Environmental and Social Risk Management

Implementation Manual 2022

INFRASTRUCTURE, HOUSING, AND SME FINANCE DEPARTMENT
STATE BANK OF PAKISTAN

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Table 1: Abbreviations

CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CO	Carbon monoxide
CO2	Carbon dioxide
DFI	Development finance institution
E&S	Environmental and social
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
ESAP	Environmental and Social Action Plan
ESDD	Environmental and Social Due Diligence
ESIA	Environmental and Social Impact Assessment
ESMS	Environmental and Social Management System
ESRM	Environment and Social Risk Management
GHGs	Greenhouse gases Green Banking Guidelines
GBGs	Environmental and Social Management System
GBO	Green Banking Office
IEE	Initial Environmental Examination
IFC	International Finance Corporation
ILO	International Labour Organization
ISO	International Standards Organization
kV	Kilovolt
MW	Megawatt
NEQSs	National Environmental Quality Standards
NOx	Nitrogen oxides
OHSAS	Occupational Health and Safety Assessment Series
PEPA	Pakistan Environmental Protection Act
PKR	Pakistani Rupee
PM	Particulate matter
PS	Performance Standards
RMs	Relationship Managers
SA	Social Accountability
SBP	State Bank of Pakistan

SME	Small and medium enterprises
SO2	Sulphur dioxide
UNESCO	United Nations Educational, Scientific and Cultural Organization
VOCs	Volatile organic compounds

Definitions

Applicability refers to loan categories for which the Environmental and Social Risk Management (ESRM) Manual is applicable, that is, retail, trade, microfinance, small and medium enterprises (SMEs), corporate finance, and project finance. All new loan proposals and credit renewals received after the official rollout of the ESRM Implementation Manual for the above applicable categories will have to be first screened against the Exclusion List and may require additional environmental and social (E&S) due diligence.

Borrower/Customer refers to a borrower/customer of a bank or development finance institution (DFI).

Compliance/E&S Compliance refers to conformity with all applicable laws, rules, and regulations of all national, federal, and regional authorities. For Pakistan's financial sector, these authorities are the State Bank of Pakistan (SBP), the Pakistan Environmental Protection Agency, provincial environmental protection agencies, provincial labor departments, and the International Labour Organization (ILO). Details are provided in Annex L.

Credit Approval Authority refers to the department/committee/body/board of a bank/DFI with the authority to approve credit proposals up to a certain or full credit limit.

E&S Due Diligence refers to a review of potential E&S risks associated with the business activities of a potential borrower/customer to ensure that a transaction does not carry E&S risks that could present a potential liability or risk to a bank/DFI.

IFC's Environmental and Social Performance Standards (IFC Performance Standards) define IFC clients' responsibilities for managing their environmental and social risks. The scope and intent of the IFC Performance Standards are addressed or partially addressed in the country's environmental and social regulatory framework. The IFC Performance Standards encompass eight topics: Assessment and Management of Environmental and Social Risks and Impacts, Labour and Working Conditions, Resource Efficiency and Pollution Prevention, Community Health, Safety, and Security, Land Acquisition and Involuntary Resettlement, Biodiversity Conservation and Sustainable Management of Living Natural Resources, Indigenous Peoples, and Cultural Heritage.

Environmental and Social Impact Assessment (ESIA) is a tool for identifying the environmental, social, and economic impacts of a project prior to decision-making.

Exclusion List refers to a list of prohibited activities that shall not be financed by banks/DFIs. Examples include child or forced labour and production or trade in weapons and munitions. A detailed list is provided in Annex A.

Environmental Risks refer to the risk of causing pollution or destruction of the natural environment (land, water, air, natural habitats, animals, and plant species) either through accidental or deliberate actions. Typical examples of environmental issues in Pakistan's industrial landscape include the discharge of highly polluted wastewater from the washing, dyeing, and finishing units of ready-made garment factories without treatment; sulphur-dioxide air emissions from burning low-grade coal in outdated brick kilns; contamination of terrestrial and marine environments through the leaching of toxic chemicals from scrapped ships or contaminated effluents and harmful fumes emitting from the steel re-rolling units; and all other activities that may have a negative impact on the environment. Please refer to Annex E for details.

Initial Environmental Examination (IEE) describe the environmental condition of a project, including potential impact, formulation of mitigation measures, and preparation of institutional requirements and environmental monitoring.

Social Risks refer to customer activities that harm social systems (such as resettlement and discrimination), have negative impacts on living standards and traditional lifestyles in the community, or do not meet acceptable standards of employment (such as minimum wages, discrimination, working hours, and safety) or business practices in the workplace. Please refer to Annex E for details.

Environmental and Social Impacts refer to any change, potential or actual, to (i) the physical, natural, or cultural environment and (ii) impacts on surrounding community and workers, resulting from the business activity to be supported.

Climate-Related Risks refer to risks posed by the exposure of financial firms and/or the financial sector to physical or transition risks caused by or related to climate change (such as damage caused by extreme weather events or a decline in the asset values of carbon intensive sectors). Climate risks at the transaction level refer to risk assessments based on formal analysis of the consequences, likelihoods, and responses to the impacts of climate change and how societal constraints shape adaptation options. Climate risks, if left unmanaged, can result in financial losses. On the one hand, industries that emit high levels of greenhouse gas (carbon dioxide and methane) are regulated and priced; on the other hand, extreme events like flood, draught, and cyclones affect business operations. Please refer to Annex E for details.

Environmental and Social Risk Rating—high, medium, or low—is generated by the E&S Risk Assessment Tool. The rating is based on the responses provided to the questions in the Environmental and Social Due Diligence (ESDD) Checklist. Environmental and social risk rating reflects the borrower/customer’s compliance level with the E&S requirements. Please refer to Annex B and Annex D for details.

E&S Categorisation refers to the classification of the relative level of environmental and social risks based on the nature of the business activity carried out by the borrower.

1. Overview of the Environmental and Social Risk Management Implementation Manual

The State Bank of Pakistan (SBP) has played a pioneering role in integrating environmental risks into overall credit assessment and developed the Green Banking Guidelines (GBGs) for Pakistan's financial sector in 2017. The objectives were to establish a minimum standard to ensure a level-playing field for the financial sector and promote a sustainable business model in Pakistan.

Since the issuance of the GBGs, banks and DFIs have identified several challenges, including identifying and managing environmental risks in lending, the resources and tools required to perform due diligence meaningfully, and the different levels of implementation among banks/DFIs, making it difficult for the SBP to fully understand the quality of implementation.

At this juncture, the SBP has developed the ESRM Implementation Manual to help banks/DFIs identify and manage environmental and social (E&S) risks by having the right policies, procedures, and tools in place. The ESRM Implementation Manual builds on the work banks/DFIs have conducted after the GBGs were issued in 2017. It may be noted that progress made to date under GBGs still holds and there is no duplication. This ESRM Implementation Manual only provides tools and procedures to strengthen implementation of the GBGs.

The ESRM Implementation Manual introduces the following features to be more streamlined, interactive, and user-friendly in nature:

- The manual has a bigger focus on social and climatic risks, which are becoming relevant and crucial for Pakistan.
- The E&S Due Diligence (ESDD) Checklist (Annex B) in the manual incorporates guidance notes to assist Relationship Managers in performing ESDD.
- The manual, in addition to investment threshold, defines applicability based on sector-specific E&S impacts. The loan categories have been expanded to include retail, trade, microfinance, small and medium enterprises (SME), corporate finance, and project finance. The manual introduces a differentiated risk-based approach.
- The organisational roles and responsibilities defined in the manual are built upon the principles of integration of E&S risks into a bank/DFI's overall credit policy. The manual clearly delineates the responsibilities of different functions of a bank/DFI in terms of E&S risk assessment and the decision-making process based on E&S risk rating.

2. Applicability of the ESRM Implementation Manual

The loan categories for which the manual is applicable are retail, trade, microfinance, SME, corporate finance, and project finance. All new loan proposals and credit renewals (received after the issuance of the ESRM Implementation Manual) for the applicable categories will have to be screened against required standards. At the time of renewal of an existing facility, the ESRM Implementation Manual requirements will be applicable for eligible projects. The requirements of this Implementation Manual will not be applicable for earlier loans in a bank/DFI's portfolio or loans that have been marked as non-performing assets or for restructuring. Please refer to Annex F for details on E&S risks in lending and Annex G for E&S risks in different banking products.

All loan proposals for the above applicable categories will have to be first screened against the Exclusion List (Annex A).

Trade, Retail, and Microfinance: For all trade, retail, and microfinance loans, only the Exclusion List will have to be consulted. Any transaction in the Exclusion List should be terminated.

SME: In the Small Enterprise category, the only required due diligence is screening against the Exclusion List. However, if a small enterprise transaction involves the following critical activities, then a loan application will be subject to due diligence using the ESDD Checklist (Annex B), in addition to the Exclusion List, even if the loan amount is less than the threshold defined in this manual:

i) Washing, dyeing, and finishing units of the ready-made garment sector (water and chemical pollution)

ii) Small steel re-rolling mills (operational health and safety as well as thermal and air pollution)

iii) Brick kilns (air pollution, child labour, and burning of fossil fuel)

iv) Units for tanning, dressing, and dyeing of leather and fur (water, chemical, and air pollution)

v) Pesticide, agrochemical, and nitrogen manufacturing units (land contamination as well as water and air pollution)

vi) Chemical and chemical product manufacturing units (safety and pollution)

vii) Rubber and plastic product manufacturing units (pollution)

viii) Battery and accumulator manufacturing units (chemical pollution)

All loan applications in the **Medium Enterprise** sector will have to undergo E&S due diligence as per the ESDD Checklist in Annex B.

Corporate Finance: All corporate finance loan applications will have to undergo the E&S due diligence process using the Exclusion List and the ESDD Checklist (Annex B). If it is a large, long-term corporate finance loan, IFC Performance Standards will be applicable; please check Annex C for the threshold matrix.

Project Finance: For all project finance transactions, after screening against the Exclusion List, please check the applicability of IFC Performance Standards using the threshold matrix in Annex C. To fill out the ESDD Checklist, Relationship Managers will need to consult the IFC Performance Standards Screening Questionnaire in Annex D and the Environmental and Social Impact Assessment (ESIA) report, which is generally submitted by the borrower/customer along with the loan application. Some banks/DFIs might have technical or engineering teams that will also review the project. For high-risk critical projects, the banks/DFIs might need to hire third-party consulting firms to gather more in-depth information to complement the Environmental Impact Assessment (EIA) or ESIA and assist in credit decision-making.

Table 2: Applicability of the Manual by Transaction Type

S. No.	Transaction Type	Exclusion List	ESDD Checklist	Third-Party ESIA
1	Retail, trade, or microfinance **(For microfinance, any amount up to PKR. 3 million)***	✓		
2	Small enterprises falling into one of the categories listed as critical **(Any amount up to PKR. 25 million)***	✓	✓	
3	Small enterprises NOT falling into one of the categories listed as critical **(Any amount up to PKR. 25 million)***	✓		
4	Medium sectors **(Any amount greater than PKR. 25 million and up to PKR. 200 million)***	✓	✓	
5	Corporate finance **(Any amount greater than PKR. 200 million and up to PKR. 880 million)***	✓	✓	
6	Project finance and long-term corporate finance **(PKR. 880 million and above)***	✓	✓	✓
*The amounts are subject to change as per instructions issued by the SBP from time to time.				

3. Applicable Standards

All national and provincial regulations pertaining to E&S governance will be applicable while performing E&S due diligence of a particular transaction. This means all relevant E&S permits, no objection certificates, consents, licences, and monitoring of E&S parameters in accordance with national and provincial regulations are considered mandatory compliance requirements for the evaluation of a loan application. A list of applicable national and provincial regulations and international treaties where Pakistan is a signatory is provided in Annex L for reference.

If borrowers/customers have established management systems as per international frameworks (such as International Standards Organization—ISO 14001—for environmental management, Occupational Health and Safety Assessment Series—OHSAS 18001—for occupational health and safety, and Social Accountability—SA 8000—for socially acceptable practices in the workplace), then they will be considered good practices.

Adherence to IFC Performance Standards will be considered in case of project finance and long-term corporate finance.

To reduce risk exposure arising from the E&S risks of borrowers/customers, banks/DFIs need to ensure that its borrower/customer's financial and operational sustainability is not undermined by adverse impacts on the environment and surrounding communities. A bank/DFI needs to have a clear understanding of the potential E&S risks and their implications on a borrower/customer's operations prior to being linked to the borrower/customer in the context of a transaction.

This requires proactive identification, assessment, and management of E&S risks before they become significant or result in an adverse outcome on the borrower/customer. A bank/DFI can best achieve this by developing and implementing an Environmental and Social Management System (ESMS) to systematically assess the E&S risks and opportunities arising from the borrower/customer's operations and manage its exposure to risk.

4. Environmental and Social Management System for Banks and Development Finance Institutions

An ESMS is a set of policies, procedures, tools, and internal capacity to identify and manage a bank/DFI's exposure to the E&S risks of its borrowers/customers. An ESMS states a bank/DFI's commitment to E&S management, explains its procedures for identifying, assessing, and managing the E&S risks of financial transactions, defines the decision-making process, describes the roles, responsibilities, and capacity needs of staff for doing so, as well as states the documentation and record-keeping requirements. It also provides guidance on how to screen and categorise transactions based on their E&S risk, conduct E&S due diligence, and monitor the borrower/customer's E&S performance.

The ESMS includes the bank/DFI's environmental and social policy and designated roles and responsibilities of its staff.

It is implemented through a set of procedures for:

- Screening transactions
- Conducting environmental and social due diligence
- Categorising transactions based on their environmental and social risks
- Decision-making process
- Monitoring a borrower/customer's environmental and social performance
- Managing a borrower/customer's non-compliance with the bank/DFI's environmental and social standards
- Incorporating environmental and social requirements, such as a corrective action plan, as clauses in legal agreements with a borrower/customer.

Figure 1: Components of an ESMS

The procedures outlined in the ESMS should be applied to each transaction as part of a bank/DFI's overall risk management framework. For each eligible transaction, this also requires a financial institution to formally document its environmental and social review as part of its record-keeping process, consider environmental and social findings during the decision-making process, and incorporate environmental and social requirements, such as a corrective action plan, as clauses in legal agreements with borrowers/ customers.

To ensure the effective implementation of the ESMS across operations, the financial institution needs to allocate the necessary resources for internal communications and training.

As part of its commitment to good corporate practices, banks/DFIs need to periodically (typically once a year) report to the State Bank of Pakistan on the environmental and social performance of transactions and measures taken to reduce overall exposure to environmental and social risks.

An ESMS helps a financial institution to:

- Identify environmental and social risks associated with its borrowers/customers and understand the potential impact on its portfolio
- Systematically assess and manage environmental and social risks
- Implement necessary steps within its risk management system, including documentation and record-keeping

- Monitor borrowers/customers' compliance with national and provincial environmental and social regulations and international best practices and standards
- Require borrowers/customers to implement mitigation measures for identified environmental and social risks
- Identify social and environmental business opportunities (details about green business opportunities are covered in the Green Business Facilitation component of the Green Banking Guidelines issued by the SBP in 2017; the ESRM Implementation Manual focuses only on E&S risks in lending)
- Develop a good reputation among borrowers/customers, investors, and other relevant parties in the financial market.

Key components of an ESMS are described below. All templates related to the development of an ESMS are listed in Annex K.

A. Environmental and Social Policy

An E&S policy states a bank/DFI's vision and mission with respect to the environment, society, and contributions to sustainable development. It is a short, written statement that articulates the bank/DFI's commitment to integrating E&S considerations into its business activities as well as contributions to sustainable development. It serves as the bank/DFI's foundation within which the objectives and procedures of an ESMS are anchored.

The E&S policy should be approved by the Board. It may include the following statements and commitments:

- Incorporating E&S risk considerations into all financing activities and considering E&S risks as core credit risk
- Excluding financing to borrowers/customers whose business activities do not meet the bank/DFI's sustainability principles
- Establishing E&S requirements for borrowers/customers, such as complying with national and provincial E&S regulations and international standards
- Communicating E&S expectations to all staff, borrowers/customers, and other external stakeholders
- Committing to improving the overall E&S performance of its portfolio through enhanced risk management
- Committing to continually building the capacity of the bank/DFI's staff, including E&S Officers/Managers, Relationship Managers, Credit Officers as well as analysts, to identify E&S risks.

There is no standard content for an E&S policy; however, it should be tailored to the specific objectives of the bank/DFI, reflecting key E&S priorities and concerns as well as the E&S standards that its borrowers/customers are required to comply with. The Green Banking Office in each bank/DFI can start developing an E&S policy by reviewing its portfolio to gain an understanding of the E&S risks associated with its financing activities.

B. Roles and Responsibilities of Staff

For an ESMS to function properly, it is essential that the roles and responsibilities of performing the necessary procedures and making decisions are clearly defined. The following staff of a bank/DFI should be responsible for implementing different aspects of the ESMS as listed below:

Green Banking Office (GBO)

- Oversee the implementation of the ESMS and this manual (procedure) within the bank/DFI's lending operations and coordinate with different departments and branches of the bank/DFI to ensure compliance with the ESMS.
- Draft policy and procedure on ESRM providing step-by step processes for evaluation of environmental and social risks of client, rating/categorisation of environmental and social risks of a financing transaction, and defining roles and responsibilities at different levels within the bank/DFI as per guidance provided in this Implementation Manual. Update Senior Management on the status of the bank/DFI's portfolio regarding ESRM and facilitate the decision-making process for unresolved E&S issues or non-compliance. The GBO may be called upon by Senior Management to provide feedback on critical E&S issues of a particular transaction. The GBO will report to the Board and its subcommittees on sustainability issues.
- Periodically (annually) report to the SBP on the bank/DFI's action on high-risk transactions using the Green Banking Monitoring and Evaluation Reporting Template (Annex M).
- Track latest E&S issues in the media and support business teams in identifying and managing E&S risks in lending via different communications and guidance from time to time.
- Provide feedback and guidance to the business teams on medium and high-risk projects, mainly outlining key E&S risks and how to manage them. The GBO might provide feedback on selected projects that have been escalated to Senior Management.

Relationship Managers (RMs)

- Identify E&S risks in a borrower/customer's operation through discussions with the borrower/customer and relevant officials, conduct site visits as well as collect documents and permits relevant for the proposed transaction.
- Based on transaction screening, the RM will input relevant information in the ESDD Checklist (Annex B or Annex D depending on the type of transaction) in consultation with the borrower/customer, collect additional information, respond to credit queries, and follow up with the borrower/customer if there are any pre-disbursement actions that need to be completed.
- Negotiate with the borrower/customer and draft specific E&S covenants or action plans in case of medium or high E&S risk rating; negotiate with the borrower/customer to finalise the action plans where necessary.
- Assist the business team in the assessment and review of technical aspects of any proposed project financed through project-related corporate banking or project finance for transactions with a term of 36 months or more and above PKR 880,000,000 of the total project size; assist in assessment in case any of the IFC Performance Standards apply.
- Following loan disbursement, monitor the borrower/customer's compliance as per the covenants and conditions given at the time of loan sanction; based on the risk rating, RMs can escalate the transaction to line management.

Credit Risk Officers

- Review ESDD results, including the compliance check, E&S risk categorisation, and E&S risk rating.
- In case of large project-related corporate loans or project finance, check the applicability of IFC Performance Standards.

- Follow up with respective Relationship Managers on the progress and implementation of E&S action plans post disbursement.

Head of Credit

- Ensure that no critical E&S issues have been overlooked and sufficient measures have been taken to manage identified risks in each transaction; check that there is adequate documentary evidence to support a borrower/customer's E&S performance rating.
- Be responsible for the overall quality control of the ESDD procedure.
- Approve medium- or high-risk projects or escalate to Senior Management for final decision-making.

Senior Management

- Take overall responsibility for implementing all policies and procedures with regards to environmental and social risk management.
- In cases of unresolved E&S issues or non-compliance associated with a transaction that cannot be resolved by the Head of Credit, Senior Management determines the appropriate course of action, which may include taking legal action against a borrower/customer to reduce the bank/DFI's potential exposure to E&S risks.
- Decide if E&S risks in critical, high-risk projects are acceptable to the bank/DFI's overall exposure to risk before proceeding with a transaction. In certain cases, Senior Management may terminate a transaction based on its level of risk.
- Review strategies, ESMS, procedures, and accountability mechanisms for implementation of the ESRM Policy prior to Board approval.
- Establish systems and procedures for hiring engagement and regular capacity building of professionals involved in the ESRM of a bank/DFI.
- Install systems for data collection and generation of meaningful statistics on environmental and social risk management for reporting to the SBP.

Board of Directors

In addition to the roles and responsibilities of the Board with regards to the Green Banking Guidelines, the Board of the bank/DFI will also be responsible for performing the following functions specific to ESRM:

- Approve the bank/DFI's E&S Policy or ESMS.
- Provide feedback on critical high-risk projects on E&S matters.
- Ensure sustainability is addressed routinely at the Board level, setting vision, and providing guidance to Senior Management for implementation.
- Review internal audit reports and follow up on the effectiveness of ESMS implementation, serious accident/incident/fatality reports, serious grievances related to the bank/DFI's operations.
- Ensure that the Green Banking Office has access to and reports periodically to the Board.
- The Board may set maximum exposure limits for industries/sectors that are more hazardous to the environment and/or society. The Board may also define the limits for different environment-friendly projects/sectors.
- The Board should be responsible for reviewing the corporate social responsibility reporting on environmental and social related measures of the bank/DFI.

Legal Division

- Ensure that the bank/DFI's E&S requirements are incorporated into legal agreements for each transaction.
- Advise the bank/DFI if a borrower/customer's non-compliance with E&S clauses constitutes a breach of contract and is considered an "event of default" under the terms of the legal agreement, which requires follow up by relevant teams.

C. Screening Transactions

At the initial stage of evaluating a potential financial transaction, the Relationship Manager should screen the activities of a potential borrower/customer against the Exclusion List in Annex A. If an activity falls on the bank/ DFI's list of excluded activities, the financial transaction should not be considered.

D. Categorising Transactions

During the initial screening, the Relationship Manager should consider the National Environmental Quality Standards (NEQS) classification (Annex L), which is based on industrial pollution levels and gives a sense of whether the transaction is in a high-risk sector. NEQS classification is important for understanding sectoral risk, but banks/DFIs are required to complete environmental and social due diligence to identify transaction-specific risks and review an IEE/EIA/ESIA or Environmental Management Plan as appropriate.

To determine the extent of E&S due diligence required for a particular transaction, an E&S risk category should be assigned to each transaction. The level of E&S risks will vary greatly for different industry sectors and types of financial transactions. The categorisation is mainly based on sectoral risk, whereas the ESDD risk rating is for identifying E&S risks at the transaction level.

An environmental and social risk categorisation system enables a bank/DFI to monitor and evaluate its exposure to E&S risk aggregated at the portfolio level. A bank/DFI can set internal threshold levels for either its overall risk exposure or level of exposure to industry sector or transaction type as a function of E&S risk category. This allows the bank/DFI to better manage and track changes in the overall risk profile of its portfolio and the associated environmental and social impacts of its borrowers/customers. This information can also be used by the bank/DFI to report internally to Senior Management and externally to stakeholders on its overall environmental and social performance.

E. Conducting Environmental and Social Due Diligence

Conducting an environmental and social due diligence (ESDD) on transactions is a critical component of a bank/DFI's environmental and social risk management system and its outcome should be factored into the decision-making process for proceeding with a transaction. The purpose of ESDD is to review any potential E&S risks associated with the business activities of a potential borrower/customer to ensure that the transaction does not carry E&S risks, which could present a potential liability or risk to the bank/DFI.

Environmental and social due diligence typically includes the following key components: (i) reviewing all available information, records, and documentation related to the environmental and social risks and impacts of the business activity; (ii) conducting site inspections and interviews of the borrower/customer's personnel and relevant stakeholders, where appropriate; (iii) analysing the business activity's environmental and social performance in relation to the requirements of the local E&S laws and regulations or other internationally recognised sources, as appropriate; and (iv) identifying any gaps and corresponding additional measures and actions beyond those identified by the borrower/customer's in-place management practices. To ensure the business activity meets the bank/DFI's E&S requirements, banks/DFIs should make these supplemental actions (Environmental and Social Action Plan, Annex I) necessary conditions of their financing arrangement.

The purpose of the E&S appraisal is to:

- Identify and assess potential E&S impacts and issues, both adverse and beneficial, associated with a proposed financing project.
- Conduct a gap analysis to define areas of project non-compliance with the requirements of national and provincial laws.
- Assess the commitment and capacity of a borrower/customer to manage identified impacts and define necessary remedial measures.
- Assess the quality and adequacy of a borrower/customer's E&S management systems and practices to avoid, minimise, or mitigate adverse impacts as well as define remedial measures.
- Identify measures to avoid, minimise, mitigate, offset, or compensate for adverse impacts on workers, affected communities, and the environment.
- Design an Environmental and Social Action Plan (ESAP) to address all deficiencies and non-compliances discerned during the appraisal, containing specific tasks designed to close all significant gaps.
- Ensure that the loan contracts (such as loan documentation) include appropriate definitions, covenants, clauses, and associated elements to obligate the borrower/customer to comply with all E&S laws and regulations, the ESAP, as well as stipulate progress and performance reporting obligations.
- Identify opportunities, such as clean production and energy efficiency, to improve E&S performance.
- Conceptualise specific reporting needs for the supervision phase to ensure that banks/DFIs have a clear understanding of their borrowers/customers' performance, behaviours, and achievement of sustainability in operations.

E&S due diligence involves the systematic identification, quantification, and assessment or evaluation of E&S risks associated with a proposed transaction. This process also helps identify the necessary mitigation measures to reduce any known E&S risks. The extent of E&S due diligence and level of detail are based on the transaction's E&S risk category and will vary by transaction type as mentioned in Section 2.

Banks/DFIs should refer to the ESDD Checklist in Annex B, which will auto-generate the E&S risk ratings—high, medium, or low—based on the responses provided to the questions in the checklist. For long-term corporate finance and project finance transactions, the IFC Performance Standards Screening Questionnaire in Annex D should be used.

The process of E&S due diligence and filling in the ESDD Checklist can involve a simple desktop review or may require a site visit with the assistance of technical experts to understand potential E&S risks associated with business activities and review a borrower/customer's compliance with the bank/DFI's E&S requirements. Relevant documents should be collected to support E&S findings. The ESDD Checklist (Annex B) has relevant guidance for banks on how to collect proof. Below are typical steps for conducting E&S due diligence:

- **Step 1: Exclusion List**

  Screen the project against a list of excluded activities adopted by the bank/DFI (Annex A).

- **Step 2: NEQS Classification**

  Review industry sector and environmental and social issues typically associated with this type of operation (Annex L).

- **Step 3: Environmental and Social Due Diligence**

- Review the project's compliance with applicable national and provincial environmental and social regulations.
- Review the project sponsors' track record on environmental and social issues, particularly potential non-compliance with national and provincial regulations or negative publicity.
- Review the project's compliance with international standards or industry best practice regarding environmental and social issues.
- Document all required information. Every loan file should have a fully completed E&S checklist, an IEE/EIA/ESIA or Environmental Management Plan, copies of all permits, relevant Environmental Protection Agency clearance certificate or no objection certificate, a fire licence, a factory licence, a buyer's audit report, an ESAP, E&S covenants in the loan agreement, and subsequent supervision reports following disbursement.

- **Step 4: Generate Risk Rating**

  Upon completion of the ESDD Checklist, a risk rating—high, medium, or low—will be generated automatically. For project finance or corporate finance related to a project, a separate threshold matrix (Annex C) and screening questionnaire will have to be used (Annex D).

- **Step 5: Environmental and Social Action Plan**

  For high- and medium-risk transactions, a time-bound action plan and relevant covenants should be included in the loan documentation. Typical covenants can be found in Annex H and an ESAP template is in Annex I.

- **Step 6: Escalation**

  Depending on its risk rating, a transaction may need to be escalated to the relevant authority for approval. The final approving authority for medium and high-risk transactions has to be commensurate with the inherent E&S risk in the specific transaction.

- **Step 7: Supervision**

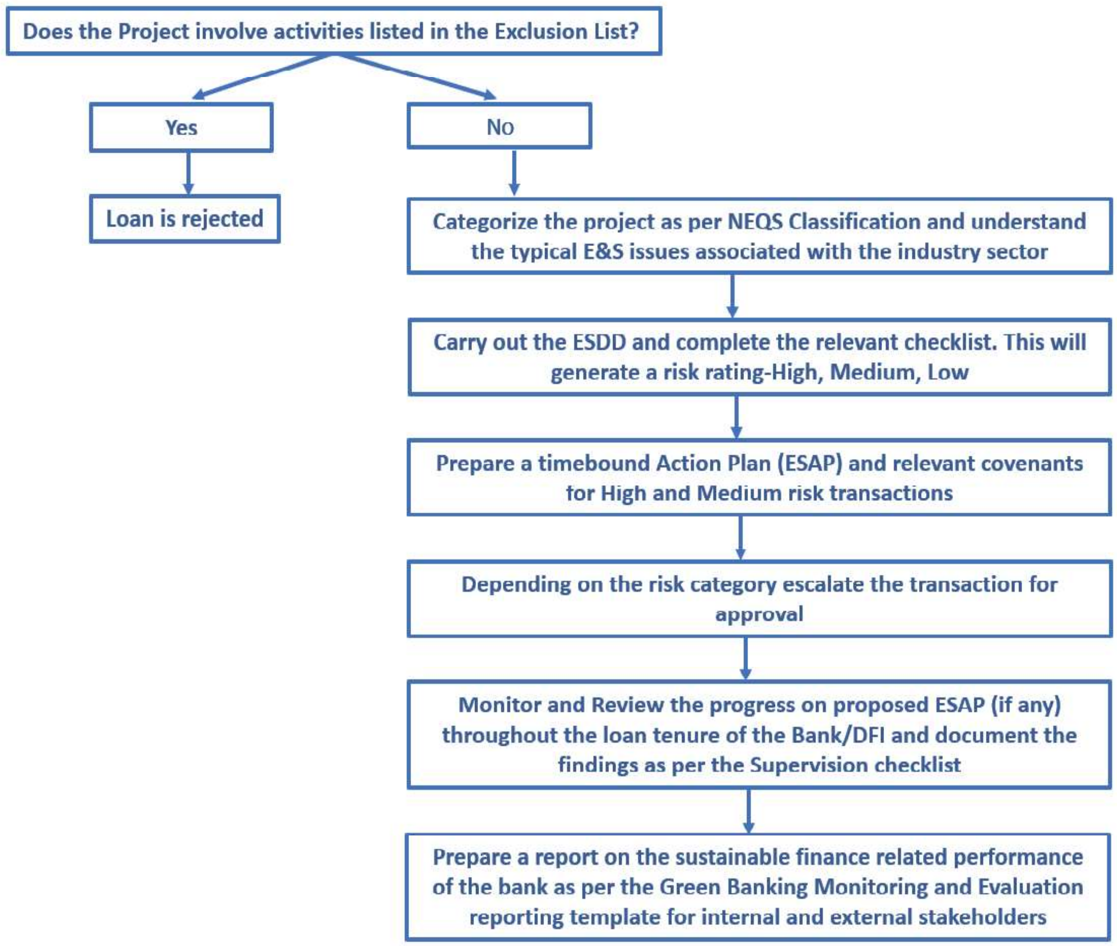
  Review of the proposed actions (if any) to mitigate potential environmental and social issues associated with the project throughout the tenure of the bank/DFI loan. Generally, supervision is conducted once a year. A supervision checklist (Annex J) must be used.

- **Step 8: Reporting**

  Banks/DFIs must report their sustainability performance internally to the Board of Directors and externally to the State Bank of Pakistan at least once a year using the Green Banking Monitoring and Evaluation Reporting Template (Annex M).

The bank/DFI should document and consider all findings from an environmental and social due diligence before proceeding with a transaction. For high-risk project finance transactions, the bank/DFI may hire an external expert or consultant to conduct ESDD to complement an EIA or ESIA. To do so effectively, it is critical that the bank/DFI clearly communicates to the external consultant the E&S requirements that its borrowers/customers are required to comply with. Banks/DFIs must also ensure that the findings are reviewed and factored into the loan decision-making process. The following flow chart summarises the steps to be followed while conducting ESDD:

Figure 2: Environmental and Social Due Diligence Flow Chart



F. Decision-Making Process

Once the ESDD is completed, the ESDD checklist or IFC Performance Standards Screening Questionnaire for eligible transaction will generate a risk rating:

- **High Risk:** Transactions typically involve borrowers/customers conducting business activities with significant adverse E&S impacts that are sensitive, diverse, or unprecedented; a potential impact is considered sensitive if it may be irreversible (such as loss of a major natural habitat), affect vulnerable groups or ethnic minorities, involve involuntary displacement and resettlement, or affect significant cultural heritage sites.
- **Medium Risk:** Transactions typically involve borrowers/customers conducting business activities with specific E&S impacts that are few in number, generally site-specific, largely reversible, and readily addressed through mitigation measures and international best practice; potential adverse environmental impacts on human population or environmentally important areas are less adverse than those of high-risk transactions.
- **Low Risk:** Transactions typically involve borrowers/customers conducting business activities with minimal or no adverse E&S impacts.

All low-risk transactions can be approved at the lowest level of decision making. All medium and high-risk transactions will be escalated to the appropriate authority for approval, which will be commensurate with the inherent E&S risk of the transaction. Some critically high-risk transactions may be escalated to Senior Management for approval.

G. Corrective Action Plan and Covenants

For medium- and high-risk projects, the identified risks will have to be mitigated. A corrective action plan can be developed identifying the risks, mitigation measures, as well as the timeline and personnel who should be responsible for implementation. Transaction-specific corrective action plan and covenants can be part of the loan's legal documents. A template of the corrective action plan is provided in Annex I and different types of covenants are outlined in Annex H.

H. Monitoring

The purpose of monitoring a borrower/customer's E&S performance is to assess existing and emerging E&S risks associated with its operations during a transaction. Once the transaction has been approved, the bank/DFI needs to monitor the borrower/customer's ongoing compliance with the E&S clauses stipulated in the legal agreement.

E&S risks or compliance status may change from the time of transaction approval; for example, E&S regulations may become more stringent. The borrower/customer may also modify its operations or production processes in a way that exacerbate previously identified risks or present new E&S risks. Managing emerging E&S risks at the transaction level ensures effective E&S risk management at the portfolio level.

A bank/DFI's environmental and social management system should explain the process for systematic monitoring on a periodic basis, such as by implementing procedures for verifying compliance with E&S requirements, including implementation of any corrective action plans to resolve non-compliance. The frequency and extent of monitoring will depend on the complexity of E&S issues associated with a borrower/customer's operations.

The monitoring process generally involves a review of periodic E&S performance reports submitted by the borrower/customer or regular site visits of the borrower/customer's operations. Instead of solely relying on performance reports, monitoring can also be performed at the periodic credit renewal stage of the loan. Special attention should be paid to:

- Assessing implementation of any mitigation measures specified in the corrective action plan.
- Monitoring for valid E&S permits or licences.
- Any fines and penalties for non-compliance with E&S regulations over the past year.
- Recent reports from the relevant regulator or inspection authority confirming compliance with specified laws, including data proving that emissions are below permitted limits.
- E&S occurrences including major accidents or incidents associated with a borrower/customer's operations, such as worker injuries and spills.
- Media attention to E&S issues related to a borrower/customer.
- Any complaints submitted by stakeholders about a borrower/customer.

If bank/DFI staff identify E&S issues, such as a borrower/customer's non-compliance with the E&S clauses stipulated in the legal agreement, they should follow up with the borrower/customer to resolve these in a reasonable timeframe. Depending on the complexity of the E&S issues associated with the borrower/customer's operations, bank/DFI staff should require a new corrective action plan and periodic reports on

E&S performance throughout the duration of the transaction. The reporting frequency should be tailored to each individual transaction and based on self-monitoring by the borrower/customer or monitoring by independent third parties or regulatory authorities.

Banks/DFIs need to refer to the Supervision Checklist (Annex J) for documenting their findings during the monitoring process.

I. Managing Eventualities in Financing Projects

Non-routine events do occur with business development and consideration of new borrowers/customers and, during appraisal, and in the post-commitment supervision cycle. Some common eventualities may include:

- Direct complaints made to the bank/DFI for financing environmentally or socially harmful projects
- Negative media report(s) and non-governmental organisation campaign about a particular transaction financed by the bank/DFI
- Serious accidents, including fatalities
- Worker unrest, riots, and demonstrations on the streets.

As soon as the bank/DFI knows about any such occurrence, the bank/DFI will collect factual information about the event, conduct a site visit, and develop an action plan to mitigate the event as well as future occurrences. The bank/DFI should communicate to the borrower/customer what implication there might be as a result of the event, including a possible requirement of re-visiting the risk rating.

J. Internal and External Communications

A bank/DFI's environmental and social management system (ESMS) should include periodic reporting on the E&S performance of transactions and measures taken to reduce its overall exposure to E&S risks.

Bank/DFI staff should compile all E&S findings from monitoring all borrowers/customers and aggregate the findings at the portfolio level. By analysing this information, the bank/DFI can have a better understanding of its portfolio's overall exposure to E&S risks.

E&S performance reports typically include information on:

- Portfolio breakdown by business line, industry sector, and E&S risk category
- Overall exposure to E&S risks and performance
- High-risk transactions and the E&S due diligence process prior to transaction approval
- Major E&S risks of individual transactions, including cases of non-compliance
- Significant E&S accidents or incidents related to a transaction
- Implementation and changes in the bank/DFI's ESMS.

A bank/DFI may have internal and external reporting requirements regarding E&S risks and impacts associated with its portfolio. To this end, an increasing number of banks/DFIs are following international sustainability reporting guidelines. The banks/DFIs may also use the SBP's Green Banking Monitoring and Evaluation Reporting Template (Annex M) to report on their green banking activities.

K. Training and Capacity Building

- A bank/DFI should regularly review its internal capacity and establish capacity building plans for its officers to effectively implement its ESMS. The capacity building programmes may include online courses.

- The trainings and capacity building programmes should also include guidance for bank/DFI officials on communicating with clients about the implications of environmental and social factors on long-term sustainability of businesses and economy, environmental and social assessment processes/ requirements, and appropriate environmental and social risk mitigation measures.
- Banks/DFIs should establish effective platforms for their relevant officers to quickly access documents, procedures, manuals, and information repository on environmental and social risks mitigated by the banks/DFIs.
- Banks/DFIs should also devise internal plans for sensitising their clients and the general public on environmental and social issues through one-on-one meetings, electronic and print media advertisements, melas, seminars, and conferences.

L. Audit and Compliance

- Implementation of an ESRM system should be incorporated into the scope of audit, compliance, and routine internal controls.
- Appropriate walls should be established between internal audit functions and other units/lines (and their management) involved in day-to-day ESRM activities to ensure its independence.

5. Implementing an Environmental and Social Management System

Once an ESMS has been developed and formally approved by the Board, it can be institutionalised and rolled out across a bank/DFI.

To implement the ESMS, the bank/DFI should develop an implementation plan, including an ESMS testing phase as well as a time schedule and designated staff responsible for completing each task. Tasks should include a review of the E&S regulations of the country in which the bank/DFI operates, conducting a testing phase, establishing a communication and training plan for staff, assigning responsibilities to applicable staff, a review of international best practices applicable to borrower/customers, and periodic reviews of the ESMS for continuous improvements.

When properly designed and implemented, the additional workload for staff and transaction costs associated with the ESMS are limited, especially when E&S risk management procedures are fully integrated into the bank/DFI's existing risk management framework.

Senior Management should be kept informed of challenges, successes, and other important issues associated with the implementation of the bank/DFI's ESMS. The Green Banking Office of each bank/DFI in consultation with relevant business teams and credit departments can lead the implementation. The SBP also monitors sustainability-related progress of each bank/DFI. Thus, banks/DFIs need to implement required changes for a robust ESMS and report progress at least once a year to the SBP.

6. Regulatory Reporting on the Environmental and Social Risk Management Performances of Banks and DFIs

To realise continuous progress on the effective implementation of the Green Banking Guidelines and the ESRM Implementation Manual, banks/DFIs will use the Green Banking Monitoring and Evaluation Reporting Template (Annex M) to conduct self-evaluation on their ESRM performances and submit the evaluation results to the SBP at least once a year. Specifically, the reporting template aims to:

- Support self-monitoring and evaluation of ESRM performances of banks/DFIs.
- Facilitate demonstration of steady and continuous progress on ESRM implementation and improvement.
- Assist banks/DFIs to disclose ESRM-related information in a relevant, useful, consistent, and comparable manner.
- Encourage public disclosure to enhance trust and confidence among investors, clients, and customers in Pakistan's financial institutions.

The reporting template (Annex M) is consistent with the requirements of the Green Banking Guidelines and the ESRM Implementation Manual. It also takes into consideration relevant international initiatives, including recommendations from the Task Force on Climate-Related Financial Disclosures, the United Nations Principles for Responsible Banking, and the Climate-Related Disclosure Prototype developed by the Technical Readiness Working Group chaired by the International Financial Reporting Standards Foundation.

The ESRM reporting template is for use by all banks/DFIs. Microfinance institutions licensed to operate at national level are also encouraged to monitor and disclose their ESRM performance and use this manual as a reference.

Banks/DFIs are required to report to the SBP annually. They are encouraged to refer to the reporting template (Annex M) and disclose their ESRM performance, where appropriate, as part of their green banking reports. The green banking report can be a separate, stand-alone report, or it can be included in a bank/DFI's corporate social responsibility report or annual report.

7. Annexes

Annex A: Exclusion List

Table 3: Exclusion List

S. No.	Sector/Activities
1	Production or trade in any product or activity deemed illegal under host country laws or regulations or international conventions and agreements, or subject to international bans, such as pharmaceuticals, pesticides, herbicides, ozone-depleting substances, polychlorinated biphenyls, wildlife, or products regulated under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) a. United Nations list of banned chemicals and products: http://www.un.org/esa/coordination/Consolidated.list-13FinalFinal.pdf b. CITES list of endangered species: http://www.cites.org/eng/app/E-Apr27.pdf
2	Ship breaking or trading activities, including: a. Ships with prevalent asbestos use (such as passenger cruises) b. Ships listed on the Greenpeace blacklist c. Ships not certified "gas free" for hot work
3	Drift-net fishing in the marine environment using nets more than 2.5 kilometres in length, deep sea bottom trawling, or fishing with the use of explosives or cyanide
4	Operations affecting the United Nations Educational, Scientific and Cultural Organization (UNESCO) ***World Heritage Sites*** or Ramsar sites (see explanations below)
5	Illegal logging and logging operations or conversion of land for plantation use in primary tropical moist forests; production or trade in wood or other forestry products other than from ***sustainably managed forests*** (see explanations below)
6	Production or activities involving harmful or exploitative forms of ***forced labour*** or harmful ***child labour*** (see explanations below)
7	Production or trade in the following without proper licences and permits from relevant government authority: a. Weapons and munitions b. Tobacco c. ***Gambling***, casinos, or equivalent enterprises (see explanations below) d. Pornography (goods or stores) e. Alcoholic beverages
8	Production or activities that impinge on the lands owned or claimed under adjudication by indigenous peoples without the full-documented consent of such peoples
9	Production or trade in unbonded asbestos fibres; this does not apply to the purchase and use of bonded asbestos cement sheeting where the asbestos content is less than 20 percent
10	Production or trade in radioactive materials; this does not apply to the purchase of medical equipment, quality control (measurement) equipment, and any equipment where the radioactive source is trivial or adequately shielded

S. No.	Sector/Activities
11	Production, trade, storage, or transport of significant volumes of hazardous chemicals, or commercial-scale usage of ***hazardous substances*** (see explanations below); the Pakistan Hazardous Substance Rules 2003 indicate licences and permits are required for handling significant volumes of hazardous chemicals and make provisions for the granting of licences for the collection, treatment, storage, importation, and transportation of hazardous substances; the rules prohibit the financing of businesses without proper licences

Explanations:

The Exclusion List defines the types of projects that banks/DFIs do not normally finance or support only under limited circumstances:

- ***A World Heritage Site*** is a landmark or area with legal protection by an international convention administered by the UNESCO. World Heritage Sites are designated by the UNESCO for having cultural, historical, scientific, or other form of significance and include "cultural and natural heritage around the world considered to be of outstanding value to humanity". The list can be accessed through the link https://whc.unesco.org/en/list/. For Pakistan, the following are listed as World Heritage Sites:
    - Archaeological Ruins at Mohenjo-Daro
    - Buddhist Ruins of Takht-i-Bahi and Neighbouring City Remains at Sahr-i-Bahlol
    - Taxila
    - Fort and Shalimar Gardens in Lahore
    - Historical Monuments at Makli, Thatta
    - Rohtas Fort
- ***Sustainable forest management*** is a means of protecting forests whilst offering direct benefits to people and the environment. It contributes to local livelihoods and offers environmental benefits such as carbon sequestration and conserving water, soil, and biodiversity. Less than 5 percent of Pakistan's total area is under forest cover and 1.5 percent of these forests are lost every year. This has profound impacts on Pakistan's biodiversity, environment, and agriculture. Economic activities that mindlessly destroy forest cover should be avoided. For detailed regulations, please refer to the National Forest Policy of Pakistan: http://www.nrsp.org.pk/gcf/docs/National-Forest-Policy-2015.pdf.
- Forced labour refers to work performed involuntarily and under the menace of any penalty. It refers to situations in which workers are coerced to work as a result of the use of violence, intimidation, or more subtle means such as manipulated debt, retention of identity papers or threats of denunciation to immigration authorities.
- ***Child labour*** is often defined as work that deprives children of their childhood, potential, and dignity and is harmful to their physical and mental development. In Pakistan, children below the age of 14 should generally not be employed in harmful economic activities (Pakistan Employment of Children Act 1991); this act applies to all provinces. Child labour refers to work that:
    - is mentally, physically, socially, or morally dangerous and harmful to children
    - interferes with their schooling by depriving them of the opportunity to attend school; obliging them to leave school prematurely; or requiring them to attempt to combine school attendance with excessively long and heavy work.

- ***Substantially involved:*** The Exclusion List refers to a “substantially involved” test being applied to the production or trade in weapons and munitions, alcoholic beverages, or tobacco as well as gambling, casinos, and equivalent enterprises. A bank/DFI will not be regarded as substantially involved if it has a cumulative portfolio exposure below 5 percent to investees/borrowers who generate more than 20 percent of their respective revenues from an excluded activity and/or has relevant approvals/permits/ no objection certificates from the government to perform such activities.
- ***Gambling*** is the practice or activity of playing games for stakes.
- ***Hazardous substances*** as per the Pakistan Environmental Protection Act 1997: (a) a substance or mixture of substance, other than a pesticide as defined in the Agricultural Pesticide Ordinance, 1971 (II of 1971), which, by reason of its chemical activity is toxic, explosive, flammable, corrosive, radioactive or other characteristics causes, or is likely to cause, directly or in combination with other matters, an adverse environmental effect; and (b) any substance which may be prescribed as a hazardous substance.

Annex B: Environmental and Social Due Diligence Checklist for Small and Medium Enterprises and Corporate Finance

Please refer to the Excel-based E&S Risk Assessment Tool.

Annex C: IFC Performance Standards Threshold for Project Finance and Long-Term Corporate Finance

Loan Type	Amount (PKR equivalent amount as per prevailing exchange rate)	Tenor	Performance Standards (PS)***
Corporate loan not associated with project finance, such as a regular-term loan	$5 million and above	36 months and above	PS 1 and PS 2 only****
Corporate loan not associated with project finance, such as working capital structured as a revolving facility	Single facility amounting to $5 million and above over a three-year period*	36 months and above	PS 1 and PS 2 only****
Corporate loan not associated with project finance, such as working capital or overdraft	Any amount	Less than 36 months	Not applicable; only the Exclusion List and national and provincial law screening required****
Corporate loan associated with a project	Any amount if the total capital cost of the project is $10 million and above	36 months and above	All*****
Project finance	Any amount if the total capital cost of the project is $10 million and above**	36 months and above	All*****
Corporate loan associated with a project	Any amount if total capital cost of the project is less than $10 million	Any tenor	Not applicable; only the Exclusion List and national and provincial law screening required****
Project finance	Any amount if total capital cost of the project is less than $10 million	Any tenor	Not applicable; only the Exclusion List and national and provincial law screening required****

*This is an aggregate value taking into consideration that many working capital loans are rolled over annually, for example, a $1.6 million loan structured as a revolving facility for up to three years.

**Where leverage is limited, banks/DFIs will be required to screen the transactions against key objectives of IFC Performance Standards and make a go- or no-go decision. Examples of limited leverage include secondary market transactions or syndicated loans where borrowers/customers' participation is below 25 percent of the total loan value.

*** IFC Performance Standards can be accessed through this link: https://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/Sustainability-At-IFC/Policies-Standards/Performance-Standards

**** Please see Annex B for an Excel-based ESDD Checklist for conducting environmental and social due diligence.

***** Please see Annex D for the IFC Performance Standards Screening Questionnaire for conducting environmental and social due diligence.

Annex D: IFC Performance Standards Screening Questionnaire for Project Finance and Long-Term Corporate Finance

This list of questions was compiled to assist banks/DFIs with financing in project and long-term corporate finance. The questionnaire offers guidance for conducting initial screening of a business activity or a borrower/customer and identifying E&S potential impacts and risks related to the business activity or the company being financed.

PS 1: Assessment and Management of Environmental and Social Risks and Impacts

Policy

- Does the company have an overarching policy (statement) defining the environmental and social objectives and principles guiding the company's E&S performance?
- Is this policy backed by the top management of the company?
- Does this policy specify who within the company is responsible for policy implementation?
- Was this policy communicated to all employees of the company?

Identification of Risks and Impacts

- Does the company have a system or procedure to screen, identify, analyse, and access the potential risks and impacts related to its business activities or projects?
- Is an emergency preparedness and response system an integrated part of the company's risk management system?
- Has the company conducted Environmental and Social Impact Assessments (greenfield projects) or any other type of E&S assessments (limited/focused E&S assessments or E&S audits) for the projects financed?

Organisational Capacity and Competency

- Has the company designated specific in-house personnel, including management representatives, with clear lines of responsibilities and authority for E&S issues?
- Do the delegated personnel possess the knowledge, skills, and experience to implement the E&S policy and follow established procedures?
- Has the company allocated resources to support its E&S functions?
- Has the company allocated resources to support capacity building of relevant staff on E&S issues?
- Does the company have relevant training programmes in place for the E&S personnel?
- Does the company outsource E&S functions to a qualified third party(parties)?

Monitoring and Review

- Does the company have procedures in place to track and evaluate E&S performance of its operations?
- Is appropriate environmental and social performance information periodically reported internally to senior management, investors, and stakeholders (as relevant)?
- Does the company have a procedure to evaluate and record results of its monitoring activities?

Stakeholder Engagement

- Does the company have a mechanism for identifying its stakeholders (such as affected communities and other interested stakeholders in the company's activities)?

- Has the company developed and implemented a Stakeholder Engagement Plan scaled to the project risks and impacts and development stage?
- If company activities have negative impacts on local communities, has the company established a community engagement process for affected communities?
- Does the company undertake the process of informed consultation and participation (when applicable)?

External Communications and Grievance Mechanism

- Does the company have a procedure to receive and process communications from external stakeholders?
- Does the company have a grievance mechanism—a procedure for receiving, addressing, and recording or documenting complaints and communications from affected communities?
- Does the grievance mechanism ensure that the confidentiality of a person raising the complaint is protected?
- Does the company ensure that the grievance mechanism is easily accessible and understandable? Is its availability communicated to affected communities?

PS 2: Labour and Working Conditions

Human Resources Policy and Management

- Does the company have a human resources policy that is consistent with requirements of national and provincial laws as well as PS 2?
- Is this policy clearly understandable and easily accessible to all employees?
- Does the company have policies and procedures for managing and monitoring the performance of third-party employers in terms of labour and working conditions?
- Has the company established a grievance mechanism for workers to review and address employee complaints?
- Has the company ensured that contracted workers by third parties, if any, also have access to the grievance mechanism?
- Is there a person responsible for reviewing complaints and following up on them in a timely and transparent manner?

Working Conditions and Terms of Engagement

- Has the company documented and communicated working conditions and terms of employment in an understandable way to all workers directly contracted (including information on working hours, rest days, overtime procedures, wages, frequency of payments, sick and maternity leave, and vacations)?
- Are the terms and working conditions in accordance with any collective agreement (if applicable)?
- Does the company identify migrant workers and ensure that such workers are engaged on substantially equivalent terms and conditions compared to non-migrant workers?
- Does the company provide accommodation to its workers?
- If so, does the company put in place and implement policies on the quality and management of the accommodation and provision of basic services?

Workers' Organisation

- Does the company allow workers to form and join workers' organisations and bargain collectively?

Non-Discrimination and Equal Opportunity

- Does the company have transparent, documented procedures to ensure that employment decisions are not made on personal characteristics unrelated to job requirements?
- Does the company have any preferential employment policies in place?

Retrenchment

- Does the company anticipate retrenchment of a significant number of employees?
- If yes, has the company assessed any alternatives to retrenchment?
- If there are no viable alternatives, is there a retrenchment plan in place?
- If retrenchment has taken place, have workers received notice of dismissal and relevant severance payments mandated by law and collective agreements in a timely manner?

Protecting the Workforce

- Does the company ensure that child or forced labour, including trafficked people, is not used in its operations, including through contractors or in the primary supply chain?
- Does the company check the age of all employees?
- Does the company ensure that young workers (under the age of 18) are not employed in dangerous work and regularly monitor their health, working conditions, and hours of work?

Occupational Health and Safety

- Does the company provide its workers with a safe and healthy work environment?
- Where applicable, does the company provide workers with personal protective equipment and mandate that they use them?
- Has the company established and implemented occupational health and safety procedures in line with good international industry practices to prevent accidents, injuries, and diseases?
- Does the company track and report on rates of injury, occupational diseases, lost days, and absenteeism and number of work-related fatalities?
- Does the company have training programmes in place for workers on occupational health and safety?
- Does the company have a fire and life safety plan?

Supply Chain

- Where there is a high risk of significant safety issues related to supply chain workers, has the company requested its primary supply chain to introduce corrective measures to address life-threatening situations?
- Where remedy is not possible, does the company have a plan to shift the primary supply chain?

PS 3: Resource Efficiency and Pollution Prevention

Resource Efficiency

- Has the company tracked use of resources and material inputs (including daily use for energy and water)?

- Does the company implement measures for improving efficiency in its consumption of energy, water, and other resources and material inputs that are in line with international industry practices?
- Is the company a potentially significant consumer of water?

Greenhouse Gas Emissions and Climate Risks

- What is the company's greenhouse gas (GHG) emissions (direct and indirect from purchased electricity)?
- Has the company considered options for reducing its GHG emissions?
- In case the company's GHG emissions exceed the equivalent of 25,000 tons of carbon dioxide annually, does the company quantify those emissions on an annual basis?
- Are there any climate change-related risks (such as floods, drought, and cyclones) associated with the company's operation?
- Does the company have a robust disaster management plan to combat climate risks?

Pollution Prevention

- Does the company monitor air, land, and water release of pollutants?
- Has the company introduced procedures, practices, or techniques to avoid the release of pollutants? Where avoidance is not feasible, does the company try to minimise or control the intensity and mass flow of the release of pollutants?
- Where historical pollution such as land or groundwater contamination exists, has the company sought to determine whether it is responsible for mitigation measures?
- If it is determined that the company is legally responsible, has the company resolved these liabilities in accordance with national and provincial laws? If national and provincial laws do not apply, has the company adhered to international best industry practices?

Waste Management

- Does the company generate significant amounts of waste?
- Does the company have procedures for storing, handling, and disposing solid waste?
- In case of hazardous waste, are those procedures in line with international best industry practices?
- Is the disposal of hazardous waste conducted by third parties?
- If so, has the company ensured that its contractors are reputable and legitimate enterprises licensed by relevant government regulatory agencies and have obtained the chain of custody documentation to the final destination?

Hazardous Materials

- Does the company have procedures for the storage, handling, transportation, use, and disposal of hazardous materials?
- Has the company considered alternatives to the use of hazardous materials?

Pesticide Use and Management

- Does the company use pesticides?
- Does the company purchase, store, use, manufacture, or trade in products that fall under the World

Health Organization Recommended Classification of Pesticides by Hazard Class Ia (extremely hazardous) and Class Ib (highly hazardous)?

- If so, has the company established and implemented integrated pest management or integrated vector management approaches?
- Does the company select pesticides with the following considerations in mind: low in human toxicity, effective against target species, and known to have minimal effects on non-target species and the environment?
- Are the pesticides properly packaged and labelled (including directions for safe and appropriate use)?
- Have the pesticides been manufactured by an entity licensed by relevant regulatory agencies?
- Are the pesticides handled, stored, applied, and disposed of in accordance with the Food and Agriculture Organization's International Code of Conduct on Pesticide Management or other international best industry practices?

PS 4: Community Health, Safety, and Security

Community Health and Safety

- Are there communities nearby the company's facilities?
- Does the company have procedures to address community health and safety issues in the context of its operations?
- Do those procedures or practices consider how the safety of company infrastructure (including buildings and structures) and equipment may affect local communities?
- Does the company have safety procedures in place to deal with the release, transportation, and disposal of hazardous materials to avoid or minimise exposure of local communities to those materials?

Ecosystem Services

- Do company operations have potential negative impacts on ecosystem services?
- In provisioning services, which products do people obtain from ecosystems? In regulating services, which are the benefits people obtain from the regulation of ecosystem processes? If company operations may result in adverse health and safety impacts on ecosystem services, has the company identified mitigation measures to avoid those impacts?

Community Exposure to Disease

- Does the company have a procedure to avoid or minimise the communities' exposure to water-borne, water-based, water-related, vector-borne, and communicable diseases (including those related to the influx of project labour) that could result from its operations?

Emergency Preparedness and Response

- Does the company's emergency preparedness and response plan consider risks and impacts from its activities and operations on local communities?
- Has the company informed affected communities about significant potential hazards and emergency procedures in an appropriate manner?

Security Personnel Requirements

- Does the company hire security personnel to provide security services at their facilities?

- If so, do the contract provisions include guidelines on how security personnel shall interact with communities nearby the facility?
- Are security personnel armed?
- If so, has the company provided training on the appropriate conduct towards workers and the nearby communities?
- Have there been any allegations of unlawful or abusive acts by security personnel towards workers or nearby communities?

PS 5: Land Acquisition and Involuntary Resettlement

Project Design

- Does the proposed investment involve any planned or actual land acquisition?

Compensation and Benefits for Displaced People

- Has there been any physical or economic displacement because of land acquisition for the project?
- Has the company or other third party responsible for resettlement provided compensation to the affected people for their loss of assets at full replacement cost?

Consultation and Grievance Mechanism

- Has the company disclosed all relevant information on resettlement to affected people and communities, consulted with them, and facilitated their informed participation in the decision-making process?
- Has the company established an effective grievance mechanism (as required by PS 1)?

Resettlement Planning and Implementation

- Has the company considered alternative designs to avoid or minimise economic and physical displacement?
- Has the company identified people who will be displaced by the project regardless of their land ownership and rights as well as those eligible for compensation and assistance?
- Has the company identified the status of displaced people according to their legal rights or claims to land?
- Has the cut-off date for eligibility been established and disseminated?
- Has the company prepared a Resettlement Action Plan or resettlement framework (if physical displacement is involved) to mitigate the negative impacts of displacement, identify development opportunities, and establish entitlement for all affected people?
- Has the company prepared a Livelihood Restoration Plan (if economic but not physical displacement is involved) to offer compensation or other assistance to establish entitlement for affected people or communities?
- Were forced evictions carried out as part of this investment?

Private Sector Responsibilities under Government-Managed Resettlement

- Was resettlement managed by the government?
- If so, has the company supplemented government actions and bridged the gaps (if applicable) between government-assigned entitlements and the requirements of PS 5?

PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources

Protection and Conservation of Biodiversity

- Has the company identified and assessed the impacts on biodiversity as part of its operations?
- Will modified, natural, or critical habitats (as defined by PS 6) be affected by the company's activities?
    - For areas of modified habitats with significant biodiversity value, has the company minimised impacts and implemented mitigation measures?
    - For natural habitats, has the company considered alternatives, consulted with stakeholders, and adequately mitigated any potential degradation of such habitats to achieve no net loss of biodiversity?
    - For critical habitats, has the company demonstrated that: 1) no viable alternatives exist; 2) there will be no measurable adverse impacts on species, habitats, and ecological processes; and 3) the mitigation strategy is designed to achieve net gains of the biodiversity values for which the critical habitats have been designated?
- Does the company conduct any operations in legally protected areas?
- If so, has the company demonstrated that the proposed operations are permitted and follow government-recognised management plans? Has the company consulted protected area sponsors and managers, affected communities, indigenous peoples, and other stakeholders (as applicable)?
- Has the company identified any alien species which may be intentionally or unintentionally introduced through its activities?
- If intentional introduction of alien species is planned, has this received government regulatory approval?
- If alien species are already established in the country or region of proposed operations, has the company exercised diligence in not spreading the alien species?

Management of Ecosystem Services

- Do the company's operations have potential negative impacts on ecosystem services?
- If so, has the company conducted a systematic review to identify priority ecosystem services (as defined by PS 6)?
- Has affected communities participated in the determination of priority ecosystem services (where applicable)?
- Does the company have direct management control or significant influence over primary ecosystem services?
- If so, has the company managed to avoid adverse impacts on affected communities?
- Has the company implemented mitigation measures to minimise the impacts and maintain priority services in cases where impacts are unavoidable?

Sustainable Management of Living Natural Resources

- Is the company engaged in the primary production of living natural resources, including natural and plantation forestry, agriculture, animal husbandry, aquaculture, and fisheries?
- If so, is this land-based production located on unforested land or converted land?
- Where primary production practices are codified by globally, regionally, or nationally recognised standards, has the company implemented sustainable management practices in line with one or more

of those standards?

- Have the company's practices been independently verified or certified?
- In the absence of relevant standards for the particular living natural resource in the country of concern, has the company applied good international industry-operating principles, management practices, and technologies?

Supply Chain

- Has the company been purchasing primary production known to be produced in regions where there is a risk of significant conversion of natural or critical habitats?
- If so, has the company established procedures and verification practices to evaluate its primary suppliers and avoid those who adversely affect such areas?

PS 7: Indigenous Peoples

Avoidance of Adverse Impacts

- Is it likely that indigenous peoples will be adversely affected by the company's operations?
- Does the ESIA (where applicable) conducted by the company identify the adverse impacts on indigenous peoples?
- Has the company identified appropriate measures to avoid or minimise impacts on indigenous peoples and opportunities for culturally appropriate sustainable development benefits for them?

Consultation and Informed Participation

- Has the company conducted a process of informed consultation and participation with affected indigenous communities?
- Will the company's operations affect lands and natural resources subject to traditional ownership or under customary use by indigenous peoples?
- Will the company's operation lead to a relocation of indigenous peoples from lands and natural resources subject to traditional ownership or under customary use?
- Will the cultural heritage of indigenous peoples be affected by the company's operations or used for commercial purposes by the company?
- Has the company obtained free, prior, and informed consent from indigenous peoples on the design, implementation, and expected outcomes of mitigation measures for impacts on lands, natural resources, and cultural heritage, which might lead to their relocation?

Private Sector Responsibilities Where Government Is Responsible for Managing Indigenous Peoples Issues

- Does the government have a defined role in the management of issues concerning indigenous peoples in relation to the company's operation?
- If so, has the company collaborated with the responsible government agency to the extent feasible and permitted by the agency to achieve outcomes that are consistent with PS 7?

PS 8: Cultural Heritage

Protection of Cultural Heritage in Project Design and Execution

- Is the project located in an area where cultural heritage is expected to be found?
- If so, has a "chance find procedure" been established by the company?

- Will the company's project site contain cultural heritage or prevent access to previously accessible cultural heritage sites being used by, or that have been used by, affected communities?
- If so, has the company allowed continued access to the cultural site or provided an alternative access route?
- Is it possible that the project may affect cultural heritage?
- Will the project cause significant damage to critical cultural heritage?
- Is the project located in a legally protected area or a legally defined buffer zone?

Project Use of Cultural Heritage

- Will the company use cultural resources, knowledge, innovations, or practices of local communities embodying traditional lifestyles for commercial purposes?
- If so, has the company informed these communities of:
    - Their rights under national and provincial laws
    - The scope and nature of the proposed commercial development
    - The potential consequences of such development.
- If commercialisation has proceeded, has the company:
    - Entered into good faith negotiation with the affected communities embodying traditional lifestyle
    - Documented their informed participation and the successful outcome of the negotiation
    - Provided fair and equitable sharing of benefits from commercialisation.

Annex E: Environmental and Social Risks in Detail

Air Emissions and Air Quality

Emissions of air pollutants can occur from a wide variety of activities during construction, operation, and decommissioning of a borrower/customer's operations.

Air emissions are typically associated with processes such as combustion, storage of materials, or other industry-sector specific processes. They can be:

- Point sources. These are discrete, stationary, and identifiable sources of emissions (such as a specific stack, vent, or other discrete point of emission) that release pollutants to the atmosphere. They are typically located in manufacturing or production plants. Point sources are characterised by the release of air pollutants typically associated with the combustion of fossil fuels, such as nitrogen oxides (NOx), sulphur dioxide (SO_2), carbon monoxide (CO), and particulate matter (PM), as well as other air pollutants including certain volatile organic compounds (VOCs) and metals that may also be associated with a wide range of industrial activities.
- Fugitive sources. These are emissions that are distributed spatially over a wide area and originate in operations where exhausts are not captured and released through a stack. Fugitive emissions have the potential for much greater ground-level impacts than stationary source emissions since they are discharged and dispersed close to the ground. The two main types of fugitive emissions are VOCs and PM. Other contaminants (NOx, SO_2, and CO) are mainly associated with combustion processes designed to deliver electrical or mechanical power, steam, and heat.
- Mobile sources. These are emissions associated with vehicle use and include CO, NOx, SO_2, PM, and

VOCs. Emissions can be reduced by implementing a regular vehicle maintenance and repair programme, instructing drivers on better driving practices to reduce both the risk of accidents and fuel consumption, replacing older vehicles with newer, more fuel-efficient alternatives, converting to cleaner fuels, and installing emissions control devices such as catalytic converters.

A borrower/customer should estimate and monitor air emissions associated with operations through qualitative or quantitative assessments and atmospheric dispersion models to assess potential ground-level concentrations and environmental impacts. At a facility level, air emissions should not result in pollutant concentrations that exceed the ambient air-quality standards set by national authorities, which would result in fines and/or penalties if concentrations are in violation of national legislation. Pollutant concentrations can also be compared to international best practices and standards to identify any deviations, which would indicate poor performance of an operation. Air emissions of concern typically include:

- *VOCs*. Emissions of VOCs are associated with industrial activities that produce, store, and use VOC-containing liquids or gases, particularly where the material is under pressure. Typical sources include equipment leaks (from valves, fittings, and elbows), open vats and mixing tanks, storage tanks, unit operations in wastewater treatment systems and accidental releases. Emissions can be reduced by modifying equipment, regularly monitoring equipment to detect and repair leaks, using fewer volatile substances such as aqueous solvents, and collecting vapours through air extractors.
- *PM*. Dust or PM is released during certain operations (such as the combustion of fossil fuels and open storage of solid materials) and from exposed soil surfaces, including unpaved roads. Emissions can be reduced through dust-control methods, such as covers, water suppression, increased moisture content for open materials storage piles, or pollution control devices like a baghouse or a cyclone.
- *Ozone-depleting* substances. These include chemicals that have been scheduled for phase-out under the Montreal Protocol on Substances that Deplete the Ozone Layer. Systems or processes using chlorofluorocarbons, halons, 1,1,1-trichloroethane (methyl chloroform), carbon tetrachloride, hydrochlorofluorocarbons, hydrobromofluorocarbons, and methyl bromide should be gradually phased out or banned as determined by national and provincial regulations. These chemicals are typically used in a variety of applications including refrigeration, air conditioning, manufacturing foam products, solvent cleaning, aerosol propellants, fire protection systems, and as crop fumigants.
- *Greenhouse gases*. GHGs, as defined under the Kyoto Protocol to the United Nations Framework Convention on Climate Change, include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride, and nitrogen trifluoride. GHGs can be generated by a facility's production processes and from the production of power (on-site or off-site) for the facility's use. Emissions can be reduced through mechanisms such as carbon financing, energy efficiency, sustainable forms of agriculture and forestry, use of renewable forms of energy, carbon capture and storage technologies, as well as recovery and use of methane in waste management and energy distribution.
- *Sulphur dioxide*. SO2 is mainly produced by the combustion of fuels, such as oil and coal, and as a by-product from some chemical production or wastewater treatment processes. Emissions can be reduced by using alternative fuels, such as low-sulphur coal, light diesel, or natural gas, and emissions-control technologies.
- *Toxics*. Mercury exists as elemental mercury, inorganic mercury compounds (primarily mercuric chloride), and organic mercury compounds (primarily methyl mercury). All forms of mercury are toxic and each form exhibits different health effects. A major source of exposure to elemental mercury is through inhalation in the workplace. Sources of inorganic mercury compounds are generally low as their

use has mostly been banned, but limited exposure can occur with old cans of latex paint. Sources of methyl mercury include fungicide-treated grains and meat from animals fed with treated grain.

A borrower/customer's operations should avoid, minimise, and control adverse impacts from emissions into the air on human health, safety, and the environment. The generation and release of air emissions can be managed through a combination of improving energy efficiency, process modification, selection of fuels or other materials, and application of emissions-control techniques. A bank/DFI can help a borrower/customer identify areas for reductions in air emissions as well as environmental business opportunities.

Water Use and Conservation

A borrower/customer's operations consume water in various production processes, which vary by industry sector. Typically, water use at the facility level is associated with processes described here:

- *Process water*. Processes that use large quantities of water include washing machines, rinsing, water jets or sprays to keep conveyors clean or to cool products, and the use of tanks, which are refilled to control losses. Water consumption can be reduced by recycling, improved equipment maintenance, and better process design.
- *Building facility operations*. Consumption of building and sanitary water is typically less than that of industrial processes. Water use can be reduced by repairing leakages and installing water-saving devices.
- *Cooling system*. Once-through cooling systems with cooling towers use large quantities of water and can be replaced by closed-circuit cooling systems. Fresh water can also be replaced with treated water to reduce wastage.
- *Heating systems*. Closed heating systems based on the circulation of low or medium-pressure hot water may consume large quantities of water if they leak or are poorly maintained. Some steam systems use large quantities of water, but consumption can be lessened by steam recovery systems and improved systems operations.

A borrower/customer's operations should manage the water use of various production processes to reduce overall water consumption at the facility level and save costs. A bank/DFI can help a borrower/customer find ways to cut down water use and identify new environmental business opportunities.

Wastewater and Water Quality

A borrower/customer's operations generate wastewater, which is treated on site or discharged untreated either to the municipal sewage system or directly to the environment (surface water).

Wastewater includes process wastewater, wastewater from utility operations, storm water, and sanitary wastewater. Wastewater varies in quality and quantity by industry sector but typically includes:

- *Process wastewater*. Pollutants may include acids, bases, soluble organic chemicals, suspended solids, nutrients (phosphorus and nitrogen), heavy metals (such as cadmium, chromium, copper, lead, mercury, nickel, and zinc), cyanide, toxic organic chemicals, oily materials, and volatile materials. The costs of treating process wastewater can be significant.
- *Wastewater from utilities operations*. Cooling towers and demineralisation systems may result in significant water consumption and the release of high-temperature water containing high amounts of dissolved solids as well as residues of biocides and other anti-fouling agents of cooling systems.
- *Storm water*. This includes any surface runoff and flows from process and materials-staging areas resulting from precipitation or drainage. Typically, storm water runoff contains suspended sediments, metals, petroleum hydrocarbons, polycyclic aromatic hydrocarbons, and coliform. Rapid runoff, even of

uncontaminated storm water, also degrades the quality of the receiving water by eroding stream beds and riverbanks.

- *Sanitary wastewater*. This may include effluents from domestic sewage, food services, and laundry facilities serving site employees. Other sources are sanitary wastewater from laboratories, medical infirmaries, equipment maintenance shops, and water softening.

A borrower/customer should monitor the quality, quantity, sources, and discharge points of liquid effluents by type (that is, process, utilities operations, storm water, and sanitary). At a facility level, the contaminant concentrations of wastewater discharge should not exceed the effluent discharge quality standards of national and provincial regulations to avoid fines and/or penalties. Discharge quality can also be compared to international best practices and standards to identify any deviations, which would indicate poor performance of an operation. The generation and discharge of wastewater should be managed to reduce the volume of water requiring specialised treatment by improving water use efficiency, modifying production processes (including the use of hazardous materials that contaminate water), and treating wastewater on site to reduce contaminants before discharge.

A borrower/customer's operations should avoid, minimise, and control adverse impacts from wastewater on human health, safety, and the environment. A bank/DFI can help a borrower/customer find ways to prevent or reduce wastewater generation through water conservation and recycling or reusing within operations and to identify environmental business opportunities.

Waste

A borrower/customer's operations may generate, store, or handle any quantity of hazardous or non-hazardous waste across a range of industry sectors.

Waste can be solid or liquid and can contain gaseous material generated from disposal, recycling, burning, or incineration. It can be a by-product of a manufacturing process or an obsolete commercial product that can no longer be used for its intended purpose and requires disposal. Inappropriate waste disposal can contaminate groundwater and result in fines or penalties as stipulated in national and provincial regulations.

Solid waste includes domestic trash, inert construction or demolition materials, metal scrap, empty containers for non-hazardous materials, and residual waste from industrial operations.

Hazardous waste shares either the properties of a hazardous material (such as ignitability, corrosivity, reactivity, or toxicity) or other physical, chemical, and biological characteristics that may pose risk to human health or the environment if not managed properly. When a hazardous material is no longer usable and needs to be disposed but still has hazardous properties, it is considered a hazardous waste. Typically, hazardous wastes include solvents, fuels, asbestos in building materials, polychlorinated biphenyl oils in electrical equipment, most pesticides, and ozone-depleting substances in refrigeration systems. Wastes may also be defined as "hazardous" by local regulations or international conventions based on their origin, characteristics, and inclusion on hazardous-waste lists. Hazardous wastes should always be segregated from non-hazardous wastes.

Facilities that generate and store wastes need to consider issues linked to waste minimisation, generation, transportation, and disposal. Typically, approaches to waste management include:

- *Waste management planning*. Facilities that generate waste should categorise their waste based on composition, source, types of wastes produced, and generation rates, or according to local regulatory requirements. This information can be used to prevent or reduce pollution, such as source reduction, reuse, and recycling.

- *Waste prevention*. Processes can be designed and implemented to prevent or minimise the amount of wastes and their associated hazards. For example, facilities can use less hazardous or toxic raw materials or inputs and switch to processing methods that generate lower waste volumes; they can also improve manufacturing processes to convert materials more efficiently.
- *Recycling and reuse*. This entails identifying and recycling products that can be reintroduced into the manufacturing process or industry activity at a site or in industrial-processing operations at other facilities. It also includes identifying materials that can be reused, saving both costs and disposal needs. Recycling and reuse plans can significantly cut down the amount of waste.
- *Treatment and disposal*. If waste materials are still generated after the implementation of feasible waste prevention, reduction, reuse, recovery, and recycling measures, they should be treated and discarded in ways that avoid potential impacts on human health and the environment. Typical methods include on- or off-site biological, chemical, or physical treatment of the waste material to make it non-hazardous before final disposal. Alternatively, they should be taken to facilities specially designed to receive the waste.
- *Hazardous waste storage*. Hazardous waste should be stored to prevent or control accidental releases into the air, soil, and water resources. This requires storage in closed containers away from direct sunlight, wind, and rain; secondary containments; and the provision of adequate ventilation where volatile wastes are stored.
- *Hazardous waste transportation*. On- and off-site transportation of waste should be conducted using appropriate protocols to prevent or minimise spills, releases, and exposures to employees and the public. All waste containers designated for off-site shipment should be secured and labelled with the contents and associated hazards; they should be properly loaded on the transport vehicles before leaving the site.
- *Hazardous treatment and disposal*. In the absence of qualified commercial or government-owned waste vendors, facilities generating waste should have the technical capability to manage the hazardous waste or install on-site waste treatment or recycling processes to reduce immediate and future impacts on the environment. This may also require applicable permits, certifications, and approvals.
- *Small quantities of hazardous waste*. Hazardous wastes are often generated in small amounts by many projects through equipment and building maintenance or other activities. Waste collection and storage areas should be inspected regularly for evidence of accidental releases, while hazardous wastes should be properly labelled and stored. These types of wastes include spent solvents and oily rags, empty paint cans, chemical containers, used lubricating oil, used batteries (such as nickel-cadmium or lead acid), and lighting equipment, such as lamps or lamp ballasts.

A borrower/customer's operations should practise sound waste management at the facility. A bank/DFI can help look for environmental business opportunities.

Land Contamination

Land can become contaminated by releases of hazardous materials, wastes, or oil, including naturally occurring substances as a result of historic or current site activities, including accidents during their handling and storage and poor management or disposal. Land is considered contaminated when it contains concentrations of hazardous materials, including oil, above baseline or naturally occurring levels.

Contaminated lands may involve topsoil or subsurface soils that affect groundwater, surface water, and adjacent sites through leaching and transport. Where subsurface contaminant sources include volatile substances, soil vapour may also create potential for contamination through infiltration of indoor air spaces of buildings.

Land contamination is a concern when hazardous materials, waste, or oil are present in any environment at dangerous levels of concentrations with the potential for contact with humans, wildlife, plants, and other living organisms. This may occur when a contaminant migrates from its point of release (such as leaching into potable groundwater), and humans or other living organisms become exposed to it through ingestion or skin absorption. This may affect human health (increasing cancer risk) and ecology, becoming a liability to the polluters or business owners who may suffer damage of business reputation and business-community relations as well as bear the costs of remediation for affected parties, such as workers at the site and nearby property owners.

Land contamination should be avoided by preventing or controlling the release of hazardous materials, hazardous wastes, or oil into the environment. When contamination is suspected or confirmed during any project phase, the cause of the uncontrolled release should be identified and corrected to avoid further releases and associated adverse impacts. Contaminated lands should be managed to avoid the risk to human health and ecological receptors. This requires a thorough clean-up to reduce the level of contamination at the site while preventing human exposure.

Where land contamination represents an immediate risk to human health and the environment, appropriate measures should be taken as soon as practicable to remove the hazard. Risk-mitigation strategies should be developed based on site-specific conditions and target contaminant source reduction, considering technical and financial feasibility. To protect human health, access to a contaminated site should be restricted through signage, fencing, or site security. Contaminated soil may need to be capped with clean soil or paved over with certain plants as a temporary measure to prevent direct contact.

A borrower/customer's operations should implement necessary measures to prevent releases of hazardous materials, waste, or oil into the ground. A bank/DFI can help a borrower/customer identify environmental business opportunities.

Labour and Working Conditions

The pursuit of economic growth through employment creation and income generation should be balanced with the protection of basic labour rights. For any business, the workforce is a valuable asset and sound worker-management relationship is a key ingredient to the long-term sustainability of the enterprise. Failure to establish and foster such a relationship can undermine worker commitment and retention, result in labour strikes, and jeopardise company operations. Conversely, by treating workers fairly and providing them with safe and healthy working conditions, borrowers/customers may create tangible benefits, such as enhancement of the efficiency and productivity of their operations.

A borrower/customer's commitment to establishing a good relationship with workers encompasses the following aspects:

- *Human resources policy*. A borrower/customer should set out its approach to managing employees and adopt a policy appropriate for its size and workforce. The policy provides information on employee rights under national labour and employment laws.
- *Working conditions and terms of employment*. A borrower/customer should document and communicate to all employees and workers (including contract staff) their working conditions and terms of employment that should at a minimum comply with national laws. These include their entitlement to wages and benefits, hours of work, overtime arrangements and overtime compensation, sick or maternity leave, and vacations or holidays. If there is a collective-bargaining agreement with a workers'

organisation, the agreement should be respected by the employer.

- *Workers' organisations*. Where permitted by law, employees should be granted the right to associate freely and bargain collectively by forming and joining workers' organisations or through alternative means. A borrower/customer should not discourage workers from forming or joining workers' organisations and should not discriminate or retaliate against workers who participate in such organisations and bargain collectively.
- *Non-discrimination and equal opportunity*. A borrower/customer should not make employment decisions based on personal characteristics unrelated to inherent job requirements; it should adhere to the principle of equal opportunity and fair treatment.
- *Retrenchment*. If a borrower/customer anticipates the elimination of numerous jobs or a layoff of a significant number of employees, it should develop a plan for managing the adverse impacts on employees.
- *Grievance mechanism*. A borrower/customer should provide all employees with a mechanism to raise reasonable workplace concerns confidentially (or anonymously if needed) so that such concerns can be addressed promptly at the management level without any retribution.
- *Child labour and forced labour*. A borrower/customer cannot employ children in a manner that is economically exploitative or is likely to be harmful to the child or interfere with the child's education. A borrower/customer cannot employ forced labour, which consists of any work or service not voluntarily performed by an individual but executed under the threat of force or penalty.
- *Supply chain*. A borrower/customer should pay attention to unfair or harmful labour practices of its suppliers, especially in instances where low labour cost is a factor in the competitiveness of supplies.

Respecting international standards concerning labour and working conditions benefits a borrower/customer's operations by encouraging a positive worker-management relationship. This leads to a more productive and stable operation, which reduces the likelihood of strikes and provides a reputational advantage that comes from enhanced public recognition for adherence to international standards.

Community Health, Safety, and Security

A borrower/customer's operation often brings benefits to communities including employment, services, and opportunities for economic development, but it can also increase community exposure to risks and impacts arising from accidents, structural failures, and releases of hazardous materials. Communities may also be affected by impacts on their natural resources, exposure to diseases, and the use of security personnel.

While public authorities play a key role in promoting public health, safety, and security, the borrower/customer also has a responsibility to avoid or minimise risks and impacts arising from its operation. This includes implementing the following actions:

- *Consultation and grievance channels*. The borrower/customer should conduct consultations and establish a line of communications with the affected community to understand and monitor potential impacts. An appropriate consultation and grievance mechanism can help manage and minimise risks, avoid reputational issues, and reduce the risk of conflict with the community.
- *Infrastructure and equipment safety*. The borrower/customer needs to ensure that its infrastructure and equipment do not pose risks of injury to the surrounding community, especially if they can access aspects of the operations. If the borrower/customer's operations involve moving equipment on public roads, necessary safety measures should be in place to prevent incidents and accidents.

- *Hazardous materials safety*. The borrower/customer should prevent or minimise community exposure to hazardous materials that may be released during operations. If there is a potential for life-threatening hazards, the borrower/customer must modify operations and substitute or eliminate substances causing the hazards. The borrower/customer also needs to control the safety of raw materials deliveries and waste transportation and disposal.
- *Environmental and natural resource issues*. The borrower/customer should avoid or minimise the exacerbation of impacts caused by natural hazards, such as landslides or floods arising from land-use changes because of its operations. Adverse impacts from the borrower/customer's operations on soil, water, and other natural resources used by the affected communities should also be avoided or minimised.
- *Community exposure to disease*. The borrower/customer needs to prevent or minimise community exposure to water-borne, vector-borne, and other communicable diseases that could result from operations. This includes the transmission of communicable diseases from an influx of temporary or permanent labour for the borrower/customer's operations.
- *Increase in traffic*. Increased traffic, especially movements of heavy vehicles, during the construction phase can lead to accidents and incidents. A traffic management plan and staff training should be implemented to manage and minimise accidents and incidents.
- *Emergency preparedness and response*. The borrower/customer needs to inform surrounding communities of potential hazards associated with operations and collaborate with them and local government agencies in preparing to respond effectively to emergency situations.
- *Use of security personnel*. A borrower/customer may retain security personnel to safeguard its operations, which may pose risks to the surrounding community if not managed properly. Security personnel should have a good record and must not be implicated in past abuses; they should be adequately trained in the use of force (including firearms, if necessary) and proper conduct towards workers and the local community. The borrower/customer will need to provide a mechanism allowing the surrounding community to express concerns about security personnel; it should also investigate any allegations of unlawful or abusive acts by such personnel to prevent recurrence.

If the impacts of a borrower/customer's operations on the surrounding community are not appropriately managed, this can create conflict and objections to the borrower/customer's presence in the community. This represents a reputational risk to the borrower/customer at the local level, which may escalate to a regional or international level if not addressed.

Land Acquisition and Resettlement

Involuntary resettlement refers to both physical displacement (relocation or loss of shelter) and economic displacement (loss of access to resources for income generation or means of livelihood) as a result of land acquisition (including rights-of-way) associated with a borrower/customer's operations. Resettlement is considered involuntary when affected individuals or communities do not have the right to refuse displacement. This occurs in cases of: i) lawful expropriation or restrictions on land use based on eminent domain; and ii) negotiated settlements in which the buyer can resort to expropriation or impose legal restrictions on land use if negotiations with the seller fail.

Displaced people may be classified as those who:

i. Have formal legal rights to the land they occupy
ii. Do not have formal legal rights to land, but have a claim to land that is recognised or recognisable

under national laws

iii. Have no recognisable legal right or claim to the land they occupy.

Unless properly managed, involuntary resettlement may result in long-term hardship and impoverishment for affected people and communities as well as environmental damage and social stress in areas where they have been displaced. For these reasons, involuntary resettlement should be avoided or minimised. Where it is unavoidable, appropriate measures should be carefully planned and implemented to mitigate adverse impacts on displaced people and host communities. Such measures include appropriate disclosure of information, consultation, and informed participation of the affected people as recommended below:

- *Compensation and benefits for displaced people*. When displacement cannot be avoided, the borrower/customer will offer displaced people and communities compensation for loss of assets at full replacement cost and other assistance to help them improve or at least restore their standards of living or livelihoods.
- *Grievance mechanism*. The borrower/customer needs to ensure that a grievance mechanism is in place to receive and address specific concerns about compensation and relocation raised by displaced people or members of host communities.
- *Social impact assessment, resettlement planning, and implementation*. Where involuntary resettlement is unavoidable, the borrower/customer will conduct a census to identify the people who will be displaced by the project, understand the likely impacts on the affected people and community, develop entitlement framework, and determine who will be eligible for compensation.
- *Physical displacement*. If people living on the site of a borrower/customer's operations must move to another location, the borrower/customer will: i) offer displaced people choices among feasible resettlement options, including adequate replacement housing or cash compensation; and ii) provide relocation assistance suited to the needs of each group of displaced people, with particular attention paid to the needs of the poor and the vulnerable. New resettlement sites built for displaced people will offer improved living conditions.
- *Economic displacement*. If land acquisition for the borrower/customer's operations causes loss of income or livelihood, the borrower/customer will promptly compensate these people; for example, affected business owners should be compensated for the cost of transferring and re-establishing their business operations elsewhere as well as their lost net income during the period of transition.
- *Government-managed resettlement*. Where land acquisition and resettlement are the responsibilities of the government, the borrower/customer needs to collaborate with the responsible government agency, to the extent permitted, to achieve outcomes that are consistent with best international practices.

Land acquisition and resettlement involving a borrower/customer's operation should be carefully managed to prevent the likelihood of hardship and impoverishment for the affected people and communities. Given that a displaced community is unlikely to be entirely satisfied with its new situation unless there is noticeable improvement in standards of living or livelihoods, involuntary resettlement will remain a reputational risk for the borrower/customer.

Indigenous Peoples

Indigenous peoples are recognised as social groups with identities that are distinct from dominant groups in national societies and are often among vulnerable segments of the population. Indigenous peoples may be referred to in different countries as "indigenous ethnic minorities", "aboriginals", "hill tribes", "minority nationalities", "scheduled tribes", "first nations", or "tribal groups".

Indigenous peoples typically self-identify as members of a distinct indigenous cultural group and are recognised as such by others; have a collective attachment to geographically distinct habitats or ancestral territories, making use of natural resources in these habitats and territories; have customary cultural, economic, social, or political institutions separate from those of the dominant society or culture; and communicate in an indigenous language, often different from the official language of the country or region.

Indigenous peoples are often closely tied to their traditional or customary lands and the natural resources on these lands. While these lands may not be under their legal ownership as defined under national law, the use of these lands by indigenous peoples for their livelihoods or cultural purposes is often recognised under customary law. However, the economic, social, and legal status of indigenous peoples often limits their capacity to defend their interests and rights to lands and natural and cultural resources. Indigenous peoples are particularly vulnerable if their lands and resources are transformed, encroached upon by outsiders, or significantly degraded. Their languages, cultures, religions, spiritual beliefs, and institutions may also be under threat. These characteristics expose indigenous peoples to different types of risks and severity of impacts, including loss of identity, culture, and natural resource-based livelihoods as well as impoverishment and exposure to disease.

A borrower/customer should ensure that in the course of its operations, the identity, culture, and natural resource-based livelihoods of indigenous peoples are respected and impoverishment and exposure to disease are prevented. This includes implementing the following actions:

- *Avoid or minimise adverse impacts*. When a borrower/customer cannot completely avoid impacts on indigenous peoples, the borrower/customer needs to mitigate or compensate for those impacts in a culturally appropriate manner and with the informed participation of affected indigenous peoples.
- *Consultation*. The borrower/customer needs to establish an ongoing, culturally appropriate relationship with the affected communities of indigenous peoples. If there are adverse impacts, the consultation process needs to ensure the free, prior, and informed consultation of the indigenous peoples and facilitate their informed participation with respect to proposed mitigation measures and sharing development benefits.
- *Sharing development benefits*. The borrower/customer needs to identify opportunities for development benefits for affected indigenous peoples. This should aim at improving their standard of living and livelihoods in a culturally appropriate manner, including the long-term sustainability of the natural resource on which they depend.
- *Impacts on traditional or customary lands*. If a borrower/customer's operations are located within traditional or customary lands or involve the commercial use of natural resources located on these lands, this will generate adverse impacts on the livelihoods or cultural identity of the community of indigenous peoples. The borrower/customer needs to inform affected communities of their rights under national laws, including the recognition of customary rights; make efforts to avoid or at least minimise the size of the affected land; and offer land-based compensation as well as culturally appropriate development opportunities to affected communities.
- *Relocation of indigenous peoples*. The borrower/customer should avoid the relocation of indigenous peoples from their traditional lands. If relocation is unavoidable, the borrower/customer needs to enter into a good faith negotiation with the affected communities and ensure that any relocation complies with best international standards.

If a borrower/customer's operations are initiated and conducted without the involvement of indigenous peoples, this can lead to misunderstanding and conflict. Given worldwide concern for the well-being of indigenous peoples, there are significant reputational risks for a borrower/customer if such issues are not managed properly.

Cultural Heritage

Cultural heritage encompasses properties and sites of archaeological, historical, cultural, artistic, and religious significance, those with unique environmental features and cultural knowledge, as well as innovations and practices of communities embodying traditional lifestyles; all of these need to be protected for current and future generations. Consistent with the requirements of the Convention Concerning the Protection of the World Cultural and Natural Heritage, a borrower/customer is required to avoid significant damage to cultural heritage because of their business activities.

Impacts on cultural heritage involve the following:

- *Chance finds*. During the construction of a borrower/customer's facilities, there may be physical impacts on previously unknown or undocumented resources that were fully or partially buried before construction begins.
- *Community input*. Where a project may affect cultural heritage, a borrower/customer will consult with affected communities who have used or continue to use such heritage for longstanding cultural purposes to determine their level of significance. A borrower/customer should incorporate the views of the affected communities on cultural heritage into the decision-making process.
- *Removal of cultural heritage*. Most cultural heritage is best protected by preserving it in its place since removal will likely result in their irreparable damage or destruction. Cultural heritage should only be removed if the borrower/customer can demonstrate that the overall benefits of operations at a particular site outweigh the anticipated loss.
- *Legally protected cultural heritage areas*. When a borrower/customer's proposed operations are located within a legally protected area or a legally defined buffer zone, the borrower/customer is required to take additional measures to enhance and promote the conservation of the area.
- *Use of cultural heritage*. If a borrower/customer makes commercial use of a community's cultural heritage, such as embodiment of traditional lifestyles, the borrower/customer is required to enter into a good faith negotiation with the affected local communities and provide fair and equitable sharing of benefits from the commercialisation of their cultural heritage.

If a borrower/customer's operations are initiated and conducted without consideration for cultural heritage, there are significant legal and reputational risks. A systematic approach to incorporating concern for cultural heritage issues throughout a borrower/customer's operations, including additional investments in the enhancement of such heritage, can bring significant reputational advantage to a borrower/customer at both the local and international levels.

Climate Risks

Tackling the climate crisis while meeting urgent development needs is a fundamental challenge faced by the world. The COVID-19 pandemic and subsequent economic crisis have been devastating. As the global economy responds to the ongoing crisis and rebuilds itself, there is an urgent need to integrate climate and development strategies to deliver green, resilient, and inclusive development.

Climate change is set to have a dramatic economic impact. It is already altering the availability of and demand for resources, supply and demand for products and services, the performance of physical assets, and the need for innovation. Failure to consider climate change in investment strategies can undermine projected financial returns and affect the non-financial risk management of institutions, particularly on development, environmental, and social issues.

As they channel investment, financial institutions have an opportunity and responsibility to take a leading role in mitigating and adapting to climate change. Institutions managing investments in long-term assets should consider the financial risks associated with climate change as well as the opportunity to create value by working proactively with borrowers/customers and stakeholders to manage the risks.

Clearly, not all investments will be affected by climate impacts, nor will they all be affected in the same ways. The severity of impacts will depend on several factors, including climatic sensitivity, location, management practices, market conditions, existing policies and regulations, and so forth. However, it is likely that the impacts will have material effects on a significant number of investments over time.

Financial performance and conditions for both equity and debt may be weakened by the following factors:

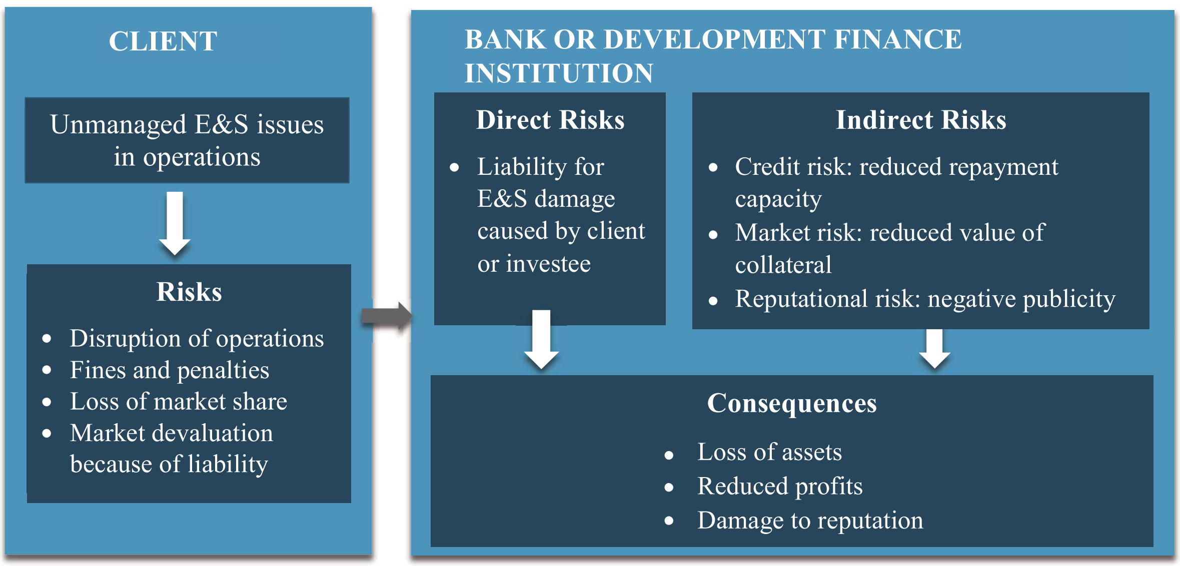
- Market conditions, particularly supply and demand, can be a key determinant of future prices. Both supply and demand can be sensitive to climate factors. Future climate-driven changes in prices may, in turn, affect the competitiveness of investments.
- Efficiency, output, and performance of assets and equipment may decrease due to changing climate conditions, with consequences for revenue.
- Operating costs may increase due to changes in the price, availability, or quality of inputs. Maintenance costs may also increase.
- Insurance costs are likely to increase if climate-related claims continue to rise as projected. A more disquieting possibility—already a reality in some regions—is that insurance companies may completely abandon some markets.
- Additional capital expenditure may be required as a result of asset damage or decreased asset performance. Further, complying with environmental regulations may require additional capital expenditure to upgrade facilities or equipment to cope with increased pollution risks.
- Staff health, safety, and productivity may be affected by climate change, and this may lead to increased expenses.
- Loss contingency projections—reserves required to allow for potential disasters or other known risks—may need to increase as the risks of climate change become more likely and better quantified. Asset depreciation rates may increase. The rates used for accounting purposes generally reflect historical experience, but the effective depreciation rates of assets due to climate change may be considerably higher. Consequently, financial models may overestimate the real value and useful life of physical assets. Faster capital depreciation could mean that assets need replacing more frequently, negatively affecting projected cash flows.
- Country risk may be aggravated by climate change impacts, particularly in economies where gross domestic product is reliant on scarce water resources or in smaller economies more vulnerable to catastrophic climate events. Significantly, studies show that rising temperatures in some regions are linked to increased risk of armed conflicts.

While performing environmental and social due diligence, banks/DFIs will be required to consider climate risks and potential mitigation measures as well as opportunities for reducing GHG emissions.

Annex F: Environmental and Social Risks in Lending by Banks or Development Finance Institutions

Banks/DFIs are exposed to some E&S risks through their borrowers/customers. If left unmanaged, these risks can lead to a decline in the bank/DFI's reputational image, costly litigation, and loss of revenue. The type, quantity, and severity of E&S risks faced by a bank/DFI depend on numerous factors, including geographic context, industry sector, and type of transaction (such as corporate, housing, insurance, leasing, microfinance, project finance, retail, short-term finance, small and medium enterprises, and trade). Please refer to Annex G for E&S risks in different banking products.

Figure 3: E&S Risks in Lending by Banks or Development Finance Institutions



- *Liability risk*. By virtue of taking possession of collateral assets, a bank/DFI is exposed to liability risk stemming from a borrower/customer's legal obligations. This includes fines, penalties, and costs of addressing third-party claims for damages due to negligence in managing E&S risks in a borrower/customer's operations and clean-up of contamination. If the bank/DFI is a principal shareholder of a borrower/customer's operations, it may also be directly liable for all E&S risks associated with a borrower/customer's operations.
- *Financial risk*. A bank/DFI is exposed to financial risk stemming from potential disruption of a borrower/customer's operations as a result of E&S problems. If not managed properly, these problems can affect a borrower/customer's ability to meet its financial obligations to the bank/DFI and can drive down the value of a borrower/customer's collateral in the context of a transaction. A borrower/customer's failure to effectively address E&S considerations can jeopardise its business operations and the bank/DFI supporting the transaction. The bank/DFI will also face liquidity risks from E&S problems associated with the borrower/customer's collateral. For example, the bank/DFI may have to use its own resources to clean up the contaminated site or meet other government requirements before being able to sell it.
- *Reputational risk*. A bank/DFI is exposed to reputational risk from potentially negative publicity associated with a borrower/customer's poor E&S practices. This harms a bank/DFI's brand value and public image in the media, the business and financial community, and even among its own staff. For example, if a borrower/customer faces strong public opposition against its operations, the bank/DFI's reputation may be tarnished through its association with the borrower/customer.

- *Credit risk*. A bank/DFI is exposed to credit risk when a borrower/customer is unwilling or unable to fulfil the contractual obligations associated with a transaction as a result of E&S issues. For example, if a borrower/customer faces increased capital or operating costs of complying with E&S standards or if it has to pay regulatory fines or penalties as a result of missing or expired operating and emission or discharge permits, the borrower/customer may not be able to meet its financial obligations to the bank/DFI.
- *Market risk*. A bank/DFI is exposed to market risk stemming from a reduction in the value of collateral associated with a transaction due to E&S problems. For example, if a production site becomes contaminated, the market value of the underlying collateral will fall.

A bank/DFI's E&S risks are those of its borrowers/customers and are inherent in the nature of the borrowers/customers' operations. E&S risks can be mitigated through compliance with E&S regulations and international E&S standards.

E&S risks are dynamic and subject to change over time. Some potential E&S risks may not seem significant or relevant at the time of approval of a financial transaction, but they may become so during execution as a result of higher regulatory standards and increased levels of enforcement. In other cases, E&S risks, such as spills or explosions, may seem unlikely to occur, but when they do, the E&S impacts are potentially extremely high. Please refer to Annex E for detailed explanations of some common E&S risks.

Annex G: Environmental and Social Risks in Different Banking Products

Risk in Trade

The E&S risks of trade finance are associated with the production of traded goods and vary by industry sector and location. Companies selling to foreign markets are required to comply with local and international social and environmental regulations and also face public scrutiny in many cases. Importing and exporting companies are therefore exposed to some level of reputational risk.

Given the short-term nature of trade finance, a bank/DFI will have limited leverage to manage E&S risks once it has approved a transaction. However, a bank/DFI can have simple transaction screening procedures to avoid supporting the trade of products and substances subject to bans and international phase-outs.

Risk in Small and Medium Enterprises

Investments in small and medium enterprises (SMEs) focus on a particular set of borrowers/customers, usually defined by annual sales but also by loan amount. SMEs have specific funding needs in terms of their business growth.

Although less complex than for large corporate and project investments, the E&S issues associated with SMEs can be significant and are primarily related to worker health and safety as well as pollution. These E&S issues may not be closely monitored and the risks will vary depending on company size and capacity to manage E&S risks, industry sector, and location.

Banks/DFIs that lend or invest in SMEs generally try to develop long-term relationships, which may further expose lenders or investors to E&S issues associated with SMEs, posing financial and liability risks. Due to the visibility of SMEs in a community, reputational risk is also a factor.

Risk in Retail

E&S issues associated with retail transactions that target individuals are generally non-existent, although there may be concerns associated with mortgage finance and potentially certain investment options that may involve controversial or high-risk projects or companies.

There is usually no credit, liability, or reputational risks due to E&S issues for banks/DFIs involved in retail banking. However, some corporate accounts linked to companies or individuals whose activities are viewed as harmful (such as arms manufacturing, money laundering, and terrorism) may represent legal and reputational risks to the banks/DFIs.

Risk in Microfinance

These transactions are typically of smaller amounts and shorter tenure than corporate loans and target small business owners or borrowers/customers whose operations are generally small.

The E&S risks associated with microfinance are typically low partly due to the small size of the operation and industry sector. However, some microfinance borrowers/customers may be involved with handling dangerous substances, such as pesticides posing health or environmental risks, and they frequently lack the necessary E&S management capacity to do so safely.

Although E&S risks associated with microfinance at an individual transaction level are low, given the smaller size and shorter tenure of transactions, there are credit or liability risks for the borrowers/customers in cases where E&S issues, such as accidents, affect their ability to repay loans. Microfinance institutions often consider the E&S impacts associated with their transactions in the context of the developmental role they play in their communities and are therefore concerned with reputational risks. In addition, many see the promotion of good E&S practices as part of their role in the community.

Risk in Corporate Finance

Loans (debt) can be used by a company or project to finance a specific aspect of its operations, such as the purchase of equipment and renovation or expansion. Equity investments provide operating capital to the entity in exchange for its shares (equity).

The E&S risks associated with a corporate transaction vary greatly and can be significant depending on the operation's industry sector, size, location, and commitment and capacity to managing such risks. E&S risks will be more significant for medium- and high-risk industry sectors and large-scale operations such as mining, oil and gas, and heavy manufacturing; if not managed properly, E&S risks can result in loss of life, water contamination, and other impacts on health and the environment. For low-risk industry sectors such as retail operations and other services, E&S risks will usually be low and mainly related to labour standards and life and fire safety, which can readily be addressed. Regardless of the industry sector, E&S risks, especially those related to labour and working conditions, may exist in the supply chain of raw materials and goods.

E&S issues may threaten the financial and operational viability of a commercial operation, whose source of repayment of a loan or payment of dividends on an investment is from the operation itself, backed by its entire balance sheet, rather than a specific asset. A corporate transaction exposes a bank/DFI to the entire commercial operation of a borrower/customer's company, which presents liability, reputational, and credit risks. When a loan is backed by a specific asset as collateral, the liability risk for the bank/DFI may increase because of associated E&S issues.

Risk in Project Finance

Project finance is generally used for large, complex, and sizeable operations, such as roads, oil and gas explorations, dams, and power plants. Investment is usually secured by a project's assets such that the bank/DFI providing the funds will assume control of the project if the sponsor has difficulties complying with the terms of the transaction. Due to their complexity, size, and location, these projects often have challenging E&S issues, including involuntary resettlement, loss of biodiversity, impacts on indigenous or local communities, worker safety, pollution, and contamination.

As these projects generally face high scrutiny from regulators, civil society, and financiers, their sponsoring companies normally allocate more resources to managing E&S risks. However, if not managed properly, the E&S risks can disrupt or halt project operations and lead to legal complications and reputational impacts that threaten the overall success of the project. Because anticipated project cash flows typically generate the necessary resources to repay the loan, any disruption to the project, regardless of the financial standing of the sponsoring companies involved, poses a direct financial risk to the bank/DFI.

Annex H: Covenants

Bank/DFI staff can incorporate E&S clauses into legal agreements with its borrowers/customers requiring that they comply with the bank/DFI's requirements. By doing this, a bank/DFI reduces its exposure to the E&S risks associated with a borrower/customer's operations throughout the lifetime of a transaction and has legal recourse in the case of non-compliance.

A bank/DFI's E&S management system should state the circumstances under which specific E&S conditions, such as a corrective action plan, need to be inserted into the legal agreement for a proposed transaction.

The Legal Department should be involved in developing and inserting the necessary clauses on E&S matters into legal agreements. The specific language will depend on the type of transaction and potential E&S risks identified during the due diligence process but generally addresses the following areas:

- *Positive covenants*. These are measures or actions that should be taken by the borrower/customer, such as compliance with national and provincial E&S regulations and international standards as well as periodic reporting on E&S performance. The borrower/customer is also required to promptly notify the bank/DFI of significant events with potentially adverse E&S effects, such as major pollution, spills, or workplace accidents resulting in serious or multiple injuries or deaths.
- *Negative covenants*. These are actions that the borrower/customer should refrain from undertaking to meet the bank/DFI's E&S requirements.
- *Conditions precedent*. These are conditions and requirements that the borrower/customer has to fulfil prior to disbursement of funds by the bank/DFI; they may include proof of valid permits and licences, preparation of government-requested reports, and completion of mitigation actions stipulated in the corrective action plan.
- *Event of default*. This refers to an event that entitles the bank/DFI to cancel a transaction and declare all amounts owed by the borrower/customer to become immediately due and payable. For transactions involving complex E&S issues, the bank/DFI may specify a time period, during which the borrower/customer must resolve the issue(s) after notification by the bank/DFI to avoid default.
- *Corrective action plan*. This is typically included as an annex to the legal agreement, outlining the specific mitigation actions to be taken by the borrower/customer according to an agreed timeframe for implementation.

To assess compliance with the E&S clauses stipulated in the legal agreement, bank/DFI staff should periodically monitor borrowers/customers and may require them to prepare and submit periodic E&S performance reports for review. The bank/DFI should consider material non-compliances with the E&S clauses as a breach of contract, which constitutes an event of default under the terms of the legal agreement.

In case of such an event, bank/DFI staff need to work with borrowers/customers to resolve non-compliance issues to mitigate any potential exposure of the bank/DFI to the borrower/customer's E&S risks. If the issue cannot be resolved, the bank/DFI may need to take legal action against the borrower/customer to reduce its exposure to the E&S risks associated with the transaction.

Annex I: Corrective Action Plan

Depending on the nature of E&S risks associated with a borrower/customer's operations, bank/DFI staff may develop a corrective action plan with a timeframe for the borrower/customer to implement appropriate mitigation measures to comply with the bank/DFI's E&S requirements. The purpose of a corrective action plan is to mitigate potential E&S risks in the context of a transaction to an acceptable level for the bank/DFI.

Bank/DFI staff should tailor the scope of a corrective action plan to each borrower/customer according to the specific risks identified during the E&S due diligence process or subsequent transaction monitoring. Corrective action plans range from simple mitigation measures to detailed management plans with actions that can be measured quantitatively or qualitatively. The corrective action plan should include a description of the specific mitigation actions to be taken by the borrower/customer, a timeframe for implementation, and a reporting requirement to inform the bank/DFI about the status of completion.

Bank/DFI staff should discuss the corrective action plan with the borrower/customer and agree on its scope and timeframe for completion. If the action plan is developed as part of the transaction appraisal process, it should be included in the legal agreement. The timeframe for implementation of specific mitigation measures will vary according to the E&S risks; it may range from being a condition of transaction approval to a reasonable timeframe from disbursement or when E&S issues are identified during transaction monitoring.

The following template can be used for documenting a corrective action plan agreed with the borrower/customer. The template also contains some examples for guidance.

Table 4: Corrective Action Plan Template with Examples

E&S Concern Area Identified Through ESDD	Corrective Actions Required	Timeframe	Action Completion Indicator	Responsibility (Borrower/ Customer, Staff, Management, or Board)	Cost Involved
Evidence of land pollution from the discharge of untreated effluent	Action plan may include: • Removal and treatment of contaminated ground soil • Construction of sewage system for industrial wastewater • Construction of wastewater treatment facility and discharge system for treated water	Six months	• Install and operate an effluent treatment plant; qualitative parameters of the treated effluent should be within limits. • The discharge of treated effluent should be solely through the constructed discharge system with no other modes of discharge and leakages. • Qualitative parameters of the treated contaminated ground soil should be within limits.	Board of the borrower company	
Absence of grievance redressal mechanism	Establish a grievance redressal mechanism	Three months	The grievance redressal mechanism should be well established and appropriately communicated to external stakeholders.	Board of the borrower company	
Displacement of community structure	Restoration of community structure for common benefits	Three months		Management of the borrower company	
Loss of trees, crops, or perennials	Compensation for standing crops and trees	One year	Plantation of trees	Management of the borrower company	

Annex J: Supervision Checklist

S. No.	Questions or Things to Check	Response
1	Reporting period covered by this supervision report	
2	List key developments and any major changes in project location and design, if any, from the time of advisory project commencement or from the last supervision period. Mention any new E&S risk not foreseen earlier.	
3	Status of implementation of covenants or corrective action plan: Is it in line with the agreed timeframe? Are all covenants/corrective action plan implemented, partially implemented, or not implemented? Is implementation delayed? If partially implemented, not implemented, or delayed, please mention the reason in the response column along with a timeline for completion of implementation as committed by the borrower/customer during supervision.	
4	Was there any incidence of accidents (minor, major, or fatal), spills, leakages, or explosions during the reporting period? If yes, what was the scale of damage? Was there any fatality and monetary loss? What was the action taken in response to the incident?	
5	Was there any recent lawsuits, fines, or penalties issued by the regulatory body related to E&S issues? If yes, please mention the nature of violation, status of the case, amount of fine or penalty paid, action taken by the borrower/customer to address the issue to avoid any such lawsuits, fine, or penalty in future.	
6	Are all the required permits, licences, clearances, and other international management systems (for example, ISO 14000, OHSAS 18001, and SA8000) in place and up to date? Please mention the issuance dates and duration of validity of all such permits, licences, and clearances.	
7	Has there been any recent protest, grievance, or complaints received from local communities? Any negative feedback from non-governmental organisations or media coverage on the borrower/customer's E&S performance? If yes, please specify the nature of grievances, actions taken by the borrower/customer to resolve them, and any outstanding issues and measures proposed by the borrower/customer to resolve them.	

Annex K: Developing an Environmental and Social Management System

Developing an ESMS requires Board commitment and Senior Management support to be integrated with a bank/DFI's existing risk management framework. A bank/DFI can initiate the process by establishing an ESMS working group.

An ESMS includes a policy; a set of procedures to identify, assess, and manage E&S risks in financial transactions; and descriptions of the roles, responsibilities, and capacity needs of staff for E&S management.

The ESMS should be designed to manage the level of E&S risks that the bank/DFI is exposed to through its portfolio, both in terms of the industry sector of its borrowers/customers and the type of financial transactions. The management of these risks should be tailored to the organisational needs of each bank/DFI as such risks can vary greatly for banking institutions, leasing companies, microfinance institutions, and private equity funds.

ESMS Template

An ESMS is anchored in a bank/DFI's environmental and social policy and outlines the E&S management capacity of its staff and external experts, as applicable, including their designated roles and responsibilities.

It is implemented through a set of procedures for:

- Screening transactions
- Categorising transactions based on their environmental and social risks
- Conducting environmental and social due diligence
- Decision-making
- Monitoring borrowers/customers' environmental and social performance
- Managing borrowers/customers' non-compliance with the bank/DFI's environmental and social standards.

The procedures outlined in the ESMS should be applied to each transaction as part of a bank/DFI's overall risk management framework. For each transaction, the bank/DFI is required to formally document its environmental and social review as part of its record-keeping, consider E&S findings during its decision-making process, and incorporate E&S requirements (such as a corrective action plan) as clauses in legal agreements with borrowers/customers.

To ensure the effective implementation of the ESMS across operations, the bank/DFI needs to allocate the necessary resources for internal communications and training.

As part of its commitment to good corporate practices, the bank/DFI can periodically report on the environmental and social performance of transactions and measures taken to reduce overall exposure to E&S risks.

A standard ESMS template is provided below for guidance and can be customised as per each organisation's requirements.

1. Background

This Environmental and Social Management System (ESMS) details the policy, procedures, and workflow that will be followed for financing made by <u>("the Bank/DFI")</u> under the management and administration of ("the Relationship Manager (or other designated officer)").

2. Environmental and Social Management System

2.1. Policy

The Bank/DFI continually endeavours to ensure effective environmental and social management practices in all its activities, products, and services with a special focus on the following:

- *Ensuring that all activities undertaken by the Bank/DFI are consistent with the Applicable Requirements. (outlined later in this document)*
- *Ensuring that all projects are reviewed against the Applicable Requirements*
- *Financing projects only when they are expected to be designed, built, operated, and maintained in a manner consistent with the Applicable Requirements*
- *Making best efforts to ensure that all projects are operated in compliance with the Applicable Requirements on an ongoing basis, during the tenure of the Bank/DFI's financing*

- *Ensuring transparency in its activities*
- *Ensuring that the management and shareholders of the Borrower/Customer companies understand the policy commitments made by the Bank/DFI in this area.*

This Policy will be communicated to all staff and operational employees of the Bank/DFI.

Signed *Effective Date*

_________________________ _________________________

2.2. Applicable Requirements

The Bank/DFI will ensure that all projects are reviewed and evaluated against the following environmental and social requirements:

- *The Exclusion List for all projects*
- *The applicable national and provincial laws on environment, health, safety, and social issues and any standards established therein*
- *The IFC Performance Standards*

2.3. Procedures

- *At an initial stage of inquiry, the Relationship Manager (or other designated officer) will apply the Exclusion List to the project. If the project involves an excluded activity, the prospective Borrower/ Customer will be so informed and further consideration of financing for the project will be terminated. Otherwise, the Relationship Manager will indicate the Applicable Requirements for the project.*
- *When the Relationship Manager (or other designated officer) indicates that the project does not involve an excluded activity, the prospective Borrower/Customer will be informed that the Bank/DFI will undertake (if required) an Environmental and Social Due Diligence (ESDD) as part of the appraisal process.*
- *The Relationship Manager (or other designated officer) will undertake (or appoint a consultant to undertake) an ESDD. Depending on the complexity of the project, the ESDD can be a desk review based on a credit officer's site visit or require a full-scale review conducted by a technically qualified person or consultant.*
- *The Borrower/Customer must be able to demonstrate compliance with the Applicable Requirements. Demonstration of compliance must be to the satisfaction of the Relationship Manager (or other designated officer), although the opinion of third parties such as regulatory agencies can be sought. Where compliance cannot be demonstrated, a Corrective Action Plan must be agreed to before the investment can proceed. The plan must specify all necessary actions to bring a project into compliance. A target completion date for each specified action must also be agreed.*
- *Prospective Borrowers/Customers must provide all requested information and the Relationship Manager (or other designated officer) must have concluded that the project is expected to meet the Applicable Requirements (with Corrective Action if required) prior to the Bank/DFI's decision to finance the project.*
- *Environmental and social performance will be evaluated on an annual basis, including the status of implementation of the Corrective Action. The benchmark for performance will be ongoing compliance with the Applicable Requirements. Performance evaluation will be undertaken by:*

a) *The Borrower/Customer companies, who will provide annual reports for the Relationship Manager (or other designated officer) to follow up as required with further queries or site visits; and*

b) *The Relationship Manager (or other designated officer), who will submit performance reports prepared based on the Borrower/Customer's annual reports, the ESDD, and supervision conducted to Bank/DFI management.*

- *All financing agreements will contain appropriate environmental and social representations, warranties, and covenants requiring that projects are in compliance in all material respects with host country environmental, health, safety, and social requirements embodied by National and Provincial Laws/Regulations and conducted in accordance with any Applicable Requirements. For details on covenants and warranties, please refer to Annex H of this document.*

2.4. Organisation and Responsibilities

- *[FIRST AND LAST NAME] is the Credit Risk Officer. The Credit Risk Officer will have oversight for environmental and social issues, will ensure resources are made available for environmental management, and will sign the Bank/DFI's annual environmental performance report.*
- *The Relationship Manager is [FIRST AND LAST NAME].*
- *The responsibilities of the Relationship Manager include:*

a) *Evaluation of environmental and social compliance of a target Borrower/Customer with the Applicable Requirements during due diligence*
b) *Supervising projects in the portfolio to ensure ongoing compliance with the Applicable Requirements*
c) *Preparing an annual environmental performance report based on the annual performance report submitted by the Borrower/Customer companies.*

- *The Relationship Manager (or other designated officer) will ensure that these procedures are implemented for each project, and that records of environmental and social reviews are maintained.*
- *The Relationship Manager (or other designated officer) will ensure that all financing decisions are supported by appropriate due diligence documentation (including, but not limited to, an environmental and social section in each final Financing Memorandum).*
- *Legal Counsel will ensure that appropriate environmental and social representations, warranties, and covenants are incorporated in each loan agreement.*

2.5. Resources and Capabilities

- *The Credit Risk Officer will work with Management to ensure that adequate Bank/DFI resources have been committed to the effective implementation of the environmental policy and procedures of the Bank/DFI.*
- *The Relationship Manager (or other designated officer) should be technically qualified to perform due diligence or review work carried out by a consultant.*
- *The Relationship Manager will maintain a file of qualified environmental consultants who can be called upon to assist in conducting environmental reviews.*

2.6. Records to Be Maintained

- *Environmental and Social Due Diligence: This is the record of the Bank/DFI's E&S review of a project* *when considering it for financing*

- *E&S supervision records for projects*
- *Reports to be provided to Bank/DFI Management*

3. Annexures

3.1. Exclusion List

4. IFC Performance Standards

Available at IFC's Website

5. Implementing Environmental and Social Due Diligence (ESDD)

An ESDD is the record of the Bank/DFI's review of a project at the time of appraisal to ensure that a project is meeting (and is expected to continue to meet) or is expected to meet in future, the Applicable Requirements per the submitted action plan. An ESDD is based on all or some of the following:

- *Review of information in the public domain to check for any social/environmental controversies or news related to the project*
- *Review of the project including its environmental and social documents*
- *Discussions with project officials*
- *Site visit(s) and discussions held*
- *Some E&S knowledge will be required along with knowledge of the technical issues in the project's industrial sector; this may require the use of an external consultant if the project is large and complex.*
- *Industry sector-wise E&S information is available at the following locations:*
  - IFC Sector Guidelines

6. Suggested ESDD Report Outline

Cover the following issues as applicable:

- *Background: project description, site and environment setting, and land requirement*
- *Compliance with Applicable Requirements: Exclusion List, national and provincial regulatory requirements, and IFC Performance Standards, if required*
- *Environment issues: air pollution, water pollution, solid and hazardous wastes, noise, site safety and community health, chemical hazards, and emergency management*
- *Resources utilisation: water, construction material, and others*
- *Sensitive receptors: local human settlements, local ecologically sensitive areas, and sites of cultural importance*
- *Social issues: land acquisition, rehabilitation, and resettlement, indigenous peoples, impact on local livelihood, and public opinion and consultation*
- *Labour relations: no child or forced labour and compliance with national labour laws*
- *Project consultation and local disclosure*
- *Other project-specific issues*
- *Environmental and social management system or corrective action plan*
- *Summary and recommendations*
- *Financing covenants and conditions*

Annex L: List of Relevant National and Provincial Regulations and International Treaties

The following information is meant to be information and guidance for banks/DFIs to familiarize themselves with environmental laws and processes. Banks/DFIs are advised to update this information, from time to time, extracting information from applicable websites, the SBP, government departments/agencies, and other reliable sources. Laws, procedures, and implementation practices may change from one province and/or region to another. Therefore, it is recommended that banks/DFIs advise their local staff accordingly.

The Pakistan Environmental Protection Act of 1997 (PEPA, 1997) was the leading national law pertaining to environmental protection before the Constitution (18th Amendment) Bill, 2010. Under this Act, the Pakistan Environmental Protection Agency (EPA) was established and has issued rules, regulations, standards, and guidelines for protection of the environment. Its key regulations include the National Environmental Quality Standards (NEQSs) and Initial Environmental Examination (IEE) and EIA regulations. However, the Eighteenth Amendment abolished the Concurrent Legislative List of the Constitution, 1973, resulting in the transfer of “environmental pollution and ecology” into the legislative domain of the Provincial Assemblies. The Parliament now has legislative powers on matters specifically mentioned in the Federal Legislative List and also matters pertaining to areas that are not included in any province within the Federation (for example, Islamabad Capital Territory, Federally Administered Tribal Areas). Further, the Federal EPA will continue to exercise its powers bestowed to it under the PEPA, 1997 in respect of projects of the Armed Forces of Pakistan or projects having transitional and inter-provincial adverse environmental effects. In addition, projects/facilities related to any of the following that are specifically mentioned as Federal subjects in the Federal Legislative List will continue to be covered by the Federal EPA:

- Cantonment areas and authorities
- Telephones, wireless, broadcasting, and other communications infrastructure
- Nuclear energy production and infrastructure
- Facilities for carriage of passengers and goods by sea or by air
- Import and export (inter-provincial trade and commerce and trade and commerce with foreign countries)
- National highways and strategic roads
- Aircraft and air navigation facilities and infrastructure
- Port quarantine, seamen’s and marine hospitals and hospitals connected with port quarantine
- Railways
- Mineral oil and natural gas production and distribution facilities and infrastructure
- Production of dangerously inflammable liquids and substances
- Electricity generation, production, and distribution infrastructure and facilities
- Major ports and port authorities

Under the 18th Amendment, all laws, rules, and notifications with respect to matters enumerated in the repealed Concurrent Legislative List, which were in force before the commencement of the 18th Amendment, shall continue to remain in force until altered, repealed, or amended through appropriate legislature in case of laws and by the competent authority vested with such legal powers in case of notifications and rules. Further, Article 143 of the Constitution, as amended by the 18th Amendment, states that if the provision of a Provincial Act is repugnant to any provision of a Federal Act that the

Parliament is competent to enact, the Federal Act shall prevail and the Provincial Act shall, to the extent of the repugnancy, be void. This implies that no Provincial Assembly can enact a law that is repugnant to any provision of the PEPA, 1997.

After the 18th Amendment, Provincial Assemblies have enacted their own Environmental Protection Acts. The Sindh EPA has also issued its own IEE and EIA regulations. Other provincial environmental protection agencies are developing their own environmental regulations, standards, and rules. In the meantime, these agencies are using the Federal EPA's rules, regulations, and standards.

The Rules and Regulations of the Federal Environmental Protection Agency

The rules and regulations of the Federal EPA relevant for banks/DFIs include the following:

- PEPA (Review of IEE and EIA) Regulations, 2000
- National Environmental Quality Standards (Self-Monitoring and Reporting by Industry) Rules, 2001
- National Environmental Quality Standards (Certification of Environmental Laboratories) Regulations, 2000
- Environmental Tribunal Rules, 1999 (notified on 18th March 2000)
- Environmental Tribunals (Procedures and Functions) Rules, 2008
- Environmental Samples Rules, 2001
- Pollution Charge for Industry (Calculation and Collection) Rules, 2001
- Provincial Sustainable Development Fund Board (Procedures) Rules, 2001
- Provincial Sustainable Development Fund (Utilization) Rules, 2003
- Pakistan Biosafety Rules, 2005
- Hospital Waste Management Rules, 2005
- Hazardous Substances Rules, 2003 (draft)
- IEE and EIA Penalty Rules, 2011 (draft)
- Handling, Manufacture, Storage, Import of Hazardous Waste and Hazardous Substances Rules, 2016
- Pakistan Environmental Protection Motor Vehicle Regulations, 2016

The Federal EPA has, in exercising powers bestowed to it under section 12 of the PEPA, 1997, issued IEE and EIA Regulations, 2000. The purpose of the environmental assessment process is to provide proponents, decision makers, as well as members of the public, with an understanding of the environmental effects to avoid or minimise adverse effects wherever possible, bearing in mind the costs and benefits of using the environmental resources in the proposed project. The approval of an IEE/EIA may have conditions attached to it. In this case, the proponent has to develop an Environmental Management Plan, which specifies the measures and procedures to be taken to mitigate these identified impacts. Environmental assessments need to be integrated at the right time in the project cycle. The IEE should start at pre-feasibility or no later than the beginning of the feasibility stage, whereas the EIA should begin with the feasibility study and the findings of the environmental assessment must feed into the results of other parameters of the feasibility stage, such as economic, technical, and financial studies.

The categories of activities for which an IEE or EIA is required are given in the table below:

List of Projects Requiring an IEE	List of Projects Requiring an EIA
A. Agriculture, Livestock, and Fisheries 1. Poultry farms with total cost of less than PKR. 5 million 2. Dairy farms and slaughterhouses with total cost of PKR.10 million to 25 million 3. Tube well constructions for agriculture/irrigation purposes with total cost of PKR.20 million 4. Construction of silos 5. Fish farms above one acre 6. Livestock and stud farms with total cost of PKR.10 million to 25 million **B. Energy** 1. Hydroelectric power generation less than 50 megawatts (MW) 2. Combining cycle power plants (both oil and natural gas fired) less than 50 MW 3. Transmission lines less than 11 kilovolt (kV), and large distribution projects 4. Oil and gas transmission systems **5.** Oil and gas extraction projects including exploration, production, gathering systems, separation, and storage **6.** Waste-to-energy generation projects **7.** Wind power plants of up to 50 MW **8.** Gas fired power plant up to 50 MW **9.** Oil and gas 2-D seismic survey **10.** Coal fuel power plants of less than 1 MW **C. Manufacturing and Processing** **1.** Ceramics and glass units with total cost of up to PKR.50 million **2.** Food processing industries, including sugar mills, beverages, milk, and dairy products, with total cost of less than PKR.100 million **3.** Man-made fibre and resin projects with total cost of less than PKR.100 million 4. Manufacturing of apparel, including dyeing and printing, with total cost of more than PKR.25 million 5. Wood products with total cost of more than PKR.25 million 6. Marble units with total cost of more than PKR.50 million 7. Flour mills, rice mills, ghee/oil mills, pharmaceutical units, cotton ginning mills, lime kilns, ice factories, and cold storages with total cost of less than PKR.100 million	**A. Energy** 1. Hydroelectric power generation over 50 MW 2. Thermal power generation over 50 MW 3. Transmission lines (11 kV and above) and grid stations 4. Nuclear power plants 5. Petroleum refineries 6. Wind power plants more than 50 MW 7. Combine cycle power plants (both oil and natural gas fired) over 50 MW 8. Gas fired power plant over 50 MW 9. Grid stations 10. Coal fired power plants of 1 MW and liquefied natural gas and liquefied petroleum gas storage facilities **B. Manufacturing and Processing** 1. Cement plants 2. Chemical projects 3. Fertiliser plants 4. Food processing industries, including sugar mills, beverages, milk, and dairy products, with total cost of PKR.100 million and above **5.** Industrial estates (including export processing zones) **6.** Man-made fibre and resin projects with total cost of PKR.100 million and above **7.** Pesticides (manufacturing or formulation) **8.** Petrochemical complex **9.** Synthetic resin, plastic, man-made fibre, paper and paperboard, paper pulping, plastic product, textile (except apparel), printing and publishing, paint and dye, oil and fat, and vegetable ghee projects, with total cost of more than PKR.10 million **10.** Tanning and leather finishing projects **C. Mining and Mineral Processing** 1. Mining and processing of coal, gold, copper, sulphur, and precious stones 2. Mining and processing of major non-ferrous metals, iron, and steel rolling 3. Smelting plants with total cost of PKR.100 million and above

List of Projects Requiring an IEE	List of Projects Requiring an EIA
D. Mining and Mineral Processing 1. Commercial extraction of sand, gravel, limestone, clay, sulphur, and other minerals not included in Schedule II with total cost of less than PKR.100 million 2. Crushing, grinding, and separation processes 3. Smelting plants with total cost of less than PKR.50 million **E. Transport** 1. Federal or provincial highways (except maintenance, rebuilding, or reconstruction of existing metalled roads) with total cost of less than PKR.100 million 2. Ports and harbour development for ships less than 500 gross tons 3. Construction and expansion of bus terminals/ railways platforms with total cost of less than PKR.50 million **F. Water Management, Dams, Irrigation, and Flood Protection** 1. Dams and reservoirs with storage volume less than 50 million cubic metres or surface area of less than 8 square kilometres 2. Irrigation and drainage projects serving less than 15,000 hectares 3. Small-scale irrigation systems with total cost of less than PKR.100 million **G. Water Supply and Treatment** 1. Water supply schemes and treatment plants 2. with total cost of less than PKR.200 million **H. Waste Disposal** 1. Waste disposal facility for domestic or industrial 2. wastes, with annual capacity of less than 3. 10,000 cubic metres **I. Construction, Urban Development, and Tourism Projects** 1. Housing schemes 2. Public facilities with significant off-site impacts (for example, hospital wastes) 3. Urban development projects 4. Commercial/office high-rise buildings of 7 to 15 storeys excluding basement 5. Residential/high-rise apartments of 7 to 15 storeys excluding basement 6. Development of parks, playgrounds, and clubs with total cost less than PKR.100 million	**D. Transport** 1. Airports 2. Federal or provincial highways or major roads (except maintenance, re-building, or reconstruction of existing roads) with total cost of PKR.100 million and above 3. Ports and harbour development for ships of 500 gross tons and above 4. Railway works 5. Construction and expansion of bus terminals/ railways platforms, including construction/ rehabilitation of berths/jetties/sea port terminals with total cost of PKR.50 million and above **E. Water Management, Dams, Irrigation, and Flood Protection** 1. Dams and reservoirs with storage volume of 50 million cubic metres and above or surface area of 8 square kilometres and above 2. Irrigation and drainage projects serving 15,000 hectares and above **F. Water Supply and Treatment** 1. Water supply schemes and treatment plants with total cost of PKR.100 million and above **G. Waste Disposal** 1. Waste disposal and/or storage of hazardous or toxic wastes (including landfill sites and incineration of hospital toxic waste) 2. Waste disposal facilities for domestic or industrial wastes, with annual capacity of more than 10,000 cubic metres **H. Construction, Urban Development, and Tourism Projects** 1. Land use studies and urban plans (large cities) 2. Large-scale tourism development projects with total cost of more than PKR.50 million 3. Commercial/official high-rise buildings of 7 to 15 storeys and above (excluding basements), depending on location if such buildings exist in clusters 4. Residential/commercial high-rise apartments of 7 to 15 storeys and above (excluding basements), depending on location if such apartments exist in clusters

List of Projects Requiring an IEE	List of Projects Requiring an EIA
7. Internal urban road construction (except rehabilitation/improvement of existing road with same alignments) and street light development with total cost of less than PKR.100 million 8. Hospitals and pathological laboratories 9. Construction of under passes, flyovers, and main fruit/vegetable markets in the city **J. Other projects** 1. Any other project for which filing of an IEE is required by the Federal Agency under sub-rule (2) of Rules 5	5. Development of parks, playgrounds, and clubs with total cost of PKR.100 million and above 6. Internal urban road construction (except rehabilitation/improvement of existing road with same alignments) and streetlight development with total cost of PKR.100 million and above 7. Development of islands and creation of artificial islands **I. Environmentally Sensitive Areas** 1. All projects situated in environmentally sensitive areas **J. Other Projects** 1. Any other project for which filing of an EIA is required by the Federal Agency under sub-rule (2) of Rules 5 2. Any other project likely to cause an adverse environmental effect

The National Environmental Quality Standards (NEQSs), issued in 1993, are national standards of pollution levels by industries. The standards are measured and monitored and must not be exceeded. The NEQSs classify industries on the basis of their pollution levels. Industries with liquid effluents are classified into three categories (A, B, or C), while industries with gaseous emissions are classified into two categories (A or B). The NEQSs were amended in 2000, 2009, and 2010.

Classification of Industrial Units for Liquid Effluents as per NEQSs	Classification of Industrial Units for Gaseous Emissions as per NEQSs
Category A 1. Chlor-alkali (mercury cell) 2. Chlor-alkali (diaphragm cell) 3. Metal finishing and electroplating 4. Nitrogenous fertiliser 5. Phosphate fertiliser 6. Pulp and paper 7. Pesticide formulation 8. Petroleum, refining 9. Steel industry 10. Synthetic fibre 11. Tanning and leather finishing 12. Textile processing 13. Pigments and dye 14. Thermal power plants (oil and coal fired) 15. Rubber products 16. Paints, varnishes, and lacquers 17. Pesticides 18. Printing 19. Industrial chemicals 20. Oil and gas production 21. Petrochemicals 22. Combined effluent treatment 23. Any other industry specified by a Federal or Provincial Agency **Category B** 1. Dairy industry 2. Fruit and vegetable processing 3. Glass manufacturing 4. Sugar 5. Detergent 6. Photographic 7. Glue manufacturing 8. Oil and gas exploration 9. Thermal power plans (gas fired) 10. Vegetable and ghee mills 11. Woollen mills 12. Plastic materials and products 13. Wood and cork products 14. Any other industry specified by a Federal or Provincial Agency **Category C** 1. Pharmaceutical (formulation) industry 2. Marble crushing 3. Cement 4. Any other industry specified by a Federal or Provincial Agency	**Category A** 1. Cement 2. Glass manufacturing 3. Iron and steel 4. Nitrogenous fertiliser 5. Phosphate fertiliser 6. Oil and gas production 7. Petroleum refining 8. Pulp and paper 9. Thermal power plants (coal and oil based) 10. Boilers, ovens, furnaces, and kilns (coal and oil fired) 11. Brick kilns (firewood and bagasse based) 12. Any other industry specified by a Federal or Provincial Agency **Category B** 1. Sugar 2. Textile 3. Chloralkaline plants 4. Dairy industry 5. Fruits and vegetables 6. Metal finishing and electroplating 7. Boilers, ovens, furnaces, and kilns (gas fired) 8. Any other industry specified by a Federal or Provincial Agency

The NEQSs apply to all industries, which may lead to the situation where no IEE/EIA but an Environmental Monitoring Report has to be filed. If an IEE or EIA exists, the rules are in addition to and not derogative of the monitoring conditions spelled out in the IEE/EIA approval. The objective of the NEQSs is to combat pollution where it is generated, that is, at the level of the industry. Section 12 of the PEPA, 1997 requires all projects (both existing and new) to follow the NEQSs. As no IEE or EIA can be requested for established industrial units, the NEQSs automatically become applicable requirements for existing projects. The Federal EPA has shifted the responsibilities of compliance with the NEQSs to the industrial units through the establishment of a self-monitoring and reporting programme (SMART) in 2006. To ensure that the measurements taken are correct, certified laboratories have been established.

In exercise of powers bestowed under Section 20 of the PEPA, 1997, the Ministry of Law and Justice has constituted tribunals at Karachi and Lahore.

Provincial Environmental Acts

After the 18th Constitutional Amendment, the following provincial environmental acts are now in effect:

- Sindh Environmental Protection Act, 2014
- Punjab Environmental Protection (Amendment) Act, 2017
- Balochistan Environmental Protection Act, 2012
- Khyber Pakhtunkhwa Environmental Protection Act, 2014
- Gilgit Baltistan Environmental Protection Act, 2015

Each provincial act defines requirements for environmental assessment and due diligence within public and private sector investments and operations. Sections and schedules relating to assessments and due diligence are relevant to banks/DFIs conducting environmental and social due diligence.

Sectoral Guidelines of the Federal Environmental Protection Agency

In addition to the above rules and regulations, the Federal and Provincial EPAs have issued Sectoral Guidelines to assist the industry in identifying key environmental issues that need to be assessed as well as mitigation measures and alternatives that should be considered. For banks/DFIs, these Guidelines provide useful information on the process of developing an IEE/EIA in these sectors. Below is a list of Sectoral Guidelines available on the website of the Federal EPA:

National Sectoral Guidelines

- Sectoral Guidelines for Environmental Reports, Major Thermal Power Stations
- Sectoral Guidelines for Environmental Reports, Major Chemical & Manufacturing Plants
- Sectoral Guidelines for Environmental Reports, Housing States & New Town Development
- Sectoral Guidelines for Environmental Reports, Industrial States
- Sectoral Guidelines for Environmental Reports, Major Roads Guidelines
- Sectoral Guidelines for Environmental Reports, Sewage Schemes
- Sectoral Guidelines for Environmental Reports, Oil & Gas Exploration and Production
- Guidelines for Environmental Reports – Wind Power Projects (Draft)
- Guidelines for Using Tire Derived Fuel (TDF) in Pakistan Cement Industry (PDF-101 KB)
- Guidelines for Using Refuse Derived Fuel (RDF) in Pakistan Cement Industry

Environmental Guidelines and Checklists by Khyber Pakhtunkhwa EPA

- Brick Kiln Units
- Construction or Expansion of Bus Terminals
- Carpet Manufacturing Units
- Canal Cleaning
- Flour Mills
- Forest Harvesting Operations
- Forest Road Constructions
- Housing Schemes
- Marble Units
- Petrol and Compressed Natural Gas Stations
- Poultry Farms
- Rural Schools and Basic Health Units
- Sanitation Schemes
- Sound Plantations
- Stone Crushing Units
- Tourist Facilities in Ecologically Sensitive Areas
- Tube-Well Construction for Agriculture and Irrigation Purposes
- Urban Areas Road Construction
- Watercourses Construction and Lining
- Water Reservoirs in Arid Zones
- Water Supply Schemes
- Solid Waste Management (Draft)

Environmental Guidelines and Checklists by Balochistan EPA

- Dairy Farms and Slaughterhouses (PDF-100KB)
- Draft Sectoral Guidelines and Upstream Petroleum Sector-Onshore

Trade-Related Laws and Regulations

Section 13 of the PEPA, 1997 prohibits import of hazardous waste into Pakistan and its territorial waters, exclusive economic zones, and historic waters. Further, Section 14 of the PEPA, 1997 provides that no person shall generate, collect, consign, transport, treat, dispose of, store, handle or import any hazardous substance except under a licence or in accordance with the provisions of any other law or any international treaty to which Pakistan is a party. The Federal Government has established rules for handling, manufacturing, storage, import of hazardous waste and hazardous substances, which, inter-alia, also provides a list of prescribed Hazardous Substances. Imports that are not covered by a specific guideline must carry an environmental certificate of no-obligation from the country of origin stating that the imported substance is classified non-hazardous and signed by a designated national authority.

As imports and exports are present in the Federal Legislative List, the Federal Government is expected to retain control of jurisdiction on the import of hazardous substances/waste. Trade is governed by the

Trade Policy issued by the Ministry of Commerce. When opening a letter of credit, the trade operations department of banks/DFIs should check whether the commodity is eligible for import/export.

Vehicle Emissions

Section 15 of the PEPA, 1997 provides that no person shall operate a motor vehicle from which air pollutants or noise are being emitted in an amount, concentration, or level that exceeds the Standards established under the Act. The Federal Government has established the Pakistan Environmental Protection Motor Vehicle Regulations, 2016, which are applicable within the jurisdiction of the Federal Government, as explained above. It is understood that Provincial EPAs may also enact similar rules and regulations.

The import of motor vehicles is guided by the NEQSs for Motor Vehicles Exhaust and Noise, 2009.

Social Laws and Regulations

1. Pakistan Labour Law

   https://www.ilo.org/ifpdial/information-resources/national-labour-law-profiles/WCMS_158916/lang--en/index.htm

2. The Sindh Occupational Safety and Health Act, 2017

   http://sindhlaws.gov.pk/setup/publications_SindhCode/PUB-NEW-19-000060.pdf

3. Protection Against Harassment of Women at the Workplace Act, 2010

   https://qau.edu.pk/pdfs/ha.pdf

4. Pakistan Factories Act, 1934

   https://www.ilo.org/dyn/natlex/docs/WEBTEXT/35384/64903/E97PAK01.htm

5. Pakistan Land Acquisition Act, 1894

   https://www.sja.gos.pk/assets/BareActs/LAND%20ACQUISITION%20ACT,%201894.pdf

6. The following acts aim to prevent child labour in provinces:
   - Punjab Restriction on Employment of Children Act, 2016
   - Khyber Pakhtunkhwa Prohibition of Employment of Children Act, 2015
   - Balochistan Employment of Children (Prohibition & Regulation) Act, 2021
   - Sindh Prohibition of Employment of Children Act, 2017
   - Gilgit Baltistan Child Protection and Welfare Act, 2013
7. The following acts are related to workers' compensation:
   - Punjab Workmen's Compensation (Amendment) Act, 2013
   - Khyber Pakhtunkhwa Worker's Compensation Act, 2013
   - Sindh Workers Compensation Act, 2016
   - Balochistan: The Workmen's Compensation Act, 1923
8. The following acts are related to factories:
   - Sindh Factories Act, 2015
   - Khyber Pakhtunkhwa Factories Act, 2013
   - Balochistan Factories Act, 2021
   - Punjab Factories (Amendment) Act, 2012

Annex M: Green Banking Monitoring and Evaluation Reporting Template for Banks and DFIs – Key Performance Indicators

Aspect	Indicator		Evaluation				High-level Summary and Reference(s)	Qualitative/ Quantitative	Reference
			Yes	In Progress/ Partially Yes	No	Not Applicable			Green Banking Guidelines
1. Responsibilities, Management and Organization	1.1 Responsibilities of the Board of Directors (BoD)	The BoD has overall responsibility of green banking oversight and is responsible for developing ESRM Policy and Procedures.						Qualitative	GBG – 2.1 Board of Directors
	1.2 Responsibilities of Senior Management	Senior Management is responsible for developing strategies, administrative procedures, and accountability mechanisms for the implementation of the Green Banking Policy.						Qualitative	GBG – 2.2 Management – ii. Green Strategies with Monitoring and Supervision
	1.3 Dedicated Green Banking Office and Official	1.3.1 A senior level officer (i.e., Group Head) is assigned as Chief Green Banking Manager to manage and supervise the activities of a Green Banking Office (GBO), which should have at least one full-time staff.						Qualitative	GBG – 2.3 Organization – i. Green Banking Office
		1.3.2 The Bank/DFI has assigned one or more Dedicated Officials within the existing Risk Management Department, who have expertise in environmental, social, and climate-related risk assessment and management. At least one dedicated official of the GBO has a vote in the Credit Risk Committee of the Bank/DFI.						Qualitative	GBG – 2.3 Organization – ii. Institutional Arrangements -Environmental Risk Management

Aspect	Indicator		Evaluation				High-level Summary and Reference(s)	Qualitative/ Quantitative	Reference
			Yes	In Progress/ Partially Yes	No	Not Applicable			Green Banking Guidelines
2. Policy & Strategy	2.1 Green Banking Policy	The Bank/DFI's Green Banking Policy includes strategic references on the role of the institution in the transformation towards a low carbon and climate resilient economy. It specifically includes policy statements on: - its environmental, social, and climate-related risk assessment, weighting, and management processes (E&S Risk Management) - its positioning towards green credits and investments (Green Business Facilitation) - its activeness towards resource efficient operations (Own Impact Reduction).						Qualitative	GBG – 2.1 Board of Directors – ii. GBG – 3.2 Environmental Risk Management General Guidelines GBG – 4.1 Green Business Facilitation General Guidelines – 1. The Green Business Facilitation Policy and Strategy GBG – 5.1 Own Impact Reduction General Guidelines – 1. Own Impact Reduction Policy and Strategy
	2.2 Green Banking Strategy	2.2.1 The Bank/DFI has developed its green banking strategies, covering: - environmental, social, and climate-related risk management - green business facilitation - own impact reduction.						Qualitative	GBG – 2.2 Management – ii. Green Strategies with Monitoring and Supervision GBG – 4.1 Green Business Facilitation General Guidelines – 1. The Green Business Facilitation Policy and Strategy GBG – 5.1 Own Impact Reduction General Guidelines – 1. Own Impact Reduction Policy and Strategy
		2.2.2 The Bank/DFI has assessed the impact of climate-related risks and opportunities on its businesses, strategy, and financial planning in short, medium, and long-term, and also assessed the resilience of its strategy.						Qualitative	

Aspect	Indicator		Evaluation				High-level Summary and Reference(s)	Qualitative/ Quantitative	Reference
			Yes	In Progress/ Partially Yes	No	Not Applicable			Green Banking Guidelines
3. Environmental, Social, and Climate-Related Risk Management	3.1 Environmental & Social Risk Management Procedures	The Bank/DFI has developed Environmental, Social, and Climate-Related Risk Management Procedures that are: - integrated into the Bank/DFI's credit risk assessment procedures - applicable for all new financing starting from the issuance of this manual - applicable for all financing proposals falling under applicable sectors - customised to reflect the different sizes, types, and nature of the business sectors and transactions.						Qualitative	GBG – 3.3 Environmental Risk Management Systems
	3.2 Initial Screening	The Bank/DFI has an Environmental, Social, and Climate-Related Exclusion List to ensure no investment in specific activities/businesses prohibited under relevant laws and/or regulations.						Qualitative	GBG – 3.3.1 Environmental Avoidance List
	3.3 Due Diligence	The Bank/DFI has developed standardised Environmental, Social, and Climate-Related Risk Due Diligence Checklist(s) and Sector-Specific Guidelines customised for different industrial sectors and different types of financing projects.						Qualitative	GBG – 3.3.2.1 Environmental Due Diligence
	3.4 Risk Categorisation/ Rating System	The Bank/DFI has developed an Environmental, Social, and Climate-Related Risk Categorisation/ Rating System to categorise financing projects. The due diligence findings and risk categorisation/ rating results are incorporated into the credit approval procedures, serving as important criteria in disbursement of loans and risk management post disbursement.						Qualitative	GBG – 3.3.2.2 Environmental Risk Characterization/Rating
	3.5 Monitoring and Control	The Bank/DFI applies Escalation Matrix, Environmental and Social Improvement Plan, and Environmental, Social, and Climate-Related Risk Covenants to monitor and control the environmental, social, and climate-related risk throughout the lifecycle of financing projects.						Qualitative	GBG – 3.3.2.3 Monitoring & Control

Aspect	Indicator		Evaluation				High-level Summary and Reference(s)	Qualitative/ Quantitative	Reference
			Yes	In Progress/ Partially Yes	No	Not Applicable			Green Banking Guidelines
4. Green Business Facilitation	4.1 Green Financing Products	The Bank/DFI has developed green banking financing products (assets and liability side products).						Qualitative	GBG – 4.1 The Green Business Facilitation General Guidelines – 2. Green Product Development
	4.2 Advisory Services and Marketing Strategy	The Bank/DFI has established its Green Advisory Services and incorporated green marketing aspects in its marketing strategy.						Qualitative	GBG – 4.1 The Green Business Facilitation General Guidelines – 3. Green Advisory Service
5. Own Impact Reduction	5.1 Baseline Scenario	The Bank/DFI has developed a baseline scenario of resource consumption for its branches and offices.						Qualitative	GBG – 5.1 Own Impact Reduction General Guidelines – 2. Impact Reduction Targets
	5.2 Impact Reduction	The Bank/DFI has set impact reduction targets at the Group level and assigned them to its branches and offices. Targets include but are not limited to: - energy and other resource consumption - GHG emissions.						Qualitative	GBG – 5.1 Own Impact Reduction General Guidelines – 2. Impact Reduction Targets
	5.3 Green Branches and automated teller machines (ATMs)	The Bank/DFI has designated some of its branches as green branches and converted some of its ATMs to renewable energy sources.						Qualitative	GBG – 5.1 Own Impact Reduction General Guidelines – 3. Green Branches/Offices
6. Data Collection and Management	6.1 Green Banking Data Collection and Management	The Bank/DFI has established a system for data collection and generation of meaningful statistics on green banking. Data to collect or generate include but are not limited to: - Value of loans screened against improved E&S regulation/policies/principles/standards - Share of loans screened against improved E&S regulation/policies/principles/standards.						Qualitative	GBG – 2.2 Management – iii. Data Management and Reporting GBG – 3.3.2.4 Reporting & Documentation

Aspect	Indicator		Evaluation				High-level Summary and Reference(s)	Qualitative/ Quantitative	Reference
			Yes	In Progress/ Partially Yes	No	Not Applicable			Green Banking Guidelines
7. Audit and Compliance	7.1 Internal Audit and Compliance	The green banking activities are incorporated into the scope of compliance and internal controls as well as subject to internal audits.						Qualitative	GBG – 2.2 Management – vi. Audit & Compliance
8. Capacity Building	8.1 Environmental, Social, and Climate-Related Training Programmes	The Bank/DFI has developed environmental, social, and climate-related training programmes to strengthen employees' capacity in green banking, including environmental, social, and climate-related risk management, green business facilitation, and own impact reduction.						Qualitative	GBG – 2.2 Management – iv. Internal Capacity Building
9. Information Disclosure	9.1 Green Banking Disclosure	The Bank/DFI has disclosed its green banking activities and initiatives in its annual reports.						Qualitative	GBG – 2.2 Management – viii. Information Disclosure
10. Performance and Targets	10.1 Value of loans screened against the ESRM Implementation Manual by the reporting banks/DFIs during the reporting period (PKR).							Quantitative	Aggregate impact indicators on ESRM implementation
	10.2 Share of loans screened against the ESRM Implementation Manual by the reporting banks/DFIs during the reporting period, as a percentage of total lending (%).							Quantitative	