities. - Prohibit noisy/high-noise activities at night (23:00–07:00) and on weekends without prior Project Company approval.
Soil	- Include topsoil stripping, stockpiling, and management in the construction workplan before land clearance and excavation. - Manage soil erosion by backfilling as quickly as feasible and re-establishing the original soil profile (e.g., layering subsoil beneath topsoil). - Properly cover the excavated areas to avoid dust and ensure regular sprinkling of water.
Waste	- Create a Waste Management Plan (WMP), specifying requirements and responsibilities for waste generation, collection, transport, and disposal. - Only contract with licensed waste transporters and management facilities to ensure compliance with regulatory standards. - Maintain a detailed log to document and track non-hazardous and hazardous waste generation and transportation.

Biodiversity	- Minimize vegetation disturbance by designing construction zones and access roads to avoid vegetation wherever feasible. - Restore vegetative cover in residual areas within project sites. - Ban hunting; educate staff on biodiversity conservation and wildlife protection (no collection/disturbance). - Insulate electrical equipment, install flight diverters/perch bars, maintain conductor spacing, and monitor raptor electrocution incidents.
Economy and Employment	- Prioritize qualified local workers (especially from economically displaced households) in employment and procurement, guided by clear principles. - Communicate construction employment plans (worker numbers, recruitment methods, job requirements) to contractors/subcontractors and embed project-specific labor requirements in contracts. - Include gender equality statements in all ads, encouraging women applicants.
Road Safety and Transport	- Assess road conditions with photos/drones pre- and post-construction. - Construction activities restricted to demarcated zones and transit corridors. - Ensure all drivers have the right competencies, require all drivers to undergo a driver's induction and sign the drivers code of conduct. - Set speed limits for driving on village roads (e.g. maximum of 30 km/h). - Grievance mechanism to collect traffic or road access-related grievances and provide timely feedback in accordance with the grievance mechanism.
Security Management	- Vet security providers/candidates; include UN human rights standards in contracts. - Train security on use of force; engage public security management if direct training isn't feasible. - Notify local law enforcement immediately post-incident for investigation/prosecution.
Labor Management	Implement a Worker Code of Conduct (CoC) for all workers (contractors/subcontractors), including induction training.

	Establish a policy defining acceptable conduct and the company's stance on gender-based violence/harassment.
Social Relations and Infrastructure	- Develop and implement Stakeholder Engagement Plan; collect data every 2 months from authorities/villages to track water/power access impacts, excluding extreme weather. - Address complaints about project impacts on local services.
Occupational Health and Safety	- Conduct risk assessments to identify hazards and prioritize elimination/control. - Provide OHS induction and ongoing training. - Follow OHS plan prepared for construction phase of the project. - Conduct regular safety drills.
Land Acquisition and Resettlement	- Monitor that the Project-Affected Peoples (PAPs) receive alternative grazing land of equal or better quality. - Disclose channels to affected herders and farmers. For valid reports of livelihood decline, propose and implement supplementary restoration measures.
Unplanned Events	- Develop a comprehensive EPRP, including first aid, fire and explosion, spill and leakage incidents. - Train all personnel on fire safety/emergency response (evacuation, alarms, firefighting). - Maintain a communication with local departments including police, fire brigade, disaster management and hospitals

4.2 Operational Phase E&S Impacts and Mitigation Measures

Potential E&S Impacts	Mitigation Measures
Water	Reuse treated domestic wastewater for onsite irrigation.
Noise	Mitigation measures include the regular maintenance of all equipment and the provision of information, instruction, and training to employees.
Soil	- Include topsoil stripping, stockpiling, and management in the construction workplan before land clearance and excavation. - Manage soil erosion by backfilling as quickly as feasible and re-establishing the original soil profile (e.g., layering subsoil beneath

	topsoil). • Properly cover the excavated areas to avoid dust and ensure regular sprinkling of water.
Waste	• Include hazardous waste in the Waste Management Plan (WMP), prioritizing protection of human health and the environment from risks associated with its generation, storage, handling, transportation, and disposal. • Maintain a detailed log to document and track hazardous waste generation and transportation, categorized by waste type, for traceability and compliance. • Establish a dedicated hazardous waste storage room with impervious hard-standing areas and sealed containers with impermeable bases.
Biodiversity	• Ban hunting; educate staff on biodiversity conservation and wildlife protection (no collection/disturbance). • Prevent raptor electrocution: insulate electrical equipment, install flight diverters/perch bars, maintain conductor spacing, and monitor incidents.
Road Safety and Transport	• Ensure all drivers have the right competencies, require all drivers to undergo a driver's induction and sign the drivers code of conduct. • Set speed limits for driving on village roads (e.g. maximum of 30 km/h). • Grievance mechanism to collect traffic or road access-related grievances and provide timely feedback in accordance with the grievance mechanism.
Security Management	• Vet security providers/candidates; include UN human rights standards in contracts. • Train security on use of force; engage public security management if direct training isn't feasible. • Notify local law enforcement immediately post-incident for investigation/prosecution.
Infrastructure	Regular inspection and maintenance of the infrastructure built for project.

Occupational Health and Safety	• Conduct risk assessments to identify hazards and prioritize elimination/control. • Provide OHS induction and ongoing training. • Follow OHS plan prepared for operation phase of the project. • Conduct regular safety drills to deal with events of fire and any other.
Unplanned Events	• Develop a comprehensive EPRP, including first aid, fire and explosion, spill and leakage incidents. • Train all personnel on fire safety/emergency response (evacuation, alarms, firefighting). • Maintain a communication with local departments including police, fire brigade, disaster management and hospitals.

5. Stakeholder Engagement Mechanism and Grievance Redressal Mechanism

5.1 Stakeholder Identification and Analysis

Stakeholder groups for each sub-project shall be identified in the project-level Stakeholder Engagement Plan (SEP). Potential stakeholder groups are listed as follows.

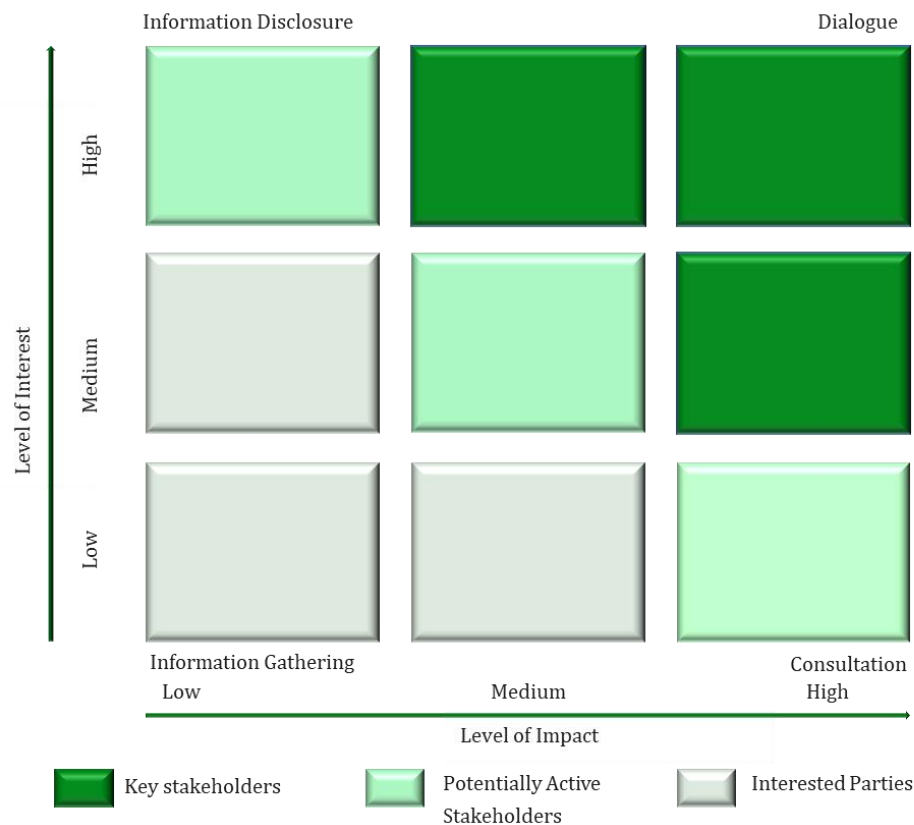
TABLE 2 PRELIMINARY IDENTIFICATION OF STAKEHOLDERS

Stakeholder Group	Engagement Purpose/Key Actions
Affected communities	Ensure engagement with community leaders, vulnerable groups, and women, as they are directly/indirectly impacted.
National, Regional, and Local Authorities	Engage to understand local regulations and obtain project permits.
NGOs and CSOs	Engage groups interested in the project's social/environmental aspects and address their concerns.
Media	Anticipate coverage, especially for projects with significant environmental/social impacts on communities.

Stakeholders will be categorized by their level of interest and impact upon (by) the company/project. A stakeholder analysis matrix (**Figure 4**) should be prepared based on the categorization. Depending on their level of interest and influence on the company/project, there are three different types of stakeholders:

- Key stakeholders (e.g. affected local communities and authorities that issue permits for the Project),
- Potentially influential stakeholders (e.g. NGOs and CSOs that are active in the Project's area of influence and concerned with the Project's environmental and social impacts)
- Interest parties (e.g. media).

FIGURE 4 STAKEHOLDER ANALYSIS MATRIX



5.2 Engagement Methods

Table 3 lists the types of stakeholders, engagement methods, and action parties based on the stakeholder groups identified above. It is important to note that it only covers the stakeholders identified preliminarily, and that the specific stakeholder engagements for each project should refer to project-level SEP.

TABLE 3 STAKEHOLDER ENGAGEMENT METHODS

Stakeholder Group	Engagement Methods	Action Parties
National, regional and local authorities	Confirm the information required by authorities and the requirements that the project should comply with, consult with government officials when necessary, and maintain good dialog and communication with them; Timely submission of documents to obtain relevant permits.	Project Companies
Affected communities	Timely disclosure of E&S impacts	Project Companies

	that may bring to affected communities, grievance channels, records of stakeholder engagement activities and follow-up; hold public hearings when necessary. Dialogue and communication should be maintained with affected communities to ensure that stakeholders' concerns are responded to in a timely manner; special attention should be paid to women and vulnerable groups, and appropriate channels of communication, disclosure, feedback, and resolution should be provided for them.	
Non-governmental Organizations (NGOs) and Civil Society Organizations (CSOs)	Regular disclosure of relevant information	Project Companies
Media	Regularly follow and monitor media reports about the company and project construction and operation	Project Companies
Document, Review and Update Continuously engage with stakeholders through Project lifecycle. Document and monitor all engagement activities. Report back to stakeholders to address their concerns when necessary.		Project companies

5.3 Grievance Redress Mechanism

Two-tiered Grievance Redress Mechanism (GRM) has been established at both the corporate level and the project level.

Project Companies shall serve as the primary frontline channel for receiving project-specific grievances. If the grievance cannot be resolved at the project level, the claimant may escalate it to the General Administration Department of CEECOIC. As the final authority for grievance handling, this department will collaborate with other relevant units as necessary to ensure proper resolution.

5.3.1 Grievance Redress Mechanism Policy

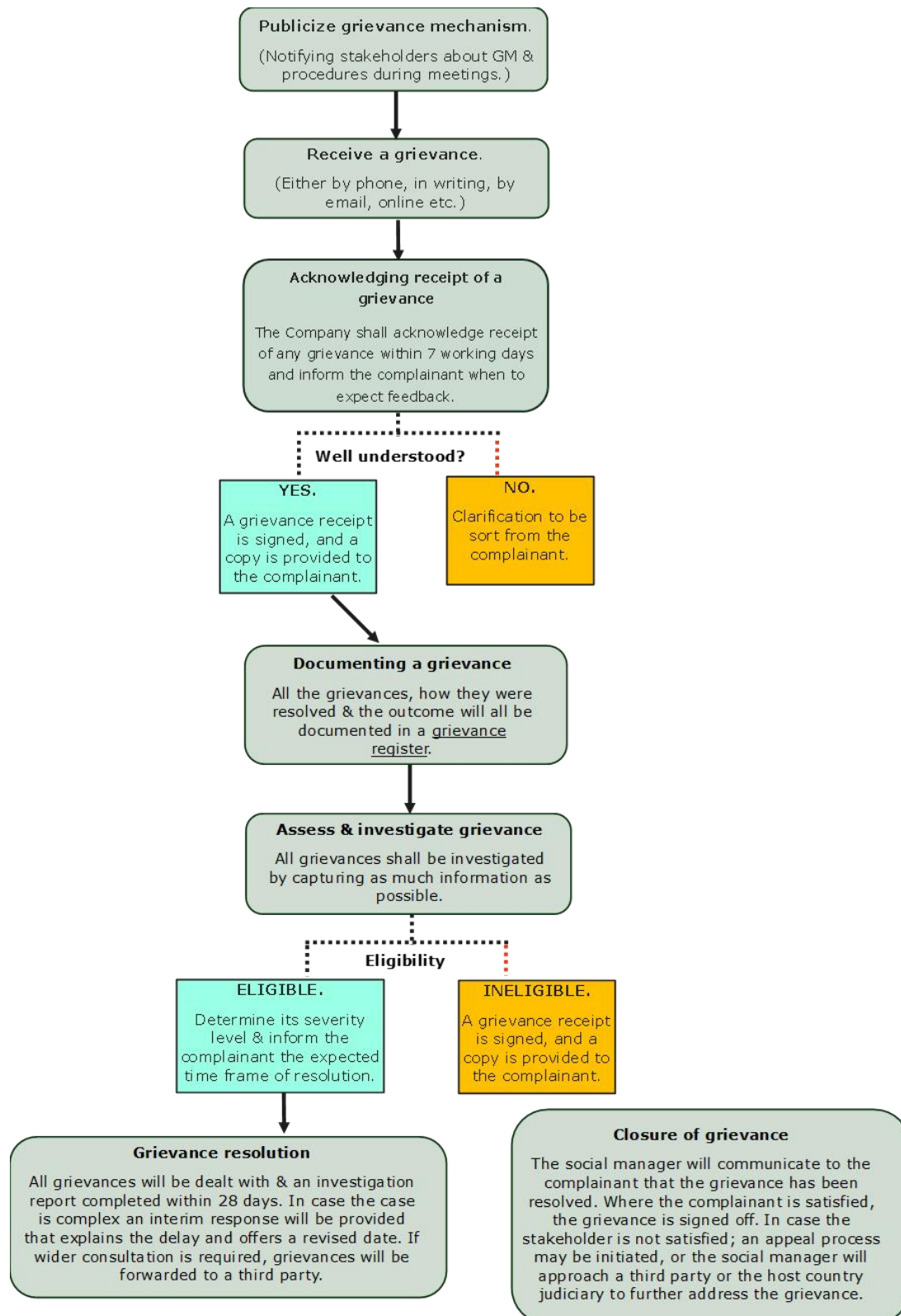
1. The Project Companies will establish an external GRM to provide a channel for external stakeholders to voice concerns and queries about CEECOIC and projects, ensuring

timely responses, offering stakeholders opportunities to raise comments/concerns, structuring and managing the handling of comments/responses/grievances for monitoring mechanism effectiveness, and ensuring fair and transparent handling.

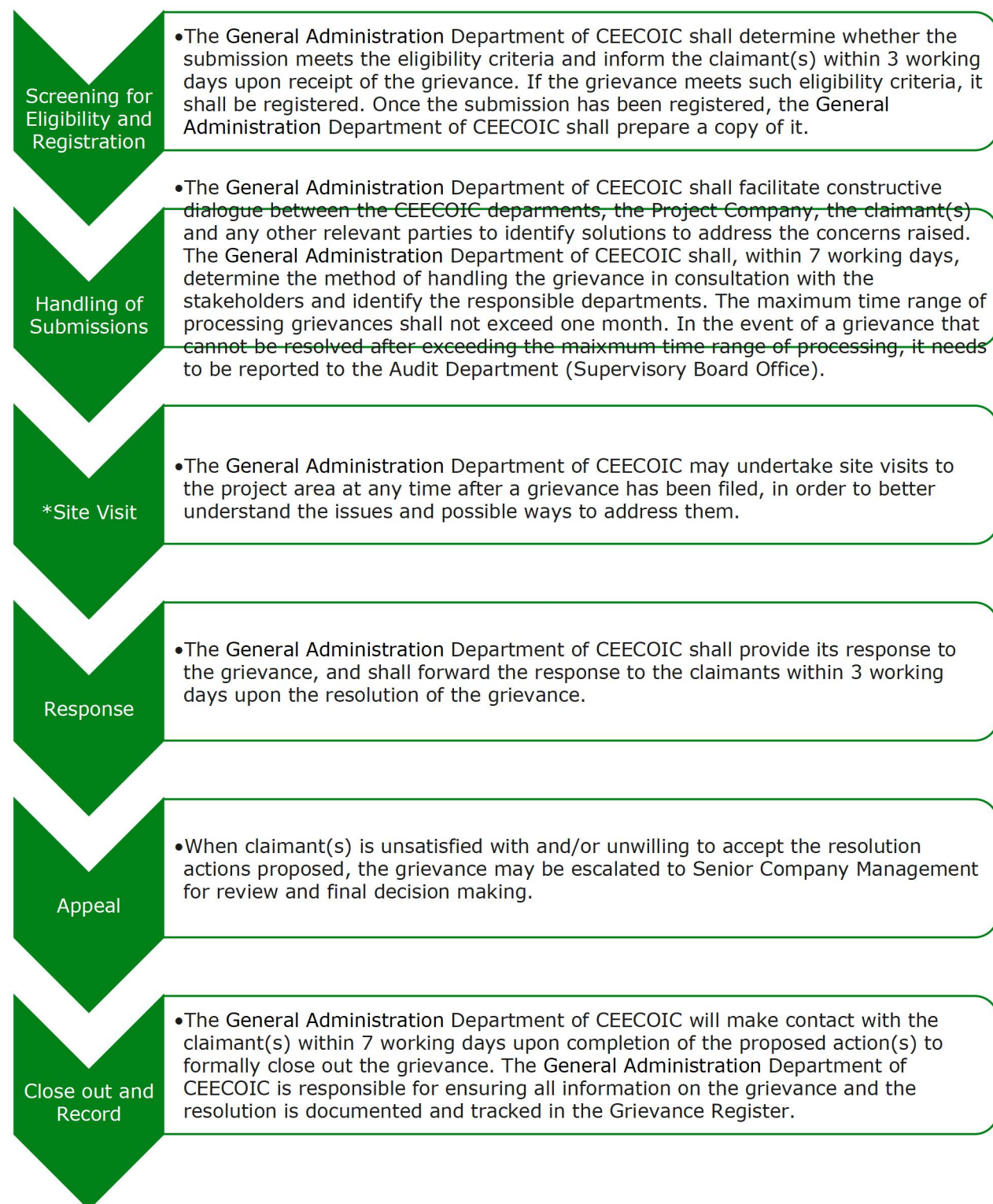
2. The Project Companies will make the external GRM culturally appropriate and language-accessible to affected stakeholders, inform project-affected people about its availability in locally appropriate language(s) via accessible and understandable means, including on the project-related website.
3. The Project Companies will establish a suitable project-level external GRM to receive and facilitate resolution of concerns/complaints from people believing they are adversely affected by the project's environmental or social impacts, and inform project-affected people of its availability, with the mechanism being culturally appropriate and language-accessible.
4. The Project Companies will acknowledge, log, and track all grievances received via external GRMs, and analyze grievance trends to identify systemic issues.
5. Strategies will be followed during the resolution of grievances, including disputes and conflicts:
 - Stakeholder(s) that raise the grievance will not be subject to any reprisal.
 - The external GRM will not impede access to judicial or administrative remedies. In addition, affected stakeholders have options to seek resolution through dispute resolution mechanism that they are more familiar with, and that they trust exist at community, national, industry, regional, and international levels.
 - Accredited or trustworthy third parties (e.g. accredited NGOs, local community heads, and accredited industrial organizations (for technical disputes) etc.) may be sought out for assistance when direct negotiations between affected stakeholders and responsible parties are unsuccessful.

5.3.2 Procedure for Grievance Redress

Project Level



Corporate Level



6. Environmental and Social Management

6.1 Environmental and Social Risk Assessment and Management

- CEECOIC will conduct ESIA for projects categorized as Category B, in accordance with AIIB ESF categorization. The ESIA will be conducted during the feasibility stage of project development so that findings can inform project designs.
- The scope and depth of the ESIA will be proportional to the nature and magnitude of the Project's potential E&S risks and impacts.
- The ESIA applies a mitigation hierarchy to:
 - anticipate and avoid risks and impacts.
 - where avoidance is not feasible, minimize or reduce risks and impacts to acceptable levels.
 - once risks and impacts have been minimized or reduced, mitigate them; and
 - where residual risks or impacts remain, compensate for or offset them, where technically and financially feasible.

FIGURE 5 MITIGATION HIERARCHY



- CEECOIC will incorporate effective measures to avoid, minimize, mitigate, offset or compensate for the adverse impacts into the Project's design and Environmental and Social Management Plan (ESMP).

6.2 General Principles on Involuntary Resettlement

- The Land Use Self-Checklist of the Land Acquisition and Involuntary Resettlement Management Procedure introduced in the Land Acquisition and Involuntary Resettlement Management Procedure will be adopted to understand if the project involves involuntary resettlement.
- For all new projects, where it is not feasible to avoid involuntary resettlement, it is required to prepare a Resettlement Action Plan, Livelihood Restoration Plan or Resettlement Framework (RAP/LRP/RF) in accordance with the Land Acquisition and Involuntary Resettlement Management Procedure in this ESMS, to manage the impacts of resettlement caused by Projects.
- In case any involuntary resettlement was undertaken within three years prior to identification of the project for possible investment, it is also required to prepare RAP/LRP/RF in compliance with the Land Acquisition and Involuntary Resettlement Management Procedure in this ESMS, to manage the impacts of resettlement caused by the Project.

- In certain situations, particularly when unresolved legacy issues persist, CEECOIC may retain the rights to conduct a resettlement audit of the involuntary resettlement that occurred prior to the three-year period against the requirements in the corporate ESMS and address any gaps if necessary.

6.3 General Principles on Indigenous Peoples

- The Indigenous Peoples Self-Check List introduced in the Indigenous Peoples Management Procedure will be adopted to identify if the project involves indigenous peoples.
- If the project would have impacts on Indigenous Peoples according to the social assessment, it is required to prepare an Indigenous Peoples Plan/ Indigenous Peoples Planning Framework (IPP/IPPF) in accordance with the Indigenous Peoples Management Procedure in the corporate ESMS.

6.4 General Principles on Climate Change

- CEECOIC's approach to address climate change is developed in line with the concept of Double Materiality, i.e. CEECOIC not only considers the climate change issues that have or may have a significant impact on the company's development, cash flow, financing capacity etc., within different timeframes ("the climate change risk"), but also the actual or potential positive and negative climate-related impacts of CEECOIC's business activities on the environment and community within different timeframes ("the climate change impact").
- For climate change risk management, Project Companies actively screen and assess potential climate change risks and opportunities and their possible consequences in accordance with the requirements set by CEECOIC's Climate Change Management Procedure on a regular basis. Based on the assessment results, Project Companies develop and implement specific mitigation measures to ensure the climate resilience of operations.
- For climate change impact management, Project Companies track and analyze the compliance of operation with host countries and international carbon neutralization and GHG emission regulations and policies and actively engage with relevant authority agencies and institutes to understand policy and law enforcement trends. Where economically and technically feasible, prioritize the use of equipment and production technologies with higher efficiency, and the use of low-carbon and renewable energy. Project Companies advance the management of fugitive GHG emissions and take measures to reduce GHG emissions during both project development and operation to comply with relevant laws and regulations.
- In addition, if the actual (or predicted) annual GHG emissions during a project's operational phase exceed 25,000 tonnes of CO₂e, or if the project is subject to laws and regulations or other requirements of stakeholders, Project Companies regularly conduct GHG accounting and disclose absolute emissions and emission intensity.

6.5 General Principles on Vulnerable Groups, Gender and Gender-Based Violence

- The social impact assessment should assess any potentially adverse risks and impacts of the project on vulnerable groups, including discrimination, and propose mitigation measures.
- The social impact assessment should identify and assess any potentially adverse gender-specific risks and impacts of the project, collect gender-disaggregated baseline data, and consider opportunities to enhance the design of the Project to promote gender equality and women's economic empowerment.
- The internal and external Grievance Redress Mechanism of CEECOIC and Project Companies should be designed with consideration of gender-related concerns and complaints relating to GBV, which include a gender-sensitive and strictly confidential channel and response methods.
- The social impact assessment should assess and put in place mitigation measures for GBV risks induced by labor influx and security personnel.

6.6 General Principles on Cultural Resources⁶

- Assess Project-induced risks and impacts on cultural resources as required by the host country laws and regulations during the feasibility study stage and avoid impacts upon cultural resources through project design, including but not limited to conducting field-based surveys using suitably qualified and experienced experts for the assessment.
- When avoidance of impacts on cultural resources is not feasible, minimize adverse impacts and implement restoration measures that ensure maintenance of the value and functionality of the cultural resources in accordance with the requirements of local laws and authorities. A cultural resources management plan can be prepared to outline and document the mitigation, restoration and monitoring measures during the preparation of EMSP.
- All projects should develop a Chance Find Procedure to manage any archaeological discoveries during site preparation or implementation of the Project.
- The Chance Find Procedure is designed to standardize the responses if previously unknown heritage resources, particularly archaeological resources, are encountered during project construction or operation. The procedure encompasses the following key elements:
 - Recordkeeping and expert verification procedure.
 - Chain of custody instructions for movable finds.

⁶ According to AIIB ESF, cultural resources include movable or immovable objects, sites, structures, groups of structures and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance, as well as graveyards and individual grave sites.

- Clear criteria for potential temporary work suspension that could be required for rapid disposition of relevant issues after discovery of the finds
- Roles and responsibilities and the response times required from both project staff, and any relevant heritage authority
- Agreed consultation procedures.
- CEECOIC does not engage in any commercial development of cultural resources.

6.7 General Principles on Labor and Working Conditions

- The Human Resources Departments of Project Companies should establish a human resource management system that complies with local laws and regulations, and should at a minimum include:
 - Establish and publish the Labor Policy of each Project which should adhere to CEECOIC ESMS Policy.
 - Establish Labor-related procedures that are in line with the host country's legislation and good international practices, which include but are not limited to:
 - Prohibit the use of child labor. There shall not be any employment of workers under the minimum age for employment as defined by national law of the host country. Workers between the minimum age⁷ and 18 will not be engaged in hazardous work or work that interferes with their education or development. All work of persons under the age of 18 will be subject to an appropriate risk assessment and regular monitoring of health, working conditions, and hours of work. The first preference, however, is to avoid the employment of any person under the age of 18.
 - Prohibit the use of forced labor. The Procedure should put in place measures to prohibit each type of forced labor listed in the ILO Indicators of Forced Labour⁸.
 - Promote equality and non-discrimination. The Procedure should state clearly that the Project Company shall not discriminate on the basis of race, color, religion (creed), gender, gender expression, age, national origin (ancestry), disability, marital status, sexual orientation in any of its activities or operations. These activities include, but are not limited to, selection, hiring, training, promotion, wage and benefits, and termination of contracts.

⁷ The minimum age of employment in Uzbekistan is 15 years, and in some cases, it is 14 years. It is per international standards and the 138th ILO convention held in 2009, which Uzbekistan ratified. However, individuals below 18 years of age require the written consent of either parents or parents in loco parentis.

⁸https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@ed_norm/@declaration/documents/publication/wcms_203832.pdf

- Respect workers' organizations and rights to collective bargaining in compliance with the national laws. Procedure should state clearly that there should not be interference with, or discrimination against, workers in this regard.
 - Regulate labor contracts, terms of employment, working hours, overtime work, remuneration, leave, benefits and insurance, termination, and retrenchment in accordance with local laws and regulations.
 - Regulate occupational health and safety in accordance with national laws and World Bank Group Environmental, Health and Safety Guidelines, ensuring providing free personal protective equipment and all workers, including contractor workers, can report dangerous work situations and suspend work until safety is reasserted. The accommodation of direct workers and contractors should at least be in line with requirements of Workers' Accommodation: Processes and Standards - A guidance note by IFC and the EBRD (2009).
 - Establish Project Company internal grievance mechanism and make it available to all employees, including contracted workers.
 - Provide employee training and awareness raising sessions relevant to the applicable labor and working conditions.
- Implement the Contractor Management Procedure in this ESMS to ensure that the labour and working conditions of contractor workers are properly managed and monitored.

6.8 General Principles on Supplier Management

- The Construction Management Department of CEECOIC and Project Companies should implement full-cycle supervision and management of suppliers through control measures outlined in the Supplier Management Procedure. This includes implementing the Supplier Self-Assessment Questionnaire, public media search, supplier due diligence, contract clauses, and periodic compliance check and follow-up action.
- If issues such as child labor, forced labor and major labor and working condition issues are identified during the supplier's contract period, immediate and effective measures to remedy the situation or replace the supplier should be undertaken.

6.9 General Principles on Security Personnel

- The management of security personnel should comply with the following principles. Specific requirements were outlined in the Environmental, Health and Safety Management Framework.
 - The use of force and firearms by security personnel shall comply with the United Nations Basic Principles on the Use of Force and Firearms.

- Recruitment procedures for security personnel that exclude individuals with convictions or credible allegations of human rights abuses, violations of international humanitarian law, or excessive use of force.
- The Code of Conduct for security personnel should be consistent with the requirements of the Voluntary Principles on Security and Human Rights.
- Ensures that all security personnel receive ongoing training, including on codes of conduct.
- Procedures for the management of recording and investigation of security incidents, including recording and investigating those incidents involving human rights implications or the use of force, taking appropriate measures to prevent recurrence, and reporting violations to the relevant authorities as necessary.
- If security personnel are provided by a private security company or public security services, the Project Companies will make reasonable efforts to meet the above requirements.

7. Institutional Arrangements

CEECOIC has established a two-tier responsibility system between "CEECOIC - Project Company," clarifying that CEECOIC is the ultimate supervision and decision-making body for the E&S affairs, while Project Companies are the responsible entities for Project-level E&S management and implementation. Specifically, CEECOIC assumes supervisory responsibility for Project Companies, responsible for guiding and monitoring the implementation of the host country's laws and regulations and the relevant provisions of this ESMS for the projects, and evaluates the implementation against these standards. Meanwhile, other departments of CEECOIC, in line with their designated roles, offer necessary technical guidance for and oversight the E&S management of Project Companies. The detailed responsibilities are listed in **Table 4**.

TABLE 4 E&S RESPONSIBILITIES WITHIN CEECOIC

The organizational structure of CEECOIC	Responsibilities under this ESMS
Board	• Oversight and Integration: Ensure that E&S considerations are integrated into CEECOIC's strategic planning and investment criteria. • Regulatory Compliance: Ensure that the Project Companies comply with relevant E&S regulations in host countries and CEECOIC's ESMS requirements. • Accountability: Establish clear accountability mechanisms for E&S performances, including assigning specific E&S performance responsibilities to board, committees, and members.
ESG Committee	• Review E&S Policies, ESMS Management Procedures, and screening tool to ensure they meet MDB standards. • Ensure the adequate resources are allocated to support effective ESMS implementation.
General Administration Department	• Develop and regularly update the company's ESMS in alignment with MDB's E&S requirements. • Oversee the effective and systematic implementation of E&S management across other departments within CEECOIC and project companies. • Conduct review of project companies' ESMS to ensure its effectiveness and consistency with CEECOIC's ESMS • Develop and implement an E&S monitoring system for

	Project Companies, provide feedback for improvements based annual performances. • Implement and manage CEECOIC's external grievance mechanism. • Regularly collect and archive stakeholder engagement and grievance records from Project Companies; investigate and verify major grievances and provide suggestions.
QHSE Department	• Provide E&S support throughout the project lifecycle. • Review E&S incident investigations conducted by Project Companies through spot checks, ensuring thoroughness and accuracy.
Investment Departments	• Engage a qualified third party to conduct ESIA/ESDD and other additional E&S studies if needed, after the project establishment; • Review the ESIA/ESDD reports.
Construction Management Department	• Responsible for construction contractor management and tier 1 supplier supervision. • Responsible for effective implementation of ESMS during construction phase. • Responsible for overseeing E&S performance and ensuring compliance with host countries' regulations and standards and CEECOIC's ESMS.
Operational Management Department	• Responsible for supervising and guiding Project Companies in implementing the Project-level ESMS in alignment with CEECOIC's ESMS during the operational phase. • Responsible for overseeing the E&S performance and ensuring compliance with host countries' regulations and standards and CEECOIC's ESMS.
Finance and Accounting Department	• Responsible for identifying E&S management requirements from AIIB and other lenders, and clarifying E&S related deliverables and corresponding timelines. • Responsible for coordinating ESDD and the subsequent monitoring led by AIIB and other lenders.
Human Resource	• Responsible for building a talent pool related to ESMS.

Department	• Implement and manage CEECOIC's employees' grievance mechanisms.
Project Company	• Develop ESMS at the Project Company level in accordance with CEECOIC ESMS's requirements and submit to the CEECOIC's General Administration Department for review. • Conduct investigations into incidents; • Conduct routine E&S monitoring, inspection and audits on contractors' onsite activities to assess the effectiveness of ESMS; • Develop, implement and monitor the implementation of project-level SEP. • Establish external grievance mechanisms, proactively respond to and address E&S related complaints, and ensure that all relevant records are properly maintained. • Deploy and maintain qualified environmental and social staff at the project level.

8. Monitoring and Reporting

8.1 Monitoring

To guarantee the effectiveness of this ESMS, CEECOIC reviews project performances against the requirements in this ESMS on an ongoing basis:

- Reviews the periodic monitoring reports provided by Project Companies to ascertain whether adverse risks and impacts are mitigated as planned.
- Request project to take corrective measures to rectify any non-compliances to comply with its E&S obligations.

Project Companies will:

- Comprehensive E&S Monitoring: Conduct comprehensive monitoring in accordance with the monitoring plan template specified in **Table 5**. For Category B projects, monitoring frequencies shall be at least semi-annually during the construction phase and annually thereafter.
- Specialized E&S Monitoring: Conduct the monitoring required in RAP/LRP/RF, IPP and IPPF, if applicable. The specialized monitoring plans, featuring timing, frequencies and scope/indicators of inspection, should be established in the ESMP, ESMPF, RAP/LRP/RF, IPP and IPPF.
 - Verify the compliance with these specific measures and their progress toward intended outcomes.
 - Engage appropriate qualified and experienced independent E&S experts, not affiliated with the project, to monitor implementation if the project is considered complex or sensitive. The external monitoring should also be undertaken as required by host country's legislations.
 - Document monitoring results and identify necessary corrective actions for implementation.

8.2 Reporting

Project Companies prepare and provide for CEECOIC periodic monitoring reports on the Project's the E&S measures. Category B project should perform monitoring report at least semi-annually during construction and annually thereafter.

Conduct monitoring in accordance with the requirements of **Table 5: E&S Monitoring Template**.

- Project Companies should report to CEECOIC immediately in case of any major incidents of non-compliance with requirements of this ESMS, social unrest, serious worker injuries or death.
- Project Companies will also carry out detailed investigations of all major/fatal accidents and will prepare a root cause analysis report which will be submitted to CEECOIC and the Lenders.

- CEECOIC is responsible for reporting the implementation of this ESMS as well as the E&S performances of projects to the lenders according to the deadline, frequency and scope agreed with the lenders.

TABLE 5 E&S MONITORING INDICATOR

Topic	Sub-topic	Indicator	Phase
Environmental Management	Environmental and Social Impact Assessment	Completed ESIA before construction commencement	Pre-Construction
	Environmental and Social Management System	Maintenance of project-specific ESMS	Pre-Construction
	Local Environmental Permit	Recipient of approval/permit before construction commencement	Pre-Construction
	Water	Maintenance of water usage and discharge logs	Construction and Operational
		Maintenance of sludge storage and transport logs	Construction and Operational
		Diversion and management of surface runoffs	Construction and Operational
	Soil Erosion	Topsoil is separately stored at a designated area	Construction
	Waste and Chemical	Establishment of a Waste Management Plan	Pre-Construction
		Maintenance of hazardous and non-hazardous waste storage and transport logs	Construction and Operational
	Biodiversity	Maintenance of wild animal incidents (e.g. electrocution) and presence of protected species log, along with measures taken	Construction and Operational
	Climate Change	Documentation of climate change risk screening results	Pre-Construction
		If applicable, documentation of climate change risk assessment results	Pre-Construction
Labor and Working Condition	Labor Management	Worker employment contracts	Throughout the project lifecycle
		Payroll records	Throughout the

			project lifecycle
		Timesheets and wage deduction records	Throughout the project lifecycle
	Internal Grievance Mechanism	Establishment of Internal Grievance Mechanism (GRM). The Internal GRM should be applicable to all employees engaged by the project, as well as contractor workers.	Pre-Construction
		Percentage of employees attended internal GRM training sessions	Throughout the project lifecycle
		Maintenance of an internal grievance log, including the number of grievances received, resolved, and pending	Throughout the project lifecycle
	Contractor Management	E&S management requirements (including environment, biodiversity, labor, health and safety, accident management, information disclosure, reporting, and grievance handling) are included in the bidding document	Pre-Construction
		E&S clauses (including environment, biodiversity, labor, health and safety, accident management, information disclosure, reporting, and grievance handling) are included in contracts	Pre-Construction
		EHS inspection log maintained by contractors	Construction
		Maintenance of monthly supervision log of contractor E&S performances against ESMP	Construction
	Supplier Management	E&S clauses regarding supplier management (including forced labor and child labor, health and safety, accident management) are incorporated in contracts between EPC contractors and suppliers	Pre-Construction
		Periodic external (e.g. political, environmental, etc.) factors review using publicly available resources	Throughout the Construction
Contractor Management	Forced labor	Worker employment contracts	Pre-Construction
		Payroll records	Construction
		Timesheets and wage deduction records	Construction
		Worker passports and IDs held by employers	Construction

	Child Labor	Birth and medical records and school records of workers	Pre-Construction and throughout construction
Health and Safety	Operational Health and Safety	Job Hazard Analysis and associated SOPs	Pre-Construction and throughout the project lifecycle
		Safety certificates, training curriculum and logs	Throughout the project lifecycle
	PPE	Distribution log of PPE (e.g. earplugs) and proper use of it	Construction and Operational
	Incident Management	Site-specific EPRP	Pre-Construction and Pre-Operational
		Maintenance of fire and safety drill logs	Construction and Operational
		Maintenance of accident and medical treatment logs, incident investigation records	Construction and Operational
	Transport	Documentation of driver's licenses	Construction and Operational
		Percentage of drivers attended transport and road safety training sessions	Construction and Operational
Land Acquisition and Involuntary Settlement	Land Certificate	Land certificates or land lease contract	Pre-Construction
	Resettlement Action Plan (RAP)	If applicable, completion of RAP	Pre-Construction
	Resettlement Completion	Percentage of affected persons who received full amount of agreed compensation	Construction and Operational
	Livelihood Restoration Plan (LRP)	If applicable, completion of LRP before land acquisition	Pre-Construction

	Resettlement Completion and Livelihood Compensation	Final Completion Audit to certify the completion of RAP/LRP	Construction and Operational
Community Health & Safety	Security Management	Establishment of security management procedure	Pre-Construction
	Security Personnel Training	Percentage of security personnel trained on human rights and use of force	Pre-Construction and Ongoing
	Incident Reporting	Number of reported security incidents involving security forces	Construction and Operational
Stakeholder Engagement and Grievance Mechanism	Stakeholder Engagement Plan (SEP)	Establishment of SEP with external grievance mechanism	Pre-Construction
	Stakeholder Engagement Activity	Documentation of stakeholder engagement monitoring (refer to project-level SEP for project-specific KPIs)	Construction and Operational
		Maintenance of a grievance log, including the number of grievances received, resolved, and pending.	Construction and Operational
Indigenous People	Indigenous People Screening	Application of Indigenous Peoples Self-Check List	Pre-Construction
	Indigenous Peoples Plan	If applicable, preparation of Indigenous Peoples Plan	Pre-Construction
Cultural Heritage	Cultural Heritage Screening	Conduct cultural heritage screening	Pre-Construction
	Chance Find Procedure	If applicable, prepare a Chance Find Procedure	Pre-Construction
	Chance Find Records	If applicable, records of cultural artifacts discovery	Construction
Organizational Structure	Roles and Responsibilities	Clear job description of E&S Personnel	Pre-Construction

	Capacity Building	AIIB ESF-aligned E&S training for employees from the Project Companies	Throughout the project lifecycle
		MDB standards-aligned E&S training for employees from contractors	Throughout the construction phase

9. Training and Capacity Building

The corporate ESMS categorizes trainings into two distinct types: awareness-raising training and specialized E&S training.

- Awareness raising is designed to provide a general understanding of the CEECOIC's E&S policy and principles and support the implementation of this ESMS.
- Specialized E&S training will be provided to CEECOIC staff, Project Companies staff and contractor staff who have responsibilities over the E&S aspects in their roles. All workers will be informed and trained to perform their jobs competently, efficiently, and safely. Project-level ESMS should include a training matrix that identifies roles and the types of training under the ESMS that shall be needed for each role.

TABLE 6 CAPACITY BUILDING ARRANGEMENTS

Target	Scope of Training	Frequency
CEECOIC all staff, including the management level	• AIIB ESF • CEECOIC's ESMS • Potential E&S risks screening and categorization • Internal and External GRM	Once a year
CEECOIC ESMS-related roles	• CEECOIC's ESMS • MDB E&S standards (e.g. AIIB ESF, IFC PS) • Potential E&S risks screening and categorization • RAP/LRP/RF, IPP/IPPF • Preparation and Implementation of ESMP, SEP, RAP/LRP/RF, IPP/IPPF • Internal and external GRM • Emergency preparedness and response, accident investigation and root cause analysis	Once a year
Project Company E&S team	• CEECOIC and Project-specific ESMS • Good International Industry Practices • Host country's E&S laws and regulations and E&S requirements • Implementation of ESMP, SEP, RAP/LRP, Project-level GRM • Environmental and social monitoring and site supervision • Occupational health and safety	Once a year

	• Waste management and disposal • Labor management • Emergency preparedness and response • Gender sensitivity • Grievance Mechanism	
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Appendix A: Exclusion List

CEEEOIC will not knowingly invest in projects involving the following:

1. The project involves the employment, directly or indirectly (through labor intermediaries or key suppliers), of any employee under the age of 16 or the existence of forced labor, including:
 - a) The company/project employs child labor.
 - b) The company/project pays workers less than the local minimum wage.
 - c) Withholding a worker's identity card or other identification documents.
 - d) Forced labor by means of violence, threat or illegal restriction of personal freedom.
 - e) Insulting, physically punishing, beating, illegally searching and detaining workers.
 - f) The company/project withholds or fails to pay wages to workers without explanation.
 - g) The company/project collects property from workers in the name of guarantee or other purposes
 - h) Collection of deposits from workers by employment agencies;
2. The project leads to forced eviction⁹;
3. Project site locates at which listed in World Heritage List or the host country's official list of applying for World Heritage Sites;
4. The project is located in national and international protected areas, Important Bird Areas (IBAs), Key Biodiversity Areas (KBAs), Alliance for Zero Extinction (AZE) protected areas, Ramsar Sites (wetlands of international significance), known bird aggregation areas and unique or threatened ecosystems

⁹ According to the definition by UN, forced evictions can be broadly defined as the permanent or temporary removal against their will of individuals, families and/or communities from the homes and/or land which they occupy, without the provision of, and access to, appropriate forms of legal or other protection.