



Concept Environmental and Social Review Summary

Concept Stage

(ESRS Concept Stage)

Date Prepared/Updated: 04/19/2023 | Report No: ESRSC03503



BASIC INFORMATION

A. Basic Project Data

Country	Region	Project ID	Parent Project ID (if any)
Malaysia	EAST ASIA AND PACIFIC	P177789	
Project Name	Malaysia HFC Phasedown - Stage I		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Environment, Natural Resources & the Blue Economy	Investment Project Financing	3/29/2024	7/12/2024
Borrower(s)	Implementing Agency(ies)		
	Department of Environment		

Proposed Development Objective

To support the Government of Malaysia's efforts to comply with its first HFC phasedown obligations.

Financing (in USD Million)	Amount
Total Project Cost	5.67

B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?

No

C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]

The project will serve as the vehicle for delivering needed investment, policy, and technical assistance interventions for achieving sustainable hydrofluorocarbon (HFC) consumption reductions in Malaysia and that concurrently promote growth of its economy and industry, development of its labor force and enhancement of climate mitigation action. As the first stage of a series of "Kigali implementation plans," that will support Malaysia to gradually eliminate HFCs up to 80% of its Montreal Protocol (MP) baseline by 2045, the project will focus on industry and stakeholder readiness while curbing demand in the MP sectors of fire suppression, commercial refrigeration, mobile air-conditioning and servicing. To sustainably reduce HFC demand in the latter three MP sectors, the project will incorporate cross-cutting activities that promote energy efficiency improvement and increased climate benefits, in line with the Kigali Amendment Decision XXVIII/2. In parallel, the project will assist the country to develop and



implement an HFC-tailored import/export quota allocation system that facilitates the control of HFC supply in accordance with principles of the Kigali Amendment and with Malaysia's HFC consumption freeze and 10% reduction obligations in 2024 and 2029 respectively.

The project will provide technical and financial assistance to eligible enterprises to reduce HFC demand and enable the country to meet its freeze and 10% reductions from the baseline in 2029. The proposed project will support the gradual transformation of the fire suppression industry to low Global Warming Potential (GWP) fire suppression agents in installed systems thereby replacing the highest GWP HFCs consistent with the Kigali Amendment. It will support a sector approach to commercial refrigeration manufacturing to sustainably convert all remaining users of HFC-134a to natural refrigerants. To increase climate benefits, the project will pursue standard and policy revisions that promote uptake of high energy efficient compressors in the sector. A pilot activity in automobile industry will promote the conversion from HFC-134a in one car model to HFO-1234yf, the technology of choice in major developed economies. Through the pilot, the entire sector and supply chain will be sensitized about the costs, challenges and opportunities of transitioning away from HFC-134a refrigerant.

Project Components

Component 1 – Investment in HFC Consumption Reductions

Component 1 will channel grant funding to three major HFC consuming industries in Malaysia. Conversion activities will range from complete HFC phaseout in stand-alone commercial refrigeration manufacturing to several activities that demonstrate or pilot safe and commercially viable alternatives for fire suppression and mobile air conditioning (MAC) systems. Selection of eligible enterprises is based on applying a compliance model to prioritize phasedown according to criteria aligned with Kigali Amendment objectives including use of high-GWP HFCs where commercially viable alternatives exist; where high-GWP HFCs are growing to the point that it might impact compliance later in Kigali implementation; and where there is a subsector grouping that facilitates government regulation for example with a subsector ban on HFCs used.

Subcomponent 1.1: Subsector-wide HFC reductions in commercial refrigeration manufacturing. An estimated 2-3 manufacturers of refrigerated display cabinets and freezers in Malaysia would be supported to replace the use of HFC-134a and HFC-404A as refrigerants with a low GWP substance.

Subcomponent 1.2: Piloting HFC conversion in mobile air conditioning (MAC) unit installation in a car manufacturing line. A Malaysian-owned car manufacturer will be supported to convert MAC units installed in new vehicles to a non-HFC refrigerant technology, HFO-1234yf. One automobile make and model will be targeted under the Project to introduce manufacturing with the HFC-134a alternative in Malaysia while monitoring the design changes, duration, technical challenges, and incremental cost changes required for dissemination among other manufacturers.

Subcomponent 1.3: Demonstrating alternative low-GWP technologies in the fire suppression sector. This component will demonstrate viable alternatives to HFC-based systems in several sensitive applications such as data centers and telecom installations. An estimated 3-5 fire suppression system providers will be supported to work with contractors and end-users to introduce low-GWP, safe and environmentally sound alternative systems for specific applications.

Component 2 – Support for Reducing HFC Demand in Servicing. The sectors responsible for servicing HFC-based equipment in commercial refrigeration and vehicles will be gradually sensitized on sound refrigerant management



and good practices to reduce wasteful use and emissions of HFC-134a and to minimize accidents when using flammable substitutes. New curriculum and training modules will be developed, and a training program initiated. Small equipment and tools will be provided to incentivize participation in the training.

Component 3 – Technical Assistance and Policy Support

This component will finance feasibility studies related to green procurement, recovery and recycling and mandatory MAC leak testing; training/course work for Customs and industry sectors on HFC monitoring and enforcement, and alternatives respectively; development of an inventory of installed HFCs in the fire suppression sector; 1-3 study tours for beneficiaries in the MAC, refrigeration and fire suppression sectors, and relevant government authorities; and, support for the establishment and convening of a public-private steering committee on HFO-1234yf developments in the MAC sector. The Project will finance the finalization of standard operating procedures or guidelines as well as online system and interface to facilitate a transparent and simplified approach to applying for, and processing quotas. A market survey of stand-alone commercial refrigeration equipment is proposed to determine refrigerants used and the average energy performance. The survey would be followed by recommendations for developing guidelines to including commercial refrigeration as one type of equipment with voluntary energy performance labeling.

Component 4 – Project Management

This component will support (a) the establishment and operations of a project management unit (PMU); (b) capacity building and support for project management, financial management, procurement, environmental and social management, and others as needed; (c) stakeholder engagement activities, including public awareness and outreach, inter-agency coordination and consultations, and the operation of a grievance redress mechanism (GRM); (d) support for annual consumption verification audits; and (e) project progress monitoring and reporting.

D. Environmental and Social Overview

D.1. Detailed project location(s) and salient physical characteristics relevant to the E&S assessment [geographic, environmental, social]

The project activities on the part related to technical assistance and policy support will be implemented at the national/sector level. Project support for investment in HFC consumption reductions under Component 1 will be undertaken at the existing manufacturing facilities of the participating enterprises, at which the Bank team had conducted initial site visits as part of its identification and technical missions. It is estimated that 2-3 manufacturers of refrigerated display cabinets and freezers in commercial refrigeration subsector would be supported by the Project which two manufacturers have already been identified. The selection process for enterprises is the result of modeling and prioritization exercise with criteria including: industry that is using high-GWP HFCs where commercially viable alternatives exist, where high-GWP HFCs is growing to the point that it might impact compliance later in Kigali implementation, and where there is a subsector grouping that makes it easier for the government to regulate with a subsector ban in use of the HFCs that will be replaced. One manufacturer is located in an industrial park in Kedah state, the northwestern part of Peninsular Malaysia approximately 70 km from Thai border. Factories in this industrial park are at Small-Medium-Enterprise (SME) scale. Another commercial manufacturer is located in an 400-acre industrial park in Negeri Sembilan state, approximately 30 km southeast of Putrajaya. This industrial park houses 200



factory lots. Both of the identified commercial manufacturers had experiences on successful conversion to cyclopentane under Malaysia HPMP.

For MAC, the Project will support a private Malaysian owned car manufacturer in piloting HFC conversion in MAC unit installation in a car manufacturing line. One car model that will be targeted under the Project is a small part of the larger and well-managed Car manufacturing plant. The company is certified on ISO standard for management systems of occupational health and safety (ISO 45001) and ISO standard for environmental management system (ISO 14001). There is no sensitive environmental receptor or protected area that could be significantly affected by the project activities since the conversion process and technical support will be conducted within the premises/sites of the individual commercial refrigeration manufacturers and Car manufacturing plant. No land acquisition will be required under the Project. For the case of the fire suppression sector, activities on demonstration of alternative low-GWP technologies will be carried out at existing facilities of system providers and end-user facilities including public and private buildings and installations.

D. 2. Borrower's Institutional Capacity

The Project will be implemented by a long-established Ozone Division with a dedicated National Ozone Unit (NOU) within the Department of Environment (DOE). The NOU, as an entity that has existed since the early 1990s due partly to its continued financing by the Multilateral Fund (MLF), has a solid record in implementing MP projects as well as MP-related rules and policies since the early days of the Montreal Protocol. In 1995, the Government of Malaysia, through the Economic Planning Unit (EPU), entered into an umbrella grant agreement (GA) with the World Bank for an ozone-depleting substances (ODS) phaseout project (P004212) to support its strategy for phasing-out chlorofluorocarbons (CFCs), halon and other substances through the implementation of cost-effective priority investments. The GA was amended to incorporate Malaysia's National CFC Phaseout Plan for addressing the phaseout of all remaining consumption of Annex-A Group-I substances (CFCs) by 2010. The amendment also shifted some of the implementation responsibility from an intermediary (a non-profit research entity) to DOE.

DOE's Ozone Section is currently implementing the National Strategy and Action Plan for HCFC Phaseout between 2013 and 2030 which has been done in stages. DOE is completing its second stage HCFC Phaseout Management Plan (HPMP) implemented under UNDP, as an MLF Implementing Agency. It serves fully as a project management unit with the exception of project procurement and disbursement which are managed by UNDP's local office.

Despite the long experiences on MP projects, the NOU capacity for World Bank operations and project implementation including the ESF is currently low only because of a decade long hiatus of Malaysia-World Bank cooperation on MP project implementation. Since the closing of the ODS Phaseout Project, staffing has changed as have government rules on institutional arrangements for foreign-assisted projects. The current expertise within the NOU permanent and contracted staff are mainly related to environmental aspects. Additional staff/resources and capacity building to support ESF preparation and implementation of Malaysia HFC Phasedown – Stage I project will be required particularly on occupational health and safety aspects, stakeholder engagement and communication. During the project identification, the Bank ES specialists provided an introductory presentation on ESF and its relevance to the Project to the NOU. The NOU ES focal person also participated in the ESF training provided in Malaysia in February 2023, which was organized in partnership with PlanMalaysia.



II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC)

Moderate

Environmental Risk Rating

Moderate

The Project environmental risk is assessed to be moderate. The Project will provide investment support to a limited number of eligible enterprises in three sectors, including commercial refrigeration, MAC, and fire suppression sectors to convert and/or demonstrate conversion from HFCs to non-HFCs. Initial site visits to the potential facilities suggested that project activities will be undertaken within existing footprints of manufacturing facilities without area expansion. The environmental baseline in the project area is overall not sensitive or vulnerable since the enterprises are located in industrial facilities, away from environmentally sensitive, and residential areas. Overall, the Project will have positive impacts on the global environment and climate through reducing GHG emissions and improved energy efficiency. It is estimated that the proposed Project will result in an estimated 775 MT of HFCs eliminated and equivalent to annual avoided emissions of 3.31 m tons of CO2. Potential adverse risks and impacts on the environment are associated with the change of refrigerants from non-flammable to mildly flammable in case of MAC and fire suppressants, and highly flammable for commercial refrigeration alternatives. However, risks and impacts are assessed to be moderate because: (i) location sensitivity is low as the potential sites will be located in designated industrial areas, and away from residential and environmentally sensitive areas; and (ii) risks and impacts from use of flammable refrigerants are predictable, temporary/reversible, site-specific and can be mostly avoidance by following the safety protocols as per the Safety Data Sheet (SDS) and mitigated by adopting relevant Environmental Management and OHS protocols. In addition, the project interventions relating to flammable refrigerant is limited to 2-3 units. These units already use highly flammable substances for insulation purposes and hence not new to handling flammable substances. Project support to ensure safe conversion of technology have been included in the project design. The pilot conversion in MAC will replace HFC-134a (non-flammable) with HFO-1234yf which is mildly flammable. The potential enterprise has a well-established environmental and OHS management system and capacity and familiar with management of flammable materials. In addition, the project activities will be undertaken in facilities located away from residential areas. For fire suppression sector, 3-5 enterprises will be supported to demonstrate conversion of HFCs to other alternatives that are safe and environmentally sound. Project activities in commercial refrigeration subsector will be conducted at the existing facility of 2-3 enterprises that have experiences handling flammable materials and these units are located inside industrial parks. The subprojects will implement safe conversion from the use of HFC-134a and HFC-404A to a low GWP alternative (e.g. R-290). which could increase fire and OHS risks. The conversion in this subsector is limited to smaller units with low-refrigerant charge sizes that comply with international standards. The project investments will include support on R&D and design changes to accommodate HC refrigerant and HC-based components. It will focus on explosive proof equipment, new/customized refrigerant charging equipment, ventilation, storage area and piping modifications, safety measures and training. It is worth noting that although R-290 is flammable, there are set industry protocols and practices for gas handling, industry norms/specifications for safety equipment as well as management practices. Environment and OHS impacts associated with these risks are site-specific and can be mitigated by implementation of proper measures.

Social Risk Rating

Low

The social risk is considered low. Overall, the Project will positively impact the global environment and climate by reducing GHG emissions and improving energy efficiency. The Project will provide investment support to a limited

Public Disclosure



number of eligible and well-established enterprises in the commercial refrigeration sector in the country, including support to strengthening occupational health and safety systems and processes within these enterprises. Sub-grant agreement (SGA) will be signed with the enterprises with obligation to adhere to and implement ESMPs to mitigate any potential risk associated with OHS practices. Risk associated with cost increases is low. In the short to medium term, there will be an impact to cost of the equipment and systems that transition to HFC-alternatives and these costs are typically passed on to the end-user. However, for the sectors prioritized, the end-users are collectively and likely not individual consumers and vulnerable groups. It is also expected that the new technology will have lower leakage rates, reducing the frequency of servicing and cost associated. The Project is not expected to have direct or indirect impact on employment as a result of shifting to a new technology. Although NOU is a well-established unit within DOE, they will need support to conduct a robust stakeholder engagement with diverse stakeholders, including public institutions, companies, private sector associations, and civil society actors in the sector and climate change dialogues. Effective stakeholder engagement and communication will be needed for conversion and phase-out activities to raise awareness and present environmental benefits while balancing economic outcomes. The NOU has long experience and staff to support the implementation of MP projects and activities but does not have experience with WB ESF. Additional staff and training/capacity building would be required during the project preparation and implementation and will be included in the project design. No significant E&S risks are anticipated from the project TA activities i.e. the proposed two Feasibility The project will finance two feasibility studies (FS). The TAs themselves are expected to provide benefits on the environment and human population through the use of lower-GWP equipment and reduce leakage of HFC in use during maintenance and repair. The feasibility study on green public procurement will determine whether procurement by government agencies of low-GWP equipment and services is feasible for various applications including mass transportation, government buildings. This FS will also consider what can be done with existing, long-term maintenance contracts where the HFC in use cannot be substituted (for example, develop a recovery and recycling program to reuse HFCs within the fleet of equipment belonging to a particular government agency. The “mandatory MAC leak testing” feasibility study would examine the feasibility of extending the Government requirement that MACs of used passenger vehicles are inspected in relation to leakage when registering (including imported secondhand vehicles).

Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) Risk Rating

Low

Risk associated to SEA/SH is considered low. The Environmental and Social Management Plan (ESMP) with site-specific measures including appropriate emergency preparedness and response measures consistent with the ESF requirements and relevant requirements of World Bank Group's Environment, Health and Safety (EHS) Guidelines and minimum requirements related to Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) will be prepared, consulted up on and disclosed for each sub-project.

B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered

B.1. General Assessment

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

Overview of the relevance of the Standard for the Project:

This standard is relevant. Based on the Aide Memoire of all the previous project missions, early discussion with key stakeholders and site visits to the potential beneficiaries' sites, key adverse risks and impacts from the project activities are associated with investment support under Component 1 which the Project will channel grant funding to



enterprises in three major HFC consuming industries in Malaysia to reduce HFC consumption. The risks and impacts from the project activities stem from conversion to alternative technologies that would involve the use of low or lower GWP substances with higher flammability in the range of mildly flammable to highly flammable.

This may increase fire and exposure risks and occupational health and safety risks both during installation/conversion of production line/s and during operation and maintenance (O&M) phase. Conversion activities are expected to be undertaken in the boundary of existing manufacturing facilities located in industrial development setting without sensitive or vulnerable environmental resources and away from residential areas. Risks and impacts associated with the handling, storage and disposal of hazardous waste including retired servicing equipment and other waste from the project activities are expected to be minimal and will be managed through existing management system of the participating enterprises in compliance with Malaysian regulatory requirements. Impacts related to HFC disposal can be mitigated by proper servicing practices which the project will include TA on good practices and safe handling of refrigerants and equipment for servicing technicians. The eligible enterprise will need to have valid license or consent to operate from Malaysian environmental or OHS regulatory perspective. The risk and impact is assessed to be at a moderate scale, site-specific and can be mostly avoidance by following the safety protocols as per the Safety Data Sheet (SDS), and if necessary can be mitigated by adopting relevant Environmental Management and Occupational Health and Safety protocols.

The Environmental and Social Management Plan (ESMP) with site-specific measures including appropriate emergency preparedness and response measures consistent with the ESF requirements and relevant requirements of World Bank Group's Environment, Health and Safety (EHS) Guidelines and minimum requirements related to Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) will be prepared, consulted up on and disclosed for each sub-projects. The ESMP will include description of sub-project, impact assessment, mitigation measures and monitoring plan. It will be part of the sub-grant agreement to be followed by the recipient. For demonstration sub-project/s under fire suppression sector, it may be possible that not all enterprises are confirmed before appraisal. For those sub-projects that will be confirmed after appraisal (likely only 1-3 sub-projects), a site-specific ESMP will be prepared during implementation phase. This will follow a Generic ESMP or the Terms of Reference (TOR) for preparing ESMP that will be prepared prior to appraisal and included in the Project Operation Manual along with an exclusion list. The project investment support will include R&D, design changes including explosion proof equipment, safety measures, training and improvement of energy performance.

Areas where “Use of Borrower Framework” is being considered:

N/A

ESS10 Stakeholder Engagement and Information Disclosure

The standard is relevant. The NOU has done several rounds of consultation and information-sharing activities with selected industries, particularly those that will implement pilots for commercial refrigeration manufacturing, car manufacturing lines, and alternative technologies in the fire suppression sector. These consultation engagements have included site visits to the industries and technical presentations about the Project. NOU has also conducted inter-agency coordination and consultations in preparation for this Project.



NOU has a lot of publicly available information about its activities on its website. Most information related to this Project will also be included on its internet website, including any ESF-related documents. NOU website already includes an electronic Grievances and Complaints Mechanism (GRM) to manage any concerns from beneficiaries or the general public.

Component 4 of the Project will support stakeholder engagement activities, including public awareness and outreach, inter-agency coordination and consultations, and the operation of a grievance redress mechanism (GRM); Moving forward, NOU will need to develop an extended consultation and identification of key stakeholders from different sectors mainly to raise awareness about the Project and communicate the benefits of the Project's objectives. NOU will prepare a Stakeholder Engagement Plan (SEP) by appraisal and adapting its current GRM to the needs of the Project.

B.2. Specific Risks and Impacts

A brief description of the potential environmental and social risks and impacts relevant to the Project.

ESS2 Labor and Working Conditions

This standard is relevant. The Project will include direct and contracted workers mainly associated with NOU and those associated with enterprises. Most labor-related activities and requirements are regulated under Malaysia's Labor Code, including OHS practices in the public and private sectors. The key risks and impacts from project activities are related to moderate fire and OHS risks from project investment support for HFC consumption reduction. For the commercial refrigeration subsector, conversion from non-flammable refrigerants (HFC-134a and HFC-404A) to hydrocarbons (R-290) technology is flammable/highly flammable in 2-3 enterprises, could increase fire and OHS risks of the sub-project sites. Specific ESMP will be prepared for each one subproject.

The Kigali Amendment financing for HFC Phasedown will include support for ensuring the safety using other options and technologies. The project investments will focus on explosion-proof equipment, safety measures (such as a special refrigerant charging unit, leak testing equipment, monitoring equipment, and refrigerant storage), and training. The enterprises will be supported on R&D and design changes to accommodate HC refrigerant and HC-based components. For the fire suppression sector, the Project will support the demonstration of alternative low-GWP technologies that is safe and environmentally sound in several sensitive applications such as data centers and telecom installations. Similarly, piloting conversion in MAC installation that will replace non-flammable refrigerant (HFC-134a) to mildly flammable alternative (HFO-1234yf) will increase fire and OHS. In addition to the grants, the project will also provide training/course work/study tour procured by PIU to help with the operations of the enterprises. Component 2 will provide training to technicians for servicing HFC-based equipment and vehicles.

Site-specific ESMPs will assess and suggest measures required for managing the potential increase in fire and OHS risks from project activities in accordance with General EHSs and industry-specific EHSs where relevant. This will include assessing the enterprises' existing OHS management and emergency response procedures for protecting workers, training and reporting processes, and recommending additional measures if required. General labor management procedures (LMPs) will be included as part of the ESMP for project-specific activities and in the Operational Manual to guide the implementation of those activities based on national requirements and ESS2. A



standalone simple project specific LMP covering all project activities and include worker's GRM will also be prepared prior to project Appraisal. It will also include minimum requirements related to Sexual Exploitation and Abuse and Sexual Harassment (SEA/SH) and information related to labor complains and grievances mechanism that exist under the national Labor Code.

ESS3 Resource Efficiency and Pollution Prevention and Management

This standard is relevant. Overall, the Project is expected to provide benefits on GHGs emission reduction and improved energy efficiency. It is estimated that the Project will result in an estimated 775 MT of HFCs eliminated (equivalent to annual avoided emissions of 3.31 m tons of CO₂) and improved energy efficiency in the commercial refrigeration sector. Impacts related to HFC disposal can be mitigated by proper servicing practices. By the time that equipment and cars reach end-of-life, the HFCs have been leaked to the atmosphere. Proper servicing practices however can help mitigate this impact – recovering HFCs before repairing car MACs and commercial refrigeration and then recycling and reusing or recovering at end of life and storing for disposal. The project will have TA devoted to updating technician curricula and training a limited number of technicians to begin rolling out new training programs. For fire suppression, HFCs rarely have a chance to leak because there are strict rules about maintaining and testing systems. The project will also propose to have an inventory of HFCs in the sector so that later when virgin HFCs are banned, companies can reuse HFCs from old, decommissioned systems (and possibly trade among themselves). Component 3 – Technical Assistance and Policy Support of the Project would finance two feasibility studies that related to green procurement, recovery and recycling and mandatory MAC leak testing (which will reduce leak of refrigerants) and other capacity building activities. Other pollutions that would be generated during conversion/installation of conversion line and O&M phase include wastewater, solid waste are expected to be minimal and will be managed through existing management system of the participating enterprises in compliance with Malaysian regulatory requirements. A more detailed assessment will be included in each site-specific ESMP.

ESS4 Community Health and Safety

This standard is relevant. The Project will support the conversion to alternative technology in 2-3 manufacturers of refrigerated display cabinets and freezers in commercial refrigeration subsector and in a pilot MAC units installation of one car model.

Safe handling of refrigerant and equipment during maintenance and repair would be required given the increasing likelihood that equipment on the market will be charged with flammable substitutes. The project activities, under Component 2, will support trainings for servicing technicians on safe handling of refrigerant and equipment. These will include development of new curriculum and training modules and program, provision, on a limited basis, of small equipment and tools used to service MACs such as for recovering refrigerant during repair and recharge. The Project will also explore ways to increase information in the market about service providers who can safely and effectively service equipment to achieve optimal energy performance while avoiding emissions of HFCs or HC (for climate and safety reasons respectively).



ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

This standard is not relevant. The project will not support activities that may need land acquisition, land use restrictions or involuntary resettlements.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

This standard is not relevant. The project activities will be carried out in existing manufacturing facilities or end-users facilities for fire suppression demonstration sub-project. Adverse impact on biodiversity or living natural resources is not anticipated.

ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

The standard is not relevant.

ESS8 Cultural Heritage

This standard is not relevant. The project activities will be carried out in existing manufacturing facilities or end-users facilities for fire suppression demonstration sub-project. Adverse impact on cultural heritage is not anticipated.

ESS9 Financial Intermediaries

This standard is not relevant.

C. Legal Operational Policies that Apply

OP 7.50 Projects on International Waterways No

OP 7.60 Projects in Disputed Areas No

III. WORLD BANK ENVIRONMENTAL AND SOCIAL DUE DILIGENCE

A. Is a common approach being considered? No

Financing Partners

n/a

B. Proposed Measures, Actions and Timing (Borrower’s commitments)

Actions to be completed prior to Bank Board Approval:

To be undertaken, prepared, disclosed, and consulted prior to appraisal:



- Site-specific Environmental and Social Management Plan (ESMP) for each sub-project at the participating commercial refrigeration companies, MAC pilot project at a Car manufacturing company, and each participating fire suppression system provider, including Labor Management Procedures (LMP).
- A stand-alone simple project-specific LMP covering all project activities and included worker’s GRM.
- Stakeholder Engagement Plan (SEP), including a GRM.
- Environmental and Social Commitment Plan (ESCP) for the Project
- TOR for the preparation of site specific ESMP for demonstration subprojects under fire suppression sector (not identified by appraisal)

Possible issues to be addressed in the Borrower Environmental and Social Commitment Plan (ESCP):

- Preparation, disclosure, and consultation of site-specific ESMPs for each sub-project at the participating commercial refrigeration companies, MAC pilot project at a Car manufacturing company, and each participating fire suppression system provider;
- Preparation, disclosure, and consultation of site-specific ESMP/s for some fire suppression system provider/s that may participate during project implementation;
- No activity under any of demonstration subprojects under fire suppression sector (not identified by appraisal) will start unless site specific ESMP has been prepared for it per approved TOR/s;
- ESF capacity building for the implementing agencies and the participating enterprises;
- Inclusion of site-specific ESMP to be followed by grant recipients as part of the Sub-grant agreement (SGA);
- Allocation of adequate resources (human, including consultants and financial resources) for implementing risk management measures and monitoring; and
- Information and Communication campaign and outreach activities.

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C. Timing

Tentative target date for preparing the Appraisal Stage ESRS

01-Feb-2024

IV. CONTACT POINTS

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Borrower/Client/Recipient



Implementing Agency(ies)

Implementing Agency: Department of Environment

V. FOR MORE INFORMATION CONTACT

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VI. APPROVAL

Task Team Leader(s):	Mary-Ellen Foley, Waraporn Hirunwatsiri
Safeguards Advisor ESSA	Nina Chee (SAESSA) Cleared on 27-Apr-2023 at 09:04:21 EDT