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# SMART SOLAR TECHNOLOGIES

## Aliğa Solar Cell & Solar Module Integrated Production Factory

### ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP)

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JANUARY 2024

ANKARA



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# 1 ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

This plan presents the Environmental and Social Management Plan (ESMP) for 'Aliğa Solar Cell and Solar Panel Integrated Production Factory' project undertaken by Smart Solar Technologies and is prepared by 2U1K Engineering and Consultancy Inc (2U1K).

The Project Company seeks potential financing from Asian Infrastructure Investment Bank (AIIB) for the Project construction. Therefore, the Project Company has appointed 2U1K for the preparation of ESMP in line with AIIB ESP (including applicable ESSs and ESEL) and good international industry practice, such as the World Bank Group's Environment, Health and Safety Guidelines.”

The project is in both operation and construction phases. An Environmental and Social Due Diligence study has been conducted and the ESMP has been prepared including the Environmental and Social Due Diligence outcomes observed during the site visit.

Reports prepared within the scope of ESDD:

- Stakeholder Engagement Plan (12.2023)
- Environmental and Social Management Plan (01.2024)
- Environmental and Social Action Plan (01.2024)
- Climate Change Risk Assessment Report (01.2024)
- Non-Technical Summary (01.2024)

Plans to be prepared by the Project Company within the scope of ESMP ;:

- Prior to the Construction Period the following E&S instruments and mechanisms will be prepared/updated and implemented throughout the project lifetime: Updated HR and labor management procedures – March 2024
- Updated Emergency Response Plan- January 2023
- Updated Occupational Safety and Health Management Plan-March 2024
- Supply Chain Management Plan- March 2024
- Camp Management Plan-March 2024
- Traffic Management Plan-March 2024
- Waste Management Plan-November 2023
- Contractor Management Plan-March 2024
- Consumption Monitoring Plan (including water, energy and fuel consumption)-January 2024

- The structured Public Grievance Redress Mechanism (GRM) and Worker GRM established and functioning.-March 2024

Construction period plans will be prepared by the subcontractor. Project Company is responsible for the effective implementation and monitoring of these plans.

Prior to the Operation Period the following plans will be updated and implemented throughout the operations:

- Emergency Response Plan- March 2023
- Waste Management Plan-March 2024
- Hazardous Materials Management Plan-January 2024
- Occupational Safety and Health Management Plan-January 2024
- Traffic Management Plan-January 2024
- Consumption Monitoring Plan (including water, energy and fuel consumption)-January 2024

### 1.1 Supply Chain Management Plan-March 2024

The Project Company is responsible for the preparation and implementation of the operational period plans. Purpose of Environmental and Social Management Plan

- To describe the Project components and activities of relevance to the environmental and social impacts assessments,
- To identify and address relevant national and international legal requirements and guidelines,
- To develop environmental & social management and monitoring plans in compliance with the relevant environmental laws, and
- To provide a framework for the implementation of specific management plans by the Project Company that will meet the requirements of the national legislation as well as AIIB's Environmental and Social Framework.

ESMP ensures that, throughout the lifecycle of the program, the Project Company continuously will screen all of the activities proposed under the program regarding the activities undertaken in relation to the Project and will monitor potential unintended environmental and social impacts properly and effectively.

## 1.2 Documentation and Reporting

Documentation is an important element linked to the implementation of the ESMP. The Project Company has already established a Quality Management System and documentation / record keeping system at a corporate level, and the commitments made within the scope of the ESMP will be included in the Project Company's existing management system. All procedures implemented by the Company will be reviewed and revised according to best practices.

### ***External Reporting***

All external reporting will be managed by the Project Company to the Turkish government entities under the national legislation requirements and to the Lenders within their obligations.

### ***Internal Reporting***

Internal reporting with regards to the Project Company's commitments within the ESMP will be managed jointly by the Human Resources Specialist, Environmental Officer and Occupational Health and Safety Officer. The Project Company will share inspection and audit findings with their suggested measures regularly with the management, the ESMP Implementation Committee and employees. To maintain an open communication between the employees and management on occupational health, safety, environmental and social issues the following tools will be used:

- Team Briefings,
- On-site work group meetings, and
- Work Specific Instructions.

## 1.3 Environmental and Social Management Plan Review

ESMP will be periodically reviewed to address changes in the responsible parties' organization, process or regulatory requirements.

Following any reviews, the Project Company will provide coordination through the ESMP Implementation Commission to make any necessary amendments to the ESMP, with the updates communicated to all responsible parties and employees involved in the Project.

## 1.4 Training

The Project Company will implement a training and awareness program covering ESMP and SEP expectations and commitments. As a minimum requirement, this should be implemented as an induction for all employees and sub-contractors with further training to be implemented depending on the level of responsibility for implementing the ESMP and SEP.

The training program will cover the following subjects:

- Purpose of ESMP and SEP in relation to the Project activities,
- Requirements of the management plans,
- Understanding of the sensitive environmental and social receptors within the project area and its vicinity,
- Awareness on the potential risk from the project activities,
- Scope of and officer for the Grievance Mechanism,
- Occupational health and safety, first aid, emergency preparedness,
- Communication with the local community,
- Training on the code of conduct, including gender-based violence, sexual harassment, sexual exploitation and abuse, and
- Traffic and road safety principles.

The Project Company will ensure that all personnel responsible for the implementation of this ESMP are competent regarding education, training and experience. All personnel will be provided with environmental and social training appropriate to their scope of activity and level of responsibility.

### 1.5 Roles and Responsibilities

All environmental and social commitments described in ESMP will be fulfilled by the Project Company. The Project Management will ensure that all affected parties, especially affected settlements, local community, adjacent facilities, and public bodies in the vicinity are kept informed of the Project. These groups will be involved in the process of identifying key issues under the Project. The general organizational structure for implementation of ESMP is presented in Table 1-1.

**Table 1-1.** General Organizational Structure for Implementation of ESMP

Roles	Responsibilities
<b>Project Company</b>	<ul style="list-style-type: none"> <li>• Overall responsibility for the implementation,</li> <li>• Ensure that the Project complies with the provisions of International Finance Institutions described in ESMP,</li> <li>• Ensure that ESMP provisions are implemented to mitigate environmental and social impacts,</li> <li>• Undertake monitor of the implementation of the ESMP, and</li> <li>• Prepare semi-annual environmental and social monitoring reports for submission to the lenders.</li> </ul>
<b>Stakeholder Engagement Plan and Grievance Mechanisms Officer</b>	<ul style="list-style-type: none"> <li>• Ensure that all workers participate in training sessions on ESMP,</li> <li>• Maintain a record of training and conduct of awareness sessions for staff to ensure compliance with environmental and safety commitments stated in ESMP,</li> </ul>

Roles	Responsibilities
	<ul style="list-style-type: none"> <li>• Prepare semi-annual environmental and social monitoring reports for submission to the lenders. Undertake monitor of the implementation of the ESMP,</li> <li>• Adopt and implement the Stakeholder Engagement Plan, and</li> <li>• Manage the worker and public grievance mechanisms.</li> </ul>
<p><b><i>Environmental, Health and Safety (EHS) Specialist/Occupational Health and Safety (OHS) Specialist</i></b></p>	<ul style="list-style-type: none"> <li>• Oversee and monitor adherence to, and implementation of the ESMP ensure that an environmental management system is set up and functions properly,</li> <li>• Ensure that the Project specifications adequately reflect the recommendations of the ESMP,</li> <li>• Visit and inspect the Project area regularly, to ascertain the level of compliance of works and report back environmental issues,</li> </ul>
<p><b><i>Quality Management Systems Unit</i></b></p>	<ul style="list-style-type: none"> <li>• Plan the necessary actions to be taken under the environmental legislation,</li> <li>• Provide employees with training on environmental awareness and waste management,</li> <li>• Execute agreements with recycling and disposal service providers,</li> <li>• Ensure that waste is delivered to licensed companies,</li> <li>• Ensure that operational checks are in place,</li> <li>• Evaluate environmental risks and opportunities, and</li> <li>• Use efforts to reduce waste.</li> </ul>
<p><b><i>Project Employees</i></b></p>	<ul style="list-style-type: none"> <li>• Attend induction training that is provided to introduce the environmental duties under the ESMP.</li> </ul>



## 2 ENVIRONMENTAL AND SOCIAL ASPECTS AND BEST PRACTICE MITIGATION MEASURES

The activities to be carried out as part of the Project are presented in Table 2-1 and include the assessment of best practice mitigation measures identified for the Project.

The activities to be carried out as part of the Project will be in accordance with the most current national legislation and AIIB ESSs. In cases where the Turkish legislation differs from AIIB ESSs, the more stringent one will be applied to the Project implementation.

The mitigation plans prepared for construction and operation phases are presented in the following chapters. The activities to be carried out as part of the Project are presented in Table 2-1.

**Table 2-1.** Activities to Be Carried Out as Part of the Project

ENVIRONMENTAL/SOCIAL REVIEW		
	Activity	Status
<b>Activities to be carried out as part of field activities</b>	A. Building improvement	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	B. New minor construction works	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	C. Individual wastewater treatment system	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	D. Historical building(s) and sites	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	E. Land acquisition <sup>1</sup>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	F. Hazardous or toxic materials <sup>2</sup>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	G. Impacts on forestlands and/or protected areas	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	H. Medical waste collection / management	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	I. Traffic and Pedestrian Safety	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

The following mitigation measures cover all activities (ongoing (cell production facility) and planned (panel production factory) activities, including hermetic transformers, and other auxiliary facilities planned (warehouses, water tanks, fire lines etc.) on site.ESMP will be applied for both construction and operation phases of the Project.

<sup>1</sup> Land acquisition covers displacement of people, change in livelihoods, and seizure of private properties. This applies to acquired/assigned lands and affects residents and/or squatters and business owners on the lands that are acquired so.

<sup>2</sup> Toxic/hazardous materials include asbestos, antifouling paints, harmful solvents, lead paint removal etc.

## 2.1 Impact/Risk Mitigation Plan for the Project Construction Phase

No.	Topic	Definition of Potential Impact	Type of Impact	Impact Significance Before Mitigation	Cost	Measures to be Taken	Responsibility	Indicative timeframe	Key Performance Indicators
1	<b>Occupational Health and Safety (OHS)</b>	Inadequate occupational health and safety conditions	Negative	Medium	Included in construction costs	<ul style="list-style-type: none"> <li>The Project Company's project management unit and the contractor's project team will consist of staff (members) (an environmental and social specialist and a full-time OHS specialist) who will work full time during the implementation of the project and will effectively manage the project. The Project Company will ensure that the following measures are taken by the contractor and impose the necessary actions/sanctions on site in case of failure to take such measures.</li> <li>The Project Company will require all employees and contractors to adhere to local and international health and safety legislation and guidelines. Workers will be provided with all the necessary personal protective equipment (PPE) (safety helmets, safety harnesses, protective coveralls, goggles, gloves, protective shoes, etc.).</li> <li>The Project Company will require all employees and contractors to adhere to local and international health and safety legislation and guidelines.</li> <li>Non-smoking areas will be allocated at the project area.</li> <li>Technical and OHS training, including the code of conduct indicating the possible risks regarding the work site and works to be carried will be given to workers by the contractor.</li> <li>Training will also be given on risks that may arise due to changes in workplace or job, change of work equipment, application of new technology.</li> <li>All employees will be informed about working conditions, job definitions, responsibilities, relations with the local community and potential work risks.</li> <li>In the project, employees will be required to comply with OHS regulations and necessary inspections will be carried out. In this context, regular inspections should be carried out by occupational safety experts and 3rd party auditors.</li> <li>Emergency teams will be formed, and drills and training programs will be carried out in line with emergency scenarios.</li> <li>Employees will have a good command of emergency plans, and the grievance will be reported to the authorized teams and resolved, if they require urgent action.</li> <li>Appropriate signposting of the sites will be provided and then workers will be informed of key rules and regulations to follow.</li> <li>A Risk Assessment will be conducted for all works to be performed before the commencement of construction works.</li> <li>Develop and implement an OHS Plan and an Emergency Response Plan specific to the work to be carried out during the period of construction.</li> </ul>	Project Company Contractor	<ul style="list-style-type: none"> <li>Occupational Health and Safety Plan for Construction -March 2024</li> <li>Throughout the Project</li> </ul>	<ul style="list-style-type: none"> <li>% of scheduled HSE Inspection</li> <li>% of attendance at HSE meetings</li> <li>% of closing of Non Compliance Reports (NCRs)</li> <li>Reporting safe observations</li> <li>Reporting unsafe observations</li> <li>Reporting near misses</li> <li>% of Toolbox attending</li> <li>% of Risk Assessment compliance</li> <li>% of Legal Requirements compliance</li> <li>HSE training carried out to training matrix</li> <li>&gt; 90% of all training to matrix</li> <li>% of attendance at scheduled trainings</li> <li>Engagement in HSE program by individual managers and supervisors</li> <li>Engagement in HSE program by contractor's</li> </ul>
2	<b>Air Quality</b>	Air pollution	Negative	Low		<ul style="list-style-type: none"> <li>All vehicles will have exhaust emission permits and all vehicles will be regularly maintained.</li> <li>Exhaust systems and emission levels of machinery and vehicles will be checked by the contractor.</li> <li>Project Grievance Mechanism will be implemented.</li> <li>Speed limits will be set for heavy equipment and actions will be taken to ensure these limits are obeyed.</li> <li>In case of any complaints, air quality measurement will be carried out at the nearest sensitive receptors in accordance with international standards, and the results will be recorded.</li> </ul>	Project Company Contractor	<ul style="list-style-type: none"> <li>Throughout the Project</li> </ul>	<ul style="list-style-type: none"> <li>Records of Non-Compliance with air quality standards</li> <li>Community complaints</li> </ul>

No.	Topic	Definition of Potential Impact	Type of Impact	Impact Significance Before Mitigation	Cost	Measures to be Taken	Responsibility	Indicative timeframe	Key Performance Indicators
3	<b>Noise</b>	Noise	Negative	Low		<ul style="list-style-type: none"> <li>Equipment and vehicles used outdoors will be regularly maintained.</li> <li>“Low noise” equipment will be used as much as possible during the construction phase. Where construction equipment is provided with soundproof acoustic covers or enclosures, covers will be kept closed while equipment is in operation.</li> <li>Equipment will be switched off or operated at minimum level when not in operation.</li> <li>Vibration levels will be monitored in case of grievances, and measures will be taken to reduce vibration if standards are exceeded.</li> <li>In case of any grievances received, noise measurement will be carried out at the nearest sensitive receptors in accordance with international standards.</li> </ul>	Project Company Contractor	▪ Throughout the Project	<ul style="list-style-type: none"> <li>Records of Non-Compliance with Project standards</li> <li>Number of noise-related community grievances</li> </ul>
4	<b>Waste</b>	Waste	Negative	Medium		<ul style="list-style-type: none"> <li>During the construction period, any waste will be collected separately at source, and stored in the temporary waste storage area.</li> <li>Construction waste will be regularly collected by licensed collectors in the excavation waste storage area allowed by the Municipality.</li> <li>Records of waste disposal will be kept regularly. To keep these records, a Waste Registry Information Form will be prepared, which will contain information on the waste code, amount, and transfer and disposal method as presented in the Waste Management Regulation – Annex-4</li> <li>Wastes may be reused or recycled where applicable.</li> </ul>	Project Company Contractor	<ul style="list-style-type: none"> <li>Consumption Monitoring Plan for construction – January 2024</li> <li>Waste Management Plan for construction- November 2023</li> <li>Throughout the Project</li> </ul>	<ul style="list-style-type: none"> <li>Total waste generated</li> <li>Ratio of recovered/reused/ recycled waste to total waste generated</li> </ul>
5	<b>Waste Batteries and Accumulators</b>	Waste	Negative	Low		<ul style="list-style-type: none"> <li>Waste batteries will be collected separately from other wastes, delivered to authorized organizations and recycled.</li> <li>Waste batteries and accumulators will be delivered to waste battery and accumulator disposal facilities within the Municipal borders through authorized transportation companies.</li> </ul>	Project Company Contractor	▪ Throughout the Project	<ul style="list-style-type: none"> <li>Total waste batteries and accumulators generated</li> <li>Ratio of recycled to total waste batteries and accumulators generated</li> </ul>
6	<b>Hazardous Materials</b>	Pollution from hazardous materials	Negative	Low		<ul style="list-style-type: none"> <li>Hazardous wastes will be stored in appropriate impervious containers safely in accordance with the internationally recognized standards. Containers will bear a “hazardous waste” label with the amount, content, properties, storage conditions and storage date of the contained material.</li> <li>Containers containing hazardous materials will be placed in secondary containment to prevent spills and leaks.</li> <li>Hazardous wastes will be transported by licensed waste transportation companies, and will be disposed of at licensed facilities.</li> <li>The use of toxic paints, solvents or lead-based paints will be avoided.</li> <li>Hazardous waste management will be carried out in accordance with the Waste Management Regulation.</li> <li>Hazardous chemicals and wastes likely to be generated at the construction site will be stored to prevent any threat to community health.</li> <li>The disposal of hazardous chemicals and wastes that may be generated at the construction site will be carried out at licensed facilities under the supervision of authorized companies and experts.</li> </ul>	Project Company Contractor	▪ Throughout the Project	▪ Ratio of hazardous waste generated to total waste
7	<b>Wastewater Management</b>	Wastewater	Negative	Low		<ul style="list-style-type: none"> <li>Any wastewater generated during construction works will be collected in a septic tank and delivered to Aliağa Organized Industry Wastewater Treatment Plant.</li> <li>Develop a monitoring plan water, energy and fuel consumption during both construction</li> </ul>	Project Company Contractor	▪ Consumption Monitoring Plan for Construction– January 2024	<ul style="list-style-type: none"> <li>Annual zero non-compliance report</li> <li>Zero grievance per year</li> <li>No significant adverse effects</li> </ul>

No.	Topic	Definition of Potential Impact	Type of Impact	Impact Significance Before Mitigation	Cost	Measures to be Taken	Responsibility	Indicative timeframe	Key Performance Indicators
8	<b>Employment / Economy</b>	Child labour, forced labour and unregistered employment  Contribution to economy	Adverse	Low	Included in construction costs	<ul style="list-style-type: none"> <li>▪ Care will be taken to contributing to the local economy through the use of local materials and to procuring various goods and services from local resources.</li> <li>▪ Priority should be given to the local labor where possible and practical.</li> <li>▪ Efforts will be exercised to allocate employment opportunities to the local parties and the settlements.</li> <li>▪ The work permits of the employees will be controlled within the scope of the Project, prohibiting child labor, forced labor, and child labor under the age of 18,</li> <li>▪ Ensure minimum legal labour standards as per ILO regulations (child/forced labour, no discrimination, working hours, minimum wages) are met.</li> <li>▪ The Project Company's contracts with its subcontractors and suppliers will include clear prohibitory provisions regarding compliance with ILO standards and the prevention of gender-based violence, harassment and abuse.</li> <li>▪ Provide hygienic, adequate facilities for workers, ensuring toilets and changing rooms are separated to male and female employees.</li> <li>▪ Ensure the workforce has access to primary healthcare on site, providing prescriptions.</li> <li>▪ Discrimination in the workplace will be eliminated.</li> <li>▪ The Project Company will check the suitability of subcontractor employee conditions.</li> <li>▪ Ensuring that employees have access to and are aware of the Grievance Mechanism</li> </ul>	Project Company  Contractor	<ul style="list-style-type: none"> <li>▪ Throughout the Project</li> </ul>	<ul style="list-style-type: none"> <li>▪ Number of grievances</li> <li>▪ Percentage of closed grievances within the target timeframe</li> <li>▪ Percentage of project budget spent on local materials and services.</li> <li>▪ Number of local suppliers and subcontractors engaged.</li> <li>▪ Percentage of local labor in the workforce.</li> <li>▪ Number of employment opportunities provided to local parties.</li> <li>▪ Number of child labor, forced labor, and workers under the age of 18 identified and reported.</li> <li>▪ Compliance rate with ILO regulations on working hours, minimum wages, and other labor standards.</li> <li>▪ Percentage of subcontractors and suppliers with clear prohibitory provisions regarding compliance with ILO standards.</li> <li>▪ Number of reported incidents related to gender-based violence, harassment, and abuse.</li> <li>▪ Number of reported cases and resolution time for sexual exploitation and abuse and sexual harassment incidents</li> <li>▪ Adequacy and cleanliness rating of worker facilities.</li> <li>▪ Percentage of the workforce with access to primary healthcare on site.</li> <li>▪ Number of reported cases related to workplace discrimination.</li> <li>▪ Effectiveness of implemented measures to eliminate discrimination.</li> </ul>

No.	Topic	Definition of Potential Impact	Type of Impact	Impact Significance Before Mitigation	Cost	Measures to be Taken	Responsibility	Indicative timeframe	Key Performance Indicators
									<ul style="list-style-type: none"> <li>Percentage of subcontractor employees with suitable working conditions.</li> <li>Number of corrective actions taken to address unsuitable conditions.</li> <li>Percentage of the workforce aware of the Grievance Mechanism.</li> <li>Number of grievances reported and resolved within a defined timeframe.</li> </ul>
9	<b>Labor and Working Conditions</b>	Improper Working Conditions, Child labor, forced labor and unregistered employment	Adverse	Low	Included in construction costs	<ul style="list-style-type: none"> <li>A Worker Grievance Redress Mechanism has been established for workers and is managed by the Human Resources unit. Effective implementation will be ensured throughout the life of the project.</li> <li>Through training to be given to all employees (including subcontractor personnel), workers will be informed about the Project's Grievance Redress Mechanism (described in detail in the Project's SEP document) and the steps to be followed. Access to the Grievance Redress Mechanism will be easy and effective.</li> <li>Announcements regarding the Grievance Redress mechanism have been made in places used by employees, such as cafeterias, canteens and service areas, and will continue to be announced throughout the life of the Project.</li> <li>The existing code of conduct document will be updated to include detailed information and stringent measures against gender-based violence, harassment and abuse, and will be shared with employees as an annex to the contract.</li> <li>All employees will be trained on discrimination and codes of conduct. The training to be given to employees will be descriptive about the concepts of sexual harassment and abuse, gender-based violence, abuse and harassment intervention.</li> <li>Training will be provided to employees before their employment and will be repeated at regular intervals. After the effectiveness of the training is assessed by the Project Human Resources personnel, the training program may be modified, instructors may be changed, or the training may be repeated if necessary.</li> <li>Female employees will be encouraged to become representatives, and they will receive the necessary training related to representation and participation in administrative processes. After the effectiveness of the training is evaluated by the Project Human Resources personnel, the training program can be changed, the trainer can be changed, or the training can be repeated if necessary.</li> <li>The HR policy will review and update employee contracts and include the following items in the contract:                             <ul style="list-style-type: none"> <li>There should be no discrimination of language, race, gender, political thought, philosophical belief and religion in business relations;</li> <li>Ensuring workers have access to the right to collective bargaining (Trade Unions and Collective Labor Agreement Law No. 6356 and Labor Law No. 4857) and,</li> <li>Ensuring access to an effectively functional worker grievance redressal mechanism.</li> <li>Minimum legal labor standards will be met (child/forced labor, anti-discrimination, working hours, minimum wages) as per International Labor Organization (ILO) regulations.</li> </ul> </li> </ul>	Project Company Contractor	<ul style="list-style-type: none"> <li>Contractor Management Plan - March 2024</li> <li>Camp Management Plan- March 2024</li> <li>Supply Management Chain-March 2024</li> <li>Throughout the Project</li> </ul>	<ul style="list-style-type: none"> <li>Number of grievances</li> <li>Percentage of closed grievances within the target timeframe</li> <li>Percentage of workers aware of the Grievance Redress Mechanism.</li> <li>Percentage of employees who have signed the updated Code of Conduct.</li> <li>Number of reported cases related to gender-based violence, harassment, and abuse.</li> <li>Number of employees receiving Code of conduct training</li> <li>Percentage of workers trained on discrimination, sexual harassment, and abuse prevention.</li> <li>Assessment of training effectiveness and modification rate.</li> <li>Number of female employees who become representatives.</li> <li>Effectiveness of training related to representation and participation.</li> <li>Percentage of employee contracts updated with specified items.</li> <li>Compliance rate with minimum legal labor standards as per ILO regulations.</li> </ul>



No.	Topic	Definition of Potential Impact	Type of Impact	Impact Significance Before Mitigation	Cost	Measures to be Taken	Responsibility	Indicative timeframe	Key Performance Indicators
						<ul style="list-style-type: none"> <li>Workers will be allowed to have access to primary healthcare on site, enabling the provision of prescriptions.</li> <li>Accommodation containers will meet worker accommodation standards prepared by the International Finance Corporation (IFC) and the European Bank for Reconstruction and Development (EBRD) and approved by the World Bank. The Project Company will engage in discussions with the subcontractor company and ensure the implementation of these standards. Special training, such as organizational and waste management training, will be given to employees in order to ensure that standards are maintained, and corrective actions taken are maintained. In addition, project implementation unit managers will be responsible for ensuring and implementing international standards in camp management.</li> <li>Develop and implement Supply Management Chain for construction.</li> </ul>			<ul style="list-style-type: none"> <li>Assessment of hygienic and adequate facilities provided to workers.</li> <li>Percentage of workers with access to primary healthcare on-site.</li> <li>Number of reported cases related to discrimination in business relations.</li> <li>Effectiveness of measures to avoid discrimination.</li> <li>Compliance rate with worker accommodation standards set by IFC and EBRD.</li> <li>Number of training sessions conducted on organizational and waste management standards.</li> <li>Percentage of international standards implemented in camp management.</li> <li>Number of corrective actions taken to maintain and improve standards.</li> </ul>
10	<b>Community Health and Safety</b>	Community health and safety risks	Adverse	High	Included in construction costs	<ul style="list-style-type: none"> <li>Security officers will be given training on appropriate communication with communities.</li> <li>A Traffic Management Plan will be developed, taking into consideration the operations and construction activities.</li> <li>Care will be taken to ensure that warning signs are visible at night and in bad weather conditions.</li> <li>The adequate number of appropriate firefighting equipment will be kept available at construction sites at all times.</li> <li>An emergency response plan will be prepared and will be implemented in order to be able to take and manage measures to protect public health and safety. Project employees, local people and response teams will be informed about this plan.</li> <li>Local people will be informed about possible hazardous material and precautions to be taken with brochures that will be placed on signs and notice boards to be hung in various areas in the neighborhood.</li> <li>Detailed information on the use of the Grievance Redress Mechanism and contact information on the grievance redress mechanism officer will be made available to the public.(at the construction site and the also via the project website)</li> <li>Damages that may occur on the road surfaces due to traffic caused by heavy construction machinery during construction works on existing roads will be repaired by the contractor. In case of any damage to infrastructure elements on private lands due to construction activities, mitigation measures will be taken by the contractor.</li> </ul>	Project Company Contractor	<ul style="list-style-type: none"> <li>Traffic Management Plan for Construction - March 2024</li> <li>Throughout the Project</li> </ul>	<ul style="list-style-type: none"> <li>Number of communicable and non-communicable diseases and injuries experienced.</li> <li>Number of community health safety &amp; security complaints from local communities as recorded in the grievance register.</li> <li>Number of reported community health &amp; safety incidents</li> <li>Number of reported noise incidents</li> <li>Number of traffic-related incidents and their resolution time.</li> <li>Percentage of warning signs that are visible at night and in bad weather conditions</li> <li>Number of reported incidents related to poor visibility of warning signs</li> <li>Assessment of the availability and condition of</li> </ul>

No.	Topic	Definition of Potential Impact	Type of Impact	Impact Significance Before Mitigation	Cost	Measures to be Taken	Responsibility	Indicative timeframe	Key Performance Indicators
									firefighting equipment at construction sites. <ul style="list-style-type: none"> <li>Response time in the event of a fire-related emergency</li> <li>Timeliness of road surface repairs caused by heavy construction machinery.</li> <li>Number of reported incidents related to road surface damage</li> <li>Timeliness and effectiveness of mitigation measures taken for infrastructure damage on private lands.</li> <li>Number of reported incidents related to infrastructure damage on private lands.</li> </ul>
11	<b>Land Acquisition &amp; Use</b>	Damages to adjacent lands and structures	Adverse	Low	Included in construction costs	<ul style="list-style-type: none"> <li>Any unintended damages caused to adjacent land and structures during construction will be compensated and repaired by Project Company/Contractor.</li> <li>If grievances are received regarding unauthorized use of privately-owned lands, damage to neighboring lands, etc. through the Grievance Redress Mechanism to be established, assessments / investigations will be performed on a case-by-case basis, and corrective actions will be planned and implemented, where necessary.</li> <li>Materials will be stored in closed and protected areas.</li> <li>If it is required to provide an additional space for closed and protected areas, the contractor will fulfill temporary rental formalities or obtain relevant permits.</li> </ul>	Project Company Contractor	▪ Throughout the Project	<ul style="list-style-type: none"> <li>Number of grievances</li> <li>Percentage of closed grievances within the target timeframe</li> </ul>
12	<b>Stakeholder Engagement and Worker and Public Grievance Redress Mechanism</b>	Communication issues with the stakeholders & Grievance Issues	Adverse	Low	Included in construction costs	<ul style="list-style-type: none"> <li>An adequate timing will be planned for interaction / communication with communities and for stakeholder engagement.</li> <li>Regular consultations will be carried out with the authorities and communities regarding the project management.</li> <li>Comprehensive information on the stakeholder engagement is provided in SEP of the Project and the SEP will be updated and implemented throughout the Project.</li> <li>An efficient Grievance Redress Mechanism will be initiated to allow potentially affected individuals to voice their concerns on the Project. The Public Grievance Redress Mechanism and the Worker Grievance Redress Mechanism will each have dedicated authorities. These designated personnel will handle and evaluate complaints impartially. Furthermore, those responsible for addressing grievances must do so confidentially and with an unbiased approach.</li> </ul>	Project Company Contractor	▪ Throughout the Project	<ul style="list-style-type: none"> <li>Number of grievances</li> <li>Percentage of closed grievances within the target timeframe</li> <li>Records of stakeholder engagement activities</li> <li>Regularity of updates to the Stakeholder Engagement Plan (SEP).</li> <li>Percentage of SEP implementation aligned with project milestones</li> <li>Number of grievances received through the Public Grievance Redress Mechanism.</li> <li>Number of grievances received through the Worker Grievance Redress Mechanism.</li> </ul>

No.	Topic	Definition of Potential Impact	Type of Impact	Impact Significance Before Mitigation	Cost	Measures to be Taken	Responsibility	Indicative timeframe	Key Performance Indicators
									<ul style="list-style-type: none"> <li>▪ Timeliness and effectiveness of responses from dedicated authorities.</li> <li>▪ Percentage of complaints handled by the designated personnel within a defined timeframe.</li> <li>▪ Perception of impartiality in the handling and evaluation of complaints.</li> <li>▪ Number of reported incidents related to perceived bias in grievance redress.</li> <li>▪ Assurance of confidentiality in the grievance redress process.</li> <li>▪ Number of reported incidents related to breaches of confidentiality.</li> </ul>
13	<b>Biodiversity</b>	Protection	Adverse	Low	Included in construction costs	<ul style="list-style-type: none"> <li>▪ No impact is expected on flora and fauna during the construction and operation phase. Therefore, there is no need to take mitigation measures.</li> </ul>	Project Company Contractor	<ul style="list-style-type: none"> <li>▪ Throughout the Project</li> </ul>	<ul style="list-style-type: none"> <li>▪ Zero damage to natural habitats, wetlands and sites considered as protected areas</li> <li>▪ Zero hunting, foraging, logging</li> </ul>
14	<b>Climate Change</b>	Adaptation	Adverse	Low	Additional cost is not expected	<ul style="list-style-type: none"> <li>▪ Reinforce the factory's physical infrastructure to withstand extreme weather events, including the installation of flood barriers, elevation of critical equipment, and designing structures that can resist heavy rainfall.</li> <li>▪ Collaborate with ALOSBI (Aliağa Organized Industrial Zone) for flood risk management, and independently ensure the resilience of structures and products against flooding.</li> <li>▪ Diversify suppliers and establish backup routes to ensure a steady flow of raw materials, with contingency plans for supply chain disruptions caused by extreme weather.</li> <li>▪ Utilize a vast network of product suppliers and delivery alternatives, including the possibility of using cargo aircraft in case of disruptions to shipping routes due to extreme weather events.</li> <li>▪ Integrate diverse energy sources to mitigate the impact of energy shortages resulting from changing climate conditions, and consider installing energy storage systems for a more reliable energy supply.</li> <li>▪ Implement emergency response plans that consider various climate-related scenarios, ensuring minimal disruption to production and a swift recovery post-event. This includes establishing clear safety protocols and regularly training employees on emergency response plans during extreme weather events.</li> <li>▪ Develop and practice evacuation plans to ensure the safety and well-being of the workforce.</li> <li>▪ Engage in collaboration with governmental bodies and industry associations to align with national or sectoral adaptation and climate resilience policies.</li> </ul>	Project Company	<ul style="list-style-type: none"> <li>▪ CCRA Report-January 2024</li> <li>▪ Throughout the Project</li> </ul>	<ul style="list-style-type: none"> <li>▪ Evidence of implementation of measures described in the CCRA Report.</li> </ul>



## 2.2 Impact/Risk Mitigation Plan for the Project Operation Phase

No	Topic	Definition of Potential Impact	Type of Impact	Impact Significance Before Mitigation	Cost	Measures to be Taken	Responsibility	Indicative timeframe	Key Performance Indicators
1	<b>Occupational Health and Safety (OHS)</b>	Inadequate occupational health and safety conditions	Negative	Medium	Included in construction costs	<ul style="list-style-type: none"> <li>Before the start of operations, all workers will be informed about job descriptions, responsibilities, relations with the local community, and potential risks to threaten occupational health and safety.</li> <li>Workers will be provided with training in proper induction, health and safety along with information on these aspects.</li> <li>All equipment used during the operational phase will be kept in good working condition.</li> <li>Workers will have a good grasp of emergency plans, and grievances will be reported to competent teams and resolved if immediate action is required.</li> <li>In the event of an accident that may lead to injury during the operational phase, first aid equipment will be kept available at the rehabilitation center, considering that first aid may be required before the injured is referred to the nearest healthcare organization.</li> <li>The contractor formally agrees that all activities will be performed in a safe and disciplined way and designed to minimize impacts on the residents in the immediate vicinity and the environment.</li> <li>It is necessary to use any equipment that meet international standards regarding performance and safety</li> <li>Develop and implement an OHS Plan specific to the work to be carried out during the period of operation.</li> </ul>	Project Company	<ul style="list-style-type: none"> <li>Occupational Health and Safety Plan -March 2024</li> <li>Throughout the Project</li> </ul>	<ul style="list-style-type: none"> <li>% of scheduled HSE Inspection</li> <li>% of attendance at HSE meetings</li> <li>% of closing of Non Compliance Reports (NCRs)</li> <li>Reporting safe observations</li> <li>Reporting unsafe observations</li> <li>Reporting near misses</li> <li>% of Toolbox attending</li> <li>% of Risk Assessment compliance</li> <li>% of Legal Requirements compliance</li> <li>HSE training carried out to training matrix</li> <li>&gt; 90% of all training to matrix</li> <li>% of attendance at scheduled trainings</li> <li>Engagement in HSE program by individual managers and supervisors</li> <li>Engagement in HSE program by contractor's</li> </ul>
2	<b>Air Quality</b>	Air pollution	Negative	Low		<ul style="list-style-type: none"> <li>During the operational phase, all vehicles and equipment will be regularly maintained, the records of which are to be kept.</li> </ul>	Project Company	<ul style="list-style-type: none"> <li>Throughout the Project</li> </ul>	<ul style="list-style-type: none"> <li>Records of Non-Compliance with air quality standards</li> <li>Community complaints</li> </ul>
3	<b>Noise</b>	Noise	Negative	Low		<ul style="list-style-type: none"> <li>Equipment and vehicles used outdoors will be regularly maintained.</li> <li>"Low noise" equipment will be used as much as possible during the operational phase. Where the equipment used is provided with soundproof acoustic covers or enclosures, covers will be kept closed while equipment is in operation.</li> <li>Equipment will be switched off or operated at minimum level when not in operation.</li> <li>Vibration levels will be monitored in case of grievances, and measures will be taken to reduce vibration if standards are exceeded.</li> <li>In case of any grievances received, noise measurement will be carried out at the nearest sensitive receptors in accordance with international standards.</li> </ul>	Project Company	<ul style="list-style-type: none"> <li>Throughout the Project</li> </ul>	<ul style="list-style-type: none"> <li>Records of Non-Compliance with Project standards</li> <li>Number of noise-related community grievances</li> </ul>

No	Topic	Definition of Potential Impact	Type of Impact	Impact Significance Before Mitigation	Cost	Measures to be Taken	Responsibility	Indicative timeframe	Key Performance Indicators
4	<b>Waste</b>	Waste	Negative	Medium		<ul style="list-style-type: none"> <li>Hazardous waste, waste oil, used accumulators and batteries, electrical and electronic waste, recyclable waste, domestic waste, medical waste, and other similar materials will be classified, stored separately at source, and disposed of in compliance with relevant regulations and the WBG EHS Guidelines.</li> <li>The temporary waste storage areas will adhere to national and international standards, including the following:                             <ul style="list-style-type: none"> <li>The storage areas will have covered roofs and sides, and proper drainage to prevent contact between surface water or rainfall and the waste.</li> <li>Access to the storage areas will be controlled through gates.</li> <li>Cautionary signage and boards displaying the name and contact number of authorized personnel will be placed.</li> <li>Separate storage areas or compartments will be designated for different types of waste.</li> <li>Secondary containment measures in accordance with relevant legislation and standards will be implemented for related wastes.</li> <li>Absorbents, spill kits, firefighting equipment, etc., will be readily available nearby to facilitate immediate response in case of emergencies such as spills or fires.</li> <li>Container types, labeling, classification, etc., within the storage areas will comply with sub-project standards.</li> <li>Hazardous and non-hazardous wastes will be segregated at the source.</li> <li>Recyclable and non-recyclable solid waste will be separated and stored separately until collected by the municipality or licensed firms.</li> <li>Ensure that transportation, recovery, and disposal firms for waste management are licensed.</li> <li>Training to personnel on waste reduction, general waste management, and housekeeping will be provided for personnel.</li> <li>Conduct drills for personnel to prepare them for emergency situations.</li> <li>Prohibit disposal or burial of waste on-site under any circumstances.</li> <li>Develop and implement a Waste Management Plan in accordance with national regulations and the WBG EHS Guidelines.</li> </ul> </li> </ul>	Project Company	<ul style="list-style-type: none"> <li>Consumption Monitoring Plan for operation – January 2024</li> <li>Waste Management Plan for operation -March 2024</li> <li>Throughout the Project</li> </ul>	<ul style="list-style-type: none"> <li>Total waste generated</li> <li>Ratio of recovered/reused/ recycled waste to total waste generated</li> </ul>
5	<b>Waste Batteries and Accumulators</b>	Waste	Negative	Low		<ul style="list-style-type: none"> <li>Waste batteries will be collected separately from other wastes, delivered to authorized organizations and recycled.</li> <li>Waste batteries and accumulators will be delivered to waste battery and accumulator disposal facilities within the Municipal borders through authorized transportation companies.</li> </ul>	Project Company	<ul style="list-style-type: none"> <li>Throughout the Project</li> </ul>	<ul style="list-style-type: none"> <li>Total waste batteries and accumulators generated</li> <li>Ratio of recycled to total waste batteries and accumulators generated</li> </ul>
6	<b>Hazardous Materials</b>	Pollution from hazardous materials	Negative	Low		<ul style="list-style-type: none"> <li>Hazardous Materials Management Plan will be prepared and implemented.</li> <li>Hazardous waste management will be fulfilled in consultation Project Company in accordance with the Hazardous Waste Control Regulation.</li> </ul>	Project Company	<ul style="list-style-type: none"> <li>For operation Hazardous Materials Management Plan – January 2024</li> <li>Throughout the Project</li> </ul>	<ul style="list-style-type: none"> <li>Ratio of hazardous waste generated to total waste</li> </ul>
7	<b>Wastewater Management</b>	Wastewater	Negative	Low		<ul style="list-style-type: none"> <li>Regular measurement of water use of domestic wastewater sent to the OIZ treatment facility, water consumption of the facility and discharge parameters of wastewater,</li> <li>Regular comparison of water flows with performance targets to identify where action needs to be taken to reduce water use.</li> <li>Develop a monitoring plan water, energy and fuel consumption during operation</li> </ul>	Project Company	<ul style="list-style-type: none"> <li>For operation Consumption Monitoring Plan – January 2024</li> <li>Throughout the Project</li> </ul>	<ul style="list-style-type: none"> <li>Annual zero non-compliance report</li> <li>Zero grievance per year</li> <li>No significant adverse effects</li> </ul>

No	Topic	Definition of Potential Impact	Type of Impact	Impact Significance Before Mitigation	Cost	Measures to be Taken	Responsibility	Indicative timeframe	Key Performance Indicators
8	<b>Employment / Economy</b>	Contribution to economy	Adverse	Low	Additional cost is not expected	<ul style="list-style-type: none"> <li>▪ Care will be taken to contributing to the local economy through the use of local materials and to procuring various goods and services from local resources.</li> <li>▪ Priority should be given to the local labor where possible and practical.</li> <li>▪ Efforts will be exercised to allocate employment opportunities to the local parties and the settlements.</li> <li>▪ The work permits of the employees will be controlled within the scope of the Project, prohibiting child labor, forced labor, and child labor under the age of 18.</li> <li>▪ Ensure minimum legal labour standards as per ILO regulations (child/forced labour, no discrimination, working hours, minimum wages) are met.</li> <li>▪ The Project Company's contracts with its subcontractors and suppliers will include clear prohibitory provisions regarding compliance with ILO standards and the prevention of gender-based violence, harassment and abuse..</li> <li>▪ Provide hygienic, adequate facilities for workers, ensuring toilets and changing rooms are separated to male and female employees.</li> <li>▪ Ensure the workforce has access to primary healthcare on site, providing prescriptions.</li> <li>▪ Discrimination in the workplace will be eliminated.</li> <li>▪ The Project Company will check the suitability of subcontractor employee conditions.</li> <li>▪ Ensuring that employees have access to and are aware of the Grievance Redress Mechanism</li> <li>▪ Develop and implement a Contractor Management Plan to manage environmental and social performance of the contractors.</li> </ul>	Project Company		<ul style="list-style-type: none"> <li>▪ Number of grievances</li> <li>▪ Percentage of closed grievances within the target timeframe</li> <li>▪ Percentage of project budget spent on local materials and services.</li> <li>▪ Number of local suppliers and subcontractors engaged.</li> <li>▪ Percentage of local labor in the workforce.</li> <li>▪ Number of employment opportunities provided to local parties.</li> <li>▪ Number of child labor, forced labor, and workers under the age of 18 identified and reported.</li> <li>▪ Compliance rate with ILO regulations on working hours, minimum wages, and other labor standards.</li> <li>▪ Percentage of subcontractors and suppliers with clear prohibitory provisions regarding compliance with ILO standards.</li> <li>▪ Number of reported incidents related to gender-based violence, harassment, and abuse.</li> <li>▪ Number of reported cases and resolution time for sexual exploitation and abuse and sexual harassment incidents</li> <li>▪ Adequacy and cleanliness rating of worker facilities.</li> <li>▪ Percentage of the workforce with access to primary healthcare on site.</li> <li>▪ Number of reported cases related to workplace discrimination.</li> <li>▪ Effectiveness of implemented measures</li> </ul>

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									to eliminate discrimination. <ul style="list-style-type: none"> <li>Percentage of subcontractor employees with suitable working conditions.</li> <li>Number of corrective actions taken to address unsuitable conditions.</li> <li>Percentage of the workforce aware of the Grievance Mechanism.</li> <li>Number of grievances reported and resolved within a defined timeframe.</li> </ul>
9	<b>Labor and Working Conditions</b>	Improper Working Conditions, Child labor, forced labor and unregistered employment	Adverse	Low	Additional cost is not expected	<ul style="list-style-type: none"> <li>A Worker Grievance Redress Mechanism has been established for workers and is managed by the Human Resources unit. Effective implementation will be ensured throughout the life of the project.</li> <li>Through training to be given to all employees (including subcontractor personnel), workers will be informed about the Project's Grievance Redress Mechanism (described in detail in the Project's SEP document) and the steps to be followed. Access to the Grievance Redress Mechanism will be easy and effective.</li> <li>Announcements regarding the Grievance Redress mechanism have been made in places used by employees, such as cafeterias, canteens and service areas, and will continue to be announced throughout the life of the Project.</li> <li>The existing code of conduct document will be updated to include detailed information and stringent measures against gender-based violence, harassment and abuse, and will be shared with employees as an annex to the contract.</li> <li>All employees will be trained on discrimination and codes of conduct. The training to be given to employees will be descriptive about the concepts of sexual harassment and abuse, gender-based violence, abuse and harassment intervention.</li> <li>Training will be provided to employees before their employment and will be repeated at regular intervals. After the effectiveness of the training is assessed by the Project Human Resources personnel, the training program may be modified, instructors may be changed, or the training may be repeated if necessary.</li> <li>Female employees will be encouraged to become representatives, and they will receive the necessary training related to representation and participation in administrative processes. After the effectiveness of the training is evaluated by the Project Human Resources personnel, the training program can be changed, the trainer can be changed, or the training can be repeated if necessary.</li> <li>The HR policy will review and update employee contracts and include the following items in the contract:                             <ul style="list-style-type: none"> <li>There should be no discrimination of language, race, gender, political thought, philosophical belief and religion in business relations;</li> <li>Ensuring workers have access to the right to collective bargaining (Trade Unions and Collective Labor Agreement Law No. 6356 and Labor Law No. 4857) and,</li> <li>Ensuring access to an effectively functional worker grievance redressal mechanism.</li> </ul> </li> </ul>	Project Company	<ul style="list-style-type: none"> <li>Supply Management Chain-March 2024</li> <li>Throughout the Project</li> </ul>	<ul style="list-style-type: none"> <li>Number of grievances</li> <li>Percentage of closed grievances within the target timeframe</li> <li>Percentage of workers aware of the Grievance Redress Mechanism.</li> <li>Percentage of employees who have signed the updated Code of Conduct.</li> <li>Number of reported cases related to gender-based violence, harassment, and abuse.</li> <li>Number of employees receiving Code of conduct training</li> <li>Percentage of workers trained on discrimination, sexual harassment, and abuse prevention.</li> <li>Assessment of training effectiveness and modification rate.</li> <li>Number of female employees who become representatives.</li> <li>Effectiveness of training related to representation and participation.</li> <li>Percentage of employee contracts updated with specified items.</li> </ul>

No	Topic	Definition of Potential Impact	Type of Impact	Impact Significance Before Mitigation	Cost	Measures to be Taken	Responsibility	Indicative timeframe	Key Performance Indicators
						<ul style="list-style-type: none"> <li>○ Minimum legal labor standards will be met (child/forced labor, anti-discrimination, working hours, minimum wages) as per International Labor Organization (ILO) regulations.</li> <li>▪ Workers will be allowed to have access to primary healthcare on site, enabling the provision of prescriptions.</li> </ul> <p>Accommodation containers will meet worker accommodation standards prepared by the International Finance Corporation (IFC) and the European Bank for Reconstruction and Development (EBRD) and approved by the World Bank. The Project Company will engage in discussions with the subcontractor company and ensure the implementation of these standards. Special training, such as organizational and waste management training, will be given to employees in order to ensure that standards are maintained, and corrective actions taken are maintained. In addition, project implementation unit managers will be responsible for ensuring and implementing international standards in camp management.</p> <p><b>Develop and implement Supply Management Chain for operation</b></p>			<ul style="list-style-type: none"> <li>▪ Compliance rate with minimum legal labor standards as per ILO regulations.</li> <li>▪ Assessment of hygienic and adequate facilities provided to workers.</li> <li>▪ Percentage of workers with access to primary healthcare on-site.</li> <li>▪ Number of reported cases related to discrimination in business relations.</li> <li>▪ Effectiveness of measures to avoid discrimination.</li> <li>▪ Compliance rate with worker accommodation standards set by IFC and EBRD.</li> <li>▪ Number of training sessions conducted on organizational and waste management standards.</li> <li>▪ Percentage of international standards implemented in camp management.</li> <li>▪ Number of corrective actions taken to maintain and improve standards</li> </ul>
10	<b>Community Health and Safety</b>	Community health and safety risks	Adverse	Low	Additional cost is not expected	<ul style="list-style-type: none"> <li>▪ The grievance redress mechanism officer will be introduced to the local people and updated information about the grievance redress mechanism will continue to be provided. In case of an update in the documents, the updated information will be announced to the local people through the relevant headman's office.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Project Company</li> </ul>	<ul style="list-style-type: none"> <li>▪ Traffic Management Plan for operation -January 2024</li> <li>▪ Throughout the Project</li> </ul>	<ul style="list-style-type: none"> <li>▪ Number of communicable and non-communicable diseases and injuries.</li> <li>▪ Number of community health safety &amp; security complaints from local communities as recorded in the grievance register</li> <li>▪ Number of reported community health &amp; safety incidents</li> <li>▪ Number of reported noise incidents</li> <li>▪ Number of traffic-related incidents and their resolution time.</li> <li>▪ Percentage of warning signs that are visible at</li> </ul>

No	Topic	Definition of Potential Impact	Type of Impact	Impact Significance Before Mitigation	Cost	Measures to be Taken	Responsibility	Indicative timeframe	Key Performance Indicators
									night and in bad weather conditions <ul style="list-style-type: none"> <li>Number of reported incidents related to poor visibility of warning signs</li> <li>Assessment of the availability and condition of firefighting equipment at construction sites.</li> <li>Response time in the event of a fire-related emergency</li> <li>Timeliness of road surface repairs caused by heavy construction machinery.</li> <li>Number of reported incidents related to road surface damage</li> <li>Timeliness and effectiveness of mitigation measures taken for infrastructure damage on private lands.</li> <li>Number of reported incidents related to infrastructure damage on private lands.</li> </ul>
11	<b>Land Use &amp; Acquisition</b>	Damages to adjacent lands and structures	Adverse	Low	Additional cost is not expected	<ul style="list-style-type: none"> <li>If grievances are received regarding unauthorized use of privately-owned lands, damage to neighboring lands, etc. through the Grievance Redress Mechanism to be established, assessments / investigations will be performed on a case-by-case basis, and corrective actions will be planned and implemented, where necessary.</li> </ul>	Project Company	<ul style="list-style-type: none"> <li>Throughout the Project</li> </ul>	<ul style="list-style-type: none"> <li>Number of grievances</li> <li>Percentage of closed grievances within the target timeframe</li> </ul>
12	<b>Stakeholder Engagement and Grievance Mechanism</b>	Communication issues with the stakeholders & Grievance Issues	Adverse	Low	Additional cost is not expected	<ul style="list-style-type: none"> <li>An efficient Grievance Redress Mechanism will be initiated to allow potentially affected stakeholders to voice their concerns on the Project. This mechanism includes recording, monitoring and performance evaluation.</li> <li>The Public Grievance Redress Mechanism and the Worker Grievance Redress Mechanism will each have dedicated authorities. These designated personnel will handle and evaluate complaints impartially. Furthermore, those responsible for addressing grievances must do so confidentially and with an unbiased approach</li> </ul>	Project Company	<ul style="list-style-type: none"> <li>Throughout the Project</li> </ul>	<ul style="list-style-type: none"> <li>Number of grievances</li> <li>Percentage of closed grievances within the target timeframe</li> <li>Records of stakeholder engagement activities</li> </ul>
13	<b>Biodiversity</b>	Protection	Adverse	Low	Additional cost is not expected	<ul style="list-style-type: none"> <li>Interaction / communication will be established with communities, and adequate timing will be planned for engagement activities. Additionally, regular consultations will be carried out with the authorities and communities regarding the project management.</li> </ul>	Project Company	<ul style="list-style-type: none"> <li>Throughout the Project</li> </ul>	<ul style="list-style-type: none"> <li>Zero damage to natural habitats, wetlands and sites considered as protected areas</li> <li>Zero hunting, foraging, logging</li> </ul>
14	<b>Climate Change</b>	Adaptasyon	Adverse	Low	Additional cost is not expected	<ul style="list-style-type: none"> <li>Reinforce the factory's physical infrastructure to withstand extreme weather events, including the installation of flood barriers, elevation of critical equipment, and designing structures that can resist heavy rainfall.</li> </ul>	Project Company	<ul style="list-style-type: none"> <li>CCRA Report-January 2024</li> <li>Throughout the Project</li> </ul>	<ul style="list-style-type: none"> <li>Evidence of implementation of measures described in the CCRA Report.</li> </ul>



No	Topic	Definition of Potential Impact	Type of Impact	Impact Significance Before Mitigation	Cost	Measures to be Taken	Responsibility	Indicative timeframe	Key Performance Indicators
						<ul style="list-style-type: none"> <li>▪ Collaborate with ALOSBI (Aliağa Organized Industrial Zone) for flood risk management, and independently ensure the resilience of structures and products against flooding.</li> <li>▪ Diversify suppliers and establish backup routes to ensure a steady flow of raw materials, with contingency plans for supply chain disruptions caused by extreme weather.</li> <li>▪ Utilize a vast network of product suppliers and delivery alternatives, including the possibility of using cargo aircraft in case of disruptions to shipping routes due to extreme weather events.</li> <li>▪ Integrate diverse energy sources to mitigate the impact of energy shortages resulting from changing climate conditions, and consider installing energy storage systems for a more reliable energy supply.</li> <li>▪ Implement emergency response plans that consider various climate-related scenarios, ensuring minimal disruption to production and a swift recovery post-event. This includes establishing clear safety protocols and regularly training employees on emergency response plans during extreme weather events.</li> <li>▪ Develop and practice evacuation plans to ensure the safety and well-being of the workforce.</li> <li>▪ Engage in collaboration with governmental bodies and industry associations to align with national or sectoral adaptation and climate resilience policies.</li> </ul>			

### 3 ENVIRONMENTAL AND SOCIAL MONITORING PLAN

The monitoring, review and audit program detailed in Chapters 2.1 and 2.2 will be implemented during the construction and operational phases to monitor the implementation of environmental and social commitments under ESMP requirements. Monitoring of mitigation measures and commitments given in ESMP will be carried out continuously starting from the construction phase by the contractor and Project Company in line with the Monitoring Plan. The Project Company will be responsible for ensuring that the contractor and its subcontractors comply with the applicable national/international regulations as well as with the requirements stipulated by lenders.

The Key Performance Indicators (KPIs) of this procedure will be monitored, verified and evaluated during project monitoring. The KPIs are presented in Table 3-1.

**Table 3-1.** Key Performance Indicators

KPI	Target
<b>Air Quality</b>	
Air quality-related incidents	Minimizing and continuously improving the number of reported air quality-related incidents
Non-compliance with air quality standards	Zero grievance per year
Public grievances	Minimizing and continuously improving the number of reported air quality-related grievances from the community
<b>Noise</b>	
Noise- and vibration-related incidents	Minimizing and continuously improving the number of reported noise- and vibration-related incidents
Non-compliance with project standards	Zero non-compliance report per year
Number of public grievances regarding noise	Zero grievance per year
<b>Water</b>	
Spillage	Minimizing and continuously improving the number of reported water quality-related incidents
Non-compliance with project standards	Zero non-compliance report per year
Wastewater collection system	Zero grievance per year
Groundwater levels of public/private wells	No significant adverse effects
Water quality analyses	Meeting national and international water quality standards for surface water and groundwater affected and/or present in the vicinity of the project
Floods	No damage to infrastructure and loads/people
<b>Wastewater</b>	
Wastewater generation	Total amount of wastewater generated Ratio of wastewater generated to the amount of treated water used for irrigation
Wastewater disposal	Ratio of treated wastewater used for irrigation to the amount of wastewater discharged to the receiving environment
<b>Waste</b>	
Waste generation	Total waste generated



KPI	Target
	Ratio of hazardous waste generated to total hazardous waste (based on contamination + generation)
Waste disposal	Ratio of recovered/reused/recycled waste to total waste generated
<b>Soil</b>	
Spillage	Minimizing and continuously improving the number of reported soil quality-related incidents
Non-compliance with project standards	Zero non-compliance report per year
Number of public grievances regarding soil	Zero grievance per year
<b>Traffic</b>	
Number of non-compliances associated with the mitigation measures set out by Management Plans	Minimizing and continuous improving the number of reported non-compliances
Number of drivers found to exceed speed limits or drive unsafely	Zero exceedance per year
Number of road accidents: Injuries and deaths due to accidents Spills (such as loads or fuel) Wildlife-vehicle collisions	Zero accident per year
Number of grievances related to traffic	Zero grievance per year
<b>Health, Safety and Environment</b>	
Percentage of scheduled EHS Audits	>90
Percentage of attendance at EHS meetings	>90
Percentage of non-compliance reports closed out	100
Reporting of safety observations	100%
Reporting of unsafe incident observations	100%
Reporting of near-misses	100%
Percentage of attendees at the occupational safety meeting	>90
Percentage of compliance with the Risk Assessment	>90
Percentage of compliance with Legal Requirements	>90
Results of scheduled audits	>85
EHS training provided based on the training matrix All training programs exceeding 90% relative to the matrix	>90
Percentage of participation in scheduled training programs	>90
Participation in the EHS program by individual managers and auditors	>90
Participation in the EHS program by contractors	>90
<b>Labor and Working Conditions</b>	
Number of worker grievances closed within the targeted timeframe	Zero outstanding worker grievance Number of forced labor and child labor cases and complaints regarding SEA/SH.
<b>Community Health and Safety</b>	
Number of communicable and non-communicable diseases and injuries	Negative Trend

KPI	Target
Number of public health safety grievances from local residents as recorded in the grievance redress mechanism	Reduced number of grievances from communities and general public
Number of public health and safety incidents reported	Zero incident per year
Number of noise-related incidents reported	Zero incident per year

### 3.1 Monitoring Plan for the Construction Phase

Issue	Monitoring Location	Timing / Monitoring Frequency	Parameters Monitored	Monitoring Method	Target/threshold values	Legislative Requirements for Monitoring	Key Performance Indicators	Cost	Responsible Party
<b>Occupational Health and Safety</b>	Project area Settlements in the vicinity of the Project area	Daily	<ul style="list-style-type: none"> <li>Safe conditions at the construction site</li> <li>Risk analysis and procedures</li> <li>Diseases</li> <li>Incidents</li> <li>Grievances</li> <li>Tool box talks and training</li> <li>EHS Audit</li> <li>Legal liabilities</li> <li>Emergency Response Plan</li> </ul>	<ul style="list-style-type: none"> <li>On-site audit</li> <li>Worker interviews</li> <li>Grievance logs</li> <li>Training and occupational safety records</li> <li>Sample contracts</li> <li>Internal and external audits</li> <li>Records of accidents and near misses</li> <li>Emergency Drill records</li> </ul>	Targets are expressed numerically in Table 3-1.	<ul style="list-style-type: none"> <li>Occupational Health and Safety Law</li> <li>Regulation on Health and Safety Requirements for the Use of Work Equipment</li> <li>AIIB ESS1</li> </ul>	<ul style="list-style-type: none"> <li>Percentage of scheduled EHS Audits</li> <li>Percentage of attendance at EHS meetings</li> <li>Percentage of non-compliance reports closed out</li> <li>Reporting of safety observations</li> <li>Reporting of unsafe incident observations</li> <li>Reporting of near-misses</li> <li>Percentage of attendees at the occupational safety meeting</li> <li>Percentage of compliance with the Risk Assessment</li> <li>Percentage of compliance with Legal Requirements</li> <li>Results of scheduled audits</li> <li>EHS training provided based on the training matrix</li> <li>All training programs exceeding 90% relative to the matrix</li> <li>Percentage of participation in scheduled training programs</li> <li>Participation in the EHS program by individual managers and auditors</li> <li>Participation in the EHS program by contractors</li> </ul>	No additional costs	Project Company, Contractor
<b>Air Quality</b>	Project area Settlements and schools in the vicinity of the Project area	During construction In case of grievance Monthly	<ul style="list-style-type: none"> <li>Grievance Records</li> </ul>	<ul style="list-style-type: none"> <li>On-site audit</li> <li>PM<sub>2.5</sub> and PM<sub>10</sub> measurements to be carried out in case of grievance</li> </ul>	<ul style="list-style-type: none"> <li>Minimizing and continuously improving the number of reported air quality-related incidents</li> <li>Zero grievance per year</li> </ul> <p>Minimizing and continuously improving the number of reported air quality-related grievances from the public</p>	<ul style="list-style-type: none"> <li>Air Quality Assessment and Management Regulation</li> <li>AIIB ESS1</li> </ul>	<ul style="list-style-type: none"> <li>Air Quality-related incidents</li> <li>Records of Non-compliance with air quality standards</li> <li>Public grievances</li> </ul>	No additional costs	Project Company Contractor
<b>Noise</b>	Project area	During construction In case of grievance	<ul style="list-style-type: none"> <li>Grievance Records</li> </ul>	<ul style="list-style-type: none"> <li>Monitoring carried out at the nearest sensitive</li> </ul>	<ul style="list-style-type: none"> <li>Minimizing and continuously improving the number of</li> </ul>	<ul style="list-style-type: none"> <li>Regulation on Assessment and</li> </ul>	<ul style="list-style-type: none"> <li>Noise- and vibration-related incidents</li> </ul>	No additional costs	Project Company Contractor

Issue	Monitoring Location	Timing / Monitoring Frequency	Parameters Monitored	Monitoring Method	Target/threshold values	Legislative Requirements for Monitoring	Key Performance Indicators	Cost	Responsible Party
	Settlements and schools in the vicinity of the Project area	Monthly		receptors using noise measuring devices <ul style="list-style-type: none"> <li>On-site audit</li> <li>Measurements to be carried out in case of grievance</li> </ul>	reported noise- and vibration-related incidents <ul style="list-style-type: none"> <li>Annual zero non-compliance report</li> <li>Zero grievance per year</li> </ul>	Management of Environmental Noise <ul style="list-style-type: none"> <li>AIB ESS1</li> </ul>	<ul style="list-style-type: none"> <li>Records of non-compliance with the Project standards</li> <li>Number of public grievances regarding noise</li> </ul>		
<b>Waste Management</b>	Project area	During construction Daily	<ul style="list-style-type: none"> <li>Conditions of the temporary waste storage areas</li> <li>Waste amount</li> <li>Recovery/reuse/recycling rate</li> </ul>	<ul style="list-style-type: none"> <li>Waste records</li> <li>On-site audit</li> </ul>	<ul style="list-style-type: none"> <li>Minimization of the total waste generated</li> <li>Minimization of the ratio of hazardous waste generated to total waste (based on contamination + generation)</li> <li>Increase in the ratio of recovered / reused / recycled waste to total waste generated</li> </ul>	<ul style="list-style-type: none"> <li>Regulation on Hazardous Waste Control</li> <li>Packaging Waste Control Regulation</li> <li>Waste Management Regulation</li> <li>AIB ESS1</li> </ul>	<ul style="list-style-type: none"> <li>Total waste generated</li> <li>Ratio of hazardous waste generated to total hazardous waste (based on contamination + generation)</li> <li>Ratio of recovered/reused/recycled waste to total waste generated</li> </ul>	No additional costs	Project Company Contractor
<b>Waste Batteries and Accumulators</b>	Project area	During construction Monthly	<ul style="list-style-type: none"> <li>Waste amount</li> <li>Recovery/reuse/recycling rate</li> </ul>	<ul style="list-style-type: none"> <li>Waste records</li> </ul>	<ul style="list-style-type: none"> <li>Minimization of the total waste generated</li> <li>Increase in the ratio of recovered / reused / recycled waste to total waste generated</li> </ul>	<ul style="list-style-type: none"> <li>Waste Battery and Accumulator Regulation</li> </ul>	<ul style="list-style-type: none"> <li>Total waste generated</li> <li>Ratio of recycled waste to total waste generated</li> <li>Records of transportation and disposal</li> </ul>	No additional costs	Project Company Contractor
<b>Hazardous Waste Management</b>	Project area	During construction Daily	<ul style="list-style-type: none"> <li>Waste amount and storage conditions</li> </ul>	<ul style="list-style-type: none"> <li>Waste records</li> <li>On-site audit</li> </ul>	<ul style="list-style-type: none"> <li>Increase in the ratio of hazardous waste generated to total hazardous waste (based on contamination + generation)</li> </ul>	<ul style="list-style-type: none"> <li>Waste Management Regulation</li> <li>AIB ESS1</li> </ul>	<ul style="list-style-type: none"> <li>Total waste generated</li> <li>Records of transportation and disposal</li> </ul>	No additional costs	Project Company Contractor
<b>Wastewater Management</b>	Project area	During construction At the start of the Project	<ul style="list-style-type: none"> <li>Wastewater amount</li> </ul>	<ul style="list-style-type: none"> <li>On-site audit</li> </ul>	<ul style="list-style-type: none"> <li>Permit being secured</li> </ul>	<ul style="list-style-type: none"> <li>Water Pollution Control Regulation</li> </ul>	<ul style="list-style-type: none"> <li>Wastewater amount</li> </ul>	No additional costs	Project Company Contractor
<b>Labor and Working Conditions</b>	Project area	Monthly	<ul style="list-style-type: none"> <li>Grievance Records</li> <li>Non-discrimination</li> <li>SEA/SH risks</li> <li>Forced and child labor</li> </ul>	<ul style="list-style-type: none"> <li>Internal and external audits</li> <li>Grievance records</li> <li>Accident records</li> <li>Training records</li> <li>Sample contracts and signed Codes of Conduct</li> <li>Human Resource Policy</li> <li>Number of the local employees</li> <li>Legal work permit</li> <li>Age verification procedure</li> <li>Labor camp conditions</li> </ul>	<ul style="list-style-type: none"> <li>Zero grievances closed out within the target timeframe</li> <li>Zero SEA/SH, forced and labor cases</li> </ul>	<ul style="list-style-type: none"> <li>Labor Law (No. 4857)</li> <li>Law on Trade Unions and Collective Bargaining Agreements</li> <li>ILO International Regulations</li> </ul>	<ul style="list-style-type: none"> <li>Number of worker grievances</li> <li>Percentage of closed grievances within the target timeframe</li> <li>Percentage of workers aware of the Grievance Redress Mechanism.</li> <li>Percentage of employees who have signed the updated Code of Conduct.</li> <li>Number of reported cases related to gender-based violence, harassment, and abuse.</li> <li>Percentage of workers trained on discrimination,</li> </ul>	No additional costs	Project Company Contractor

Issue	Monitoring Location	Timing / Monitoring Frequency	Parameters Monitored	Monitoring Method	Target/threshold values	Legislative Requirements for Monitoring	Key Performance Indicators	Cost	Responsible Party
				<ul style="list-style-type: none"> <li>▪ Sample supplier and subcontractor contracts</li> </ul>			sexual harassment, and abuse prevention. <ul style="list-style-type: none"> <li>▪ Number of employees receiving Code of conduct training</li> <li>▪ Assessment of training effectiveness and modification rate.</li> <li>▪ Number of female employees who become representatives.</li> <li>▪ Effectiveness of training related to representation and participation.</li> <li>▪ Percentage of employee contracts updated with specified items.</li> <li>▪ Compliance rate with minimum legal labor standards as per ILO regulations.</li> <li>▪ Assessment of hygienic and adequate facilities provided to workers.</li> <li>▪ Percentage of workers with access to primary healthcare on-site.</li> <li>▪ Number of reported cases related to discrimination in business relations.</li> <li>▪ Effectiveness of measures to avoid discrimination.</li> <li>▪ Compliance rate with worker accommodation standards set by IFC and EBRD.</li> <li>▪ Number of training sessions conducted on organizational and waste management standards.</li> <li>▪ Percentage of international standards implemented in camp management.</li> <li>▪ Number of corrective actions taken to maintain and improve standards.</li> <li>▪ Number of employees receiving Code of conduct training</li> </ul>		

Issue	Monitoring Location	Timing / Monitoring Frequency	Parameters Monitored	Monitoring Method	Target/threshold values	Legislative Requirements for Monitoring	Key Performance Indicators	Cost	Responsible Party
<b>Community Health and Safety</b>	Project area Residential areas around project area	Daily	<ul style="list-style-type: none"> <li>▪ Safety conditions at the site</li> <li>▪ Fencing of construction site</li> <li>▪ Warning signs and flashlights</li> <li>▪ Grievances</li> <li>▪ Incidents</li> <li>▪ Accidents</li> </ul>	<ul style="list-style-type: none"> <li>▪ Records of comments/ suggestions/ grievances</li> <li>▪ Site Audits</li> <li>▪ Training records</li> </ul>	<ul style="list-style-type: none"> <li>▪ No significant increase in communicable and non-communicable disease and injury rates per 1,000 residents per annum.</li> <li>▪ Decreasing number/ continuous improvement in number of complaints</li> <li>▪ Zero incidents per year</li> </ul>	<ul style="list-style-type: none"> <li>▪ Public Health Law</li> <li>▪ Health and Safety Signs Regulation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Number of communicable and non-communicable diseases and injuries.</li> <li>▪ Number of community health safety &amp; security complaints from local communities as recorded in the grievance management system.</li> <li>▪ Number of reported community health &amp; safety incidents</li> <li>▪ Number of reported noise incidents</li> <li>▪ Number of reported traffic-related incidents and their resolution time.</li> <li>▪ Percentage of warning signs that are visible at night and in bad weather conditions</li> <li>▪ Number of reported incidents related to poor visibility of warning signs</li> <li>▪ Assessment of the availability and condition of firefighting equipment at construction sites.</li> <li>▪ Response time in the event of a fire-related emergency</li> <li>▪ Timeliness of road surface repairs caused by heavy construction machinery.</li> <li>▪ Number of reported incidents related to road surface damage</li> <li>▪ Timeliness and effectiveness of mitigation measures taken for infrastructure damage on private lands.</li> <li>▪ Number of reported incidents related to infrastructure damage on private lands.</li> </ul>	No additional costs	Project Company Contractor
<b>Land Use</b>	Project area	Monthly	<ul style="list-style-type: none"> <li>▪ Grievance Records</li> </ul>	<ul style="list-style-type: none"> <li>▪ Grievance redress mechanism</li> <li>▪ Compensation for unintended damages to land and structures during construction</li> </ul>	<ul style="list-style-type: none"> <li>▪ Zero grievances not closed out within the target timeframe</li> </ul>	<ul style="list-style-type: none"> <li>▪ AİIB ESS 2</li> </ul>	<ul style="list-style-type: none"> <li>▪ Grievance Records</li> <li>▪ Number of grievances</li> <li>▪ Percentage of closed grievances within the target timeframe</li> </ul>	No additional costs	Project Company Contractor

Issue	Monitoring Location	Timing / Monitoring Frequency	Parameters Monitored	Monitoring Method	Target/threshold values	Legislative Requirements for Monitoring	Key Performance Indicators	Cost	Responsible Party
<b>Stakeholder Engagement and Grievance Mechanism</b>	Project area Settlements near the project area	Monthly	<ul style="list-style-type: none"> <li>▪ Stakeholder activities</li> <li>▪ Grievance Records</li> </ul>	<ul style="list-style-type: none"> <li>▪ View/suggestion/ grievance records</li> <li>▪ On-site inspection</li> </ul>	<ul style="list-style-type: none"> <li>▪ Zero grievances not closed out within the target timeframe</li> </ul>	<ul style="list-style-type: none"> <li>▪ AIBB ESS 1</li> <li>▪ Laws on Right to Information 4982</li> </ul>	<ul style="list-style-type: none"> <li>▪ Grievance Records</li> <li>▪ Number of grievances</li> <li>▪ Percentage of closed grievances within the target timeframe</li> </ul>	No additional costs	Project Company Contractor
<b>Biodiversity</b>	Project area	During construction Daily	<ul style="list-style-type: none"> <li>▪ Grievance</li> <li>▪ Loss of Natural Habitats</li> <li>▪ Incidents and Accidents involving flora and fauna</li> <li>▪ Records of training for employees</li> <li>▪ Availability of the Invasive Species Management Plan</li> </ul>	<ul style="list-style-type: none"> <li>▪ On-site audit</li> </ul>	<ul style="list-style-type: none"> <li>▪ Zero Grievance Log</li> <li>▪ Zero Habitat Loss</li> <li>▪ Zero Incident and Accident involving flora and fauna</li> <li>▪ Records of training for employees</li> <li>▪ Zero Invasive Species Spread</li> </ul>	<ul style="list-style-type: none"> <li>▪ AIBB ESS1</li> </ul>	<ul style="list-style-type: none"> <li>▪ Number of Grievance Logs</li> <li>▪ Habitat Losses</li> <li>▪ Number of Incidents and Accidents involving flora and fauna</li> <li>▪ Records of Invasive Species Spread</li> </ul>	No additional costs	Project Company Contractor

### 3.2 Monitoring Plan for the Operation Phase

Issue	Monitoring Location	Timing / Monitoring Frequency	Parameters Monitored	Monitoring Method	Target/threshold values	Legislative Requirements for Monitoring	Key Performance Indicators	Cost	Responsible Party
<b>Occupational Health and Safety</b>	Project area	Monthly	<ul style="list-style-type: none"> <li>▪ Disease</li> <li>▪ Incidents</li> <li>▪ Grievances</li> <li>▪ Trainings</li> <li>▪ EHS Audit</li> <li>▪ Legal liabilities</li> <li>▪ Compliance with the Emergency Response Plan</li> </ul>	<ul style="list-style-type: none"> <li>▪ On-site audit</li> <li>▪ Worker interviews</li> <li>▪ Grievance logs</li> <li>▪ Training records</li> <li>▪ Sample contracts</li> <li>▪ Internal and external audits</li> <li>▪ Emergency Plans</li> <li>▪ Accident records</li> </ul>	<ul style="list-style-type: none"> <li>▪ Targets are expressed numerically in Table 3-1.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Occupational Health and Safety Law</li> <li>▪ Regulation on Health and Safety Requirements for the Use of Work Equipment</li> </ul>	<ul style="list-style-type: none"> <li>▪ Percentage of scheduled EHS Audits</li> <li>▪ Percentage of attendance at EHS meetings</li> <li>▪ Percentage of non-compliance reports closed out</li> <li>▪ Reporting of safety observations</li> <li>▪ Reporting of unsafe incident observations</li> <li>▪ Reporting of near-misses</li> <li>▪ Percentage of attendees at the occupational safety meeting</li> <li>▪ Percentage of compliance with the Risk Assessment</li> <li>▪ Percentage of compliance with Legal Requirements</li> <li>▪ Results of scheduled audits</li> <li>▪ EHS training provided based on the training matrix</li> <li>▪ All training programs exceeding 90% relative to the matrix</li> <li>▪ Percentage of participation in scheduled training programs</li> <li>▪ Participation in the EHS program by individual managers and auditors</li> <li>▪ Participation in the EHS program by contractors</li> </ul>	No additional costs	Project Company
<b>Waste Management</b>	Project area	During the Project In case of grievance Daily	<ul style="list-style-type: none"> <li>▪ Waste amount</li> <li>▪ Recovery/reuse/recycling rate</li> </ul>	<ul style="list-style-type: none"> <li>▪ Waste records</li> <li>▪ On-site audit</li> </ul>	<ul style="list-style-type: none"> <li>▪ Minimization of the total waste generated</li> <li>▪ Minimization of the ratio of hazardous waste generated to total waste (based on contamination + generation)</li> <li>▪ Increase in the ratio of recovered / reused / recycled waste to total waste generated</li> </ul>	<ul style="list-style-type: none"> <li>▪ Regulation on Hazardous Waste Control</li> <li>▪ Packaging Waste Control Regulation</li> <li>▪ Waste Management Regulation</li> <li>▪ Regulation on the Management of Waste Oils</li> <li>▪ Regulation on the Control of Waste</li> </ul>	<ul style="list-style-type: none"> <li>▪ Total waste generated</li> <li>▪ Ratio of hazardous waste generated to total hazardous waste (based on contamination + generation)</li> <li>▪ Ratio of recovered/reused/recycled waste to total waste generated</li> </ul>	No additional costs	Project Company



Issue	Monitoring Location	Timing / Monitoring Frequency	Parameters Monitored	Monitoring Method	Target/threshold values	Legislative Requirements for Monitoring	Key Performance Indicators	Cost	Responsible Party
						Batteries and Accumulators ▪ Medical Waste Control Regulation			
<b>Wastewater Management</b>	Project area	During the Project Monthly	▪ Wastewater amount	▪ Environmental permit	▪ Permit being secured	Water Pollution Control Regulation	▪ Wastewater amount ▪ Analysis reports	No additional costs	Project Company
<b>Labor and Working Conditions</b>	Project route and maintenance areas	Monthly	▪ Grievances	▪ Internal and external audits ▪ Grievance logs ▪ Accident records ▪ Training records ▪ Sample contracts ▪ Human Resources Policy ▪ Number of the local employees ▪ Legal work permit	▪ Closure of all grievances within the targeted timeframe	▪ Labor Law (No. 4857) ▪ Law on Trade Unions and Collective Bargaining Agreements ▪ ILO International Conventions	▪ Number of worker grievances ▪ Percentage of grievances closed within the targeted timeframe ▪ Percentage of workers aware of the Grievance Redress Mechanism. ▪ Percentage of employees who have signed the updated Code of Conduct. ▪ Number of reported cases related to gender-based violence, harassment, and abuse. ▪ Percentage of workers trained on discrimination, sexual harassment, and abuse prevention. ▪ Number of employees receiving Code of conduct training ▪ Assessment of training effectiveness and modification rate. ▪ Number of female employees who become representatives. ▪ Number of women employees, including white and blue-collar females, and female engineers per annum ▪ Effectiveness of training related to representation and participation. ▪ Percentage of employee contracts updated with specified items. ▪ Compliance rate with minimum legal labor standards as per ILO regulations.	No additional costs	Project Company

Issue	Monitoring Location	Timing / Monitoring Frequency	Parameters Monitored	Monitoring Method	Target/threshold values	Legislative Requirements for Monitoring	Key Performance Indicators	Cost	Responsible Party
							<ul style="list-style-type: none"> <li>▪ Assessment of hygienic and adequate facilities provided to workers.</li> <li>▪ Percentage of workers with access to primary healthcare on-site.</li> <li>▪ Number of reported cases related to discrimination in business relations.</li> <li>▪ Effectiveness of measures to avoid discrimination.</li> <li>▪ Compliance rate with worker accommodation standards set by IFC and EBRD.</li> <li>▪ Number of training sessions conducted on organizational and waste management standards.</li> <li>▪ Percentage of international standards implemented in camp management.</li> <li>▪ Number of corrective actions taken to maintain and improve standards</li> <li>▪ Number of employees receiving Code of conduct training</li> </ul>		
<b>Community Health and Safety</b>	Project area	Monthly	<ul style="list-style-type: none"> <li>▪ Grievances</li> <li>▪ Incidents</li> <li>▪ Accidents</li> </ul>	<ul style="list-style-type: none"> <li>▪ View/suggestion/grievance logs</li> <li>▪ On-site Audits</li> <li>▪ Training records</li> </ul>	<p>No considerable increase in the number of communicable and non-communicable diseases and injuries</p> <p>Reduction/continuous improvement in the number of grievances</p> <ul style="list-style-type: none"> <li>▪ Zero incident per year</li> </ul>	<ul style="list-style-type: none"> <li>▪ Public Health Law</li> <li>▪ Health and Safety Signs Regulation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Number of communicable and non-communicable diseases and injuries</li> <li>▪ Number of public health safety grievances from local residents as recorded in the grievance handling system</li> <li>▪ Number of public health and safety incidents reported</li> <li>▪ Number of noise-related incidents reported</li> <li>▪ Number of traffic-related incidents and their resolution time.</li> <li>▪ Percentage of warning signs that are visible at night and in bad weather conditions</li> <li>▪ Number of reported incidents related to poor visibility of warning signs</li> <li>▪ Assessment of the availability and condition of firefighting equipment at construction sites.</li> </ul>	No additional costs	Project Company

Issue	Monitoring Location	Timing / Monitoring Frequency	Parameters Monitored	Monitoring Method	Target/threshold values	Legislative Requirements for Monitoring	Key Performance Indicators	Cost	Responsible Party
							<ul style="list-style-type: none"> <li>▪ Response time in the event of a fire-related emergency</li> <li>▪ Timeliness of road surface repairs caused by heavy construction machinery.</li> <li>▪ Number of reported incidents related to road surface damage</li> <li>▪ Timeliness and effectiveness of mitigation measures taken for infrastructure damage on private lands.</li> <li>▪ Number of reported incidents related to infrastructure damage on private lands.</li> </ul>		
<b>Stakeholder Engagement and Grievance Mechanism</b>	Project area	Monthly	<ul style="list-style-type: none"> <li>▪ Grievance Records</li> </ul>	<ul style="list-style-type: none"> <li>▪ View/suggestion/ grievance records</li> <li>▪ On-site inspection</li> </ul>	<ul style="list-style-type: none"> <li>▪ Zero grievances not closed out within the target timeframe</li> </ul>	<ul style="list-style-type: none"> <li>▪ AIBB ESS 1</li> <li>▪ Laws on Right to Information 4982</li> </ul>	<ul style="list-style-type: none"> <li>▪ Grievance Records</li> <li>▪ Number of grievances</li> <li>▪ Percentage of closed grievances within the target timeframe</li> </ul>	No additional costs	Project Company

## 4 REPORTING

Reporting processes that should be put into action during the implementation phase of the project and the requirements of such processes are presented in Table 4-1.

**Table 4-1.** Reporting Process Requirements and Responsible Parties

Responsible Party	Reporting Process Requirements
Project Implementation Unit (Project Company and Project Management Company)	<ul style="list-style-type: none"> <li>▪ Prepare and submit the Project information notes to the Bank every six months</li> <li>▪ Summarize environmental and social aspects of the Project implementation for the Bank in the monitoring report every six months and present them together with the Grievance Log</li> </ul>
Contractor	<ul style="list-style-type: none"> <li>▪ Prepare and submit monthly Environmental and Social Monitoring Reports for the approval of the Project Company</li> </ul>
Environmental and Social Audit Consultants	<ul style="list-style-type: none"> <li>▪ The Audit Contractor will prepare monitoring reports during construction works on behalf of the Project Company every six months as well as annual audit reports during the operational phase of the Project.</li> </ul>