Docusign Envelope ID: 640546E3-E793-4F2C-9B63-3A4B80748986

United Nations Development Programme

PROJECT DOCUMENT

Country: India

Project Title: Demonstrating Low Global Warming Potential (GWP) Alternatives to Hydrofluorocarbons (HFCs) funded by the Multilateral Fund for Implementation of the Montreal Protocol

Project Number: 01004654 (Voltas) and 01004655 (Rockwell)

Implementing Partner: UNDP

Start Date: 1 January 2024[1] **End Date:** 8 April 2027[2] **LPAC Meeting date:** 8 April 2025

Brief Description

The Montreal Protocol is an international environmental treaty for phasing out of production and consumption of substances that deplete the Stratospheric Ozone Layer. The Montreal Protocol has universal ratification.

As Party to the Montreal Protocol, India is mandated to phase-out substances controlled under the Montreal Protocol. The Multilateral Fund (MLF) is the financial mechanism of the Montreal Protocol, established under Article 10 of the Montreal Protocol. The MLF, through its Executive Committee (ExCom), provides funding in the form of grant to Parties operating under Article 5 of the Montreal Protocol (developing countries) for meeting the compliance obligations of the Montreal protocol. India, being an Article-5 Party, is entitled to receive funding from the MLF.

In the past, India has already successfully phased out the production and consumption of Chlorofluorocarbons (CFCs), Carbontetrachloride (CTC), Halons, Methyl Bromide and Methyl Chloroform, with the financial support from the MLF. Currently, the phase-out of production and consumption of Hydrochlorofluorocarbons (HCFCs) is being implemented as per the accelerated phase-out schedule of the Montreal Protocol vide decision vide XIX/6 of the 19th Meeting of the Parties (MOP) to the Montreal Protocol.

The Executive Committee (ExCom) of the MLF in its 93rd meeting held in December 2023 approved funding for the following two Hydrofluorocarbon (HFC) demonstration projects, to be implemented from 2024 to 2026.

a. Technology conversion to R-290 in two commercial refrigeration equipment manufacturing lines at Rockwell Industries limited and achieve of phase-out 21.91 MT of HFC-134a including technical assistance for enhancing energy efficiency resulting in net direct CO2-equivalent emission reductions of about 31,328 tons.
b. Technology conversion to R-32 in one manufacturing line of packaged air-conditioning and ducted air-conditioning units of varying cooling capacities at Voltas Limited and achieve phase out of 30.29 MT of R-407C and 4.63 MT of R-410A, resulting in net direct CO2-equivalent emission reductions of about 63,383 tons.

In view of the new issues being addressed in the Montreal Protocol for implementation of the Kigali Amendment, comprising energy efficiency disposal, etc, similar individual demonstration projects are

[1] Inclusive of PIP duration

[2] In alignment with the LPAC approval

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likely to be submitted from time to time, the implementation of which having specific deliverables, need to be completed in a time bound manner.

The implementation framework, project management and implementation modality, monitoring and evaluation, governance and management arrangements, risk and mitigation measures and legal context for the two HFC demonstration projects will be similar to HPMP Stage-III, which will also be applied to new individual demonstration projects approved by the ExCom of the MLF from time to time. DEA will be apprised of such project approvals including budget.

<table>
<tr><td>Total resources required:</td><td colspan="2">US$ 996,326</td></tr>
<tr><td rowspan="5">Total resources allocated:</td><td colspan="2">US$ 996,326</td></tr>
<tr><td>UNDP TRAC:</td><td>0</td></tr>
<tr><td>Donor: Multi-Lateral Fund (MLF):</td><td>US$ 996,326<table><tr><th>Project</th><th>Amount (US$)</th></tr><tr><td>HFC Project-Rockwell Industries (TC)</td><td>423,765</td></tr><tr><td>HFC Project-Rockwell Industries (TA)</td><td>150,000</td></tr><tr><td>HFC Project-Voltas Ltd (TC)</td><td>422,561</td></tr></table></td></tr>
<tr><td>Government:</td><td>0</td></tr>
<tr><td>In-Kind:</td><td>0</td></tr>
<tr><td>Unfunded:</td><td colspan="2">0</td></tr>
</table>

Agreed by (signatures)[3]:

UNDP
DocuSigned by: Isabelle Tschan D12F7DC81BD94DB... Isabelle Tschan Deputy Resident Representative and Officer-in-Charge, UNDP India
Date: 22-Jul-2025

[3]Note: Adjust signatures as needed

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I. DEVELOPMENT CHALLENGE

Background

India acceded to the Vienna Convention for the Protection of the Ozone Layer in March 1991 and ratified the Montreal Protocol on Substances that deplete the Ozone Layer in June 1992. The Multilateral Fund (MLF) for the Implementation of the Montreal Protocol established under Article 10 of the Montreal Protocol provides funds for meeting the compliance obligations for phase-out of Ozone Depleting Substances (ODSs) to parties operating under Article 5 (developing countries) of the Montreal protocol, including India.

The Empowered Steering Committee (ESC) constituted by the Ministry of Environment, Forest and Climate Change (MoEFCC), vide decision of the Union Cabinet no. 47/1/94 dated 27.1.94, is the apex body for all matters concerning the implementation of Montreal Protocol. A separate Ozone Cell was set up by the MoEFCC coordinates the implementation of the Montreal Protocol activities in India.

Need to demonstrate solutions for HFC conversion activities

India ratified the Kigali Amendment to the Montreal Protocol for phase down of Hydrofluorocarbons (HFCs) during September 2021 after approval of the Union Cabinet. As per the agreed phase-down of HFCs under the Kigali Amendment, India will have to complete its phase down the production and consumption of HFCs in 4 steps from 2032 onwards with reduction of 10% from the baseline of production and consumption in 2032, 20% in 2037, 30% in 2042 and 85% in 2047 respectively. The baseline constitutes the average of production and consumption of HFCs for the period 2024-2026 and the freeze applicable for India is 2028. Pursuant to the ratification, a National Strategy for the implementation of phase-down of HFCs, in consultation of Industry and other stake holders being developed is under finalisation.

Considering the size of Indian market and the multitude of sectors present in the country, it was felt that a few projects demonstrating transition from HFCs to low Global Warming Potential (GWP) would be useful as the experiences could be leveraged while implementing the HFC phase down plans starting from 2028 onwards, once the baseline and freeze for the country are established. The sectors to be addressed are refrigeration manufacturing and air-conditioning manufacturing, the two sectors in which currently high-GWP HFCs are used and technically proven low-GWP alternatives are available. Accordingly, the Ozone Cell, MoEFCC identified 2 large enterprises operating in the commercial refrigeration and air-conditioning sector for associating in the implementation of HFC projects. This is because large enterprises have the required competency and resources to implement such projects. The details of the 2 HFC demonstration projects approved by the ExCom in its 93rd meeting held in December 2023 are as follows:

(i) HFC project relating to conversion of the manufacturing of commercial refrigeration appliances at Rockwell Industries Limited from HFC-134a to propane (R-290) including technical assistance to enhance the energy efficiency of the converted equipment.

The project aims to (i) initiate the conversion activities out of the HFC-134a and signalized the market the needs to minimize penetration of high-GWP HFC technologies in the commercial refrigeration (CRM) sector (ii) to demonstrate a technology pathway for converting the CRM sector showing that the long-term use of R-290 is a sustainable and ready to use technology (iii) to demonstrate the practical actions to maintain and/or enhance energy efficiency that can be achieved through the proposed technology conversion. .

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(ii) HFC project relating to conversion from R-407C and R-410A to HFC-32 in the manufacturing of light commercial air-conditioning packaged and ducted air-conditioning units at Voltas Limited

The project aims to (i) to initiate the conversion activities for minimizing the penetration of high-GWP HFC refrigerants like R-407 C and R-410A in the fast-growing Light Commercial Air-conditioning sector in India (ii) to demonstrate R-32 refrigerant technology in packaged air-conditioning and ducted air-conditioning units of varying cooling capacities at Voltas Limited, Vadodara, India.

II. STRATEGY

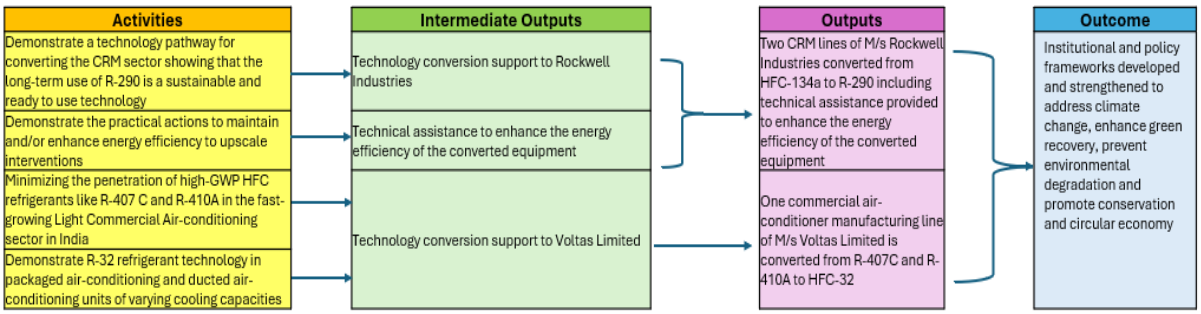
The strategy would be to follow the principles enshrined in the Country Program of India for phase-out of Ozone Depleting Substances, comprising to have minimum economic dislocation and obsolescence cost and maximize indigenous production for twin environment and economic gains.

The strategy will focus on penetration of new/alternative technologies in the country in sectors using HFCs and creating awareness and capacity in relevant stakeholders for alternative low GWP technologies. In addition, the strategy is based on the following guiding principles.

(a) It should reflect national context, priorities, national policies and be country driven.
(b) It should be based on developing and demonstrating a strengthened and proactive partnership between government and industry.
(c) It should draw upon the lessons learnt from functioning of institutional arrangements and operational mechanisms in implementation of Montreal Protocol in past.
(d) It should integrate and build upon existing infrastructures and introduce new mechanisms as needed; and
(e) It should be dynamic and evolving and be open for revisions and adaptation as necessary in response to evolving situations.

The Ozone Depleting Substances (Regulation and Control) Rules, 2000 and its amendments will continue to be the overarching legal framework for implementation of the Kigali Amendment. The implementation of HFC demonstration project will be as per the procedures and guidelines laid down by the ExCom, with country specific project management arrangements between Implementing Agencies, Government, Implementing partner and the participating enterprises.

By applying above approach, the project will address all critical gaps. Below is given the diagram for Theory of Change.



III. RESULTS AND PARTNERSHIPS

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Expected Results

The following specific results/ outputs are expected by the end of the two approved demonstration projects. This would be updated with other HFC demonstration project as and when approved in future.

- Technology conversion to R-290 in two commercial refrigeration equipment manufacturing lines at Rockwell Industries limited and achieve of phase-out 21.91 MT of HFC-134a, resulting in net direct CO_2-equivalent emission reductions of about to 31,328 tons.
- Technology conversion to R-32 in one manufacturing line of packaged air-conditioning and ducted air-conditioning units of varying cooling capacities at Voltas Limited and achieve phase out of 30.29 MT of R-407C and 4.63 MT R-410A, resulting in net direct CO_2-equivalent emission reductions of about to 63,383 tons.
- Technology conversion support in other HFC demonstration project, as and when approved and implemented, to achieve targeted phase-out of HFC(s) and associated CO2-equivalent emission reductions.

Resources required to achieve the Expected Results

The project budget of USD 996,326 by the MLF shall be utilised for implementing the two HFC demonstration projects approved by the ExCom. Additionally, up to USD 2 million is earmarked for future demo projects and will be updated in upon MLF approval. The government in collaboration with UNDP will undertake timely implementation of the project in line with the approval of the ExCom.

Partnerships

UNDP, as the implementing agency, will work closely with Ozone Cell, MoEFCC. International experiences through the Montreal Protocol Unit (MPU) team of UNDP will also appropriately be leveraged for effective implementation of the two HFC projects. Concerned nodal line ministries /departments will also be associated as needed.

Risks and Assumptions

The project shall be implemented as per the procedures and guidelines laid down by the Ex-Com of the MLF with country specific project management arrangements between UNDP and Ozone Cell, MOEFCC and Responsible parties - enterprises. Since the HFC projects are demonstration projects, risks would be minimum and almost negligible. A detailed Risk Analysis has been included with this project document as in Annexure I which is summarised in following table:

Risk Description	**Impact and Likelihood (1-5)**	**Significance**	**Mitigation Measure**
There is a risk of delays in project implementation due to inadequate capacities of implementing partners in effectively performing oversight functions as per their roles defined under the Project Governance Arrangements.	I=3 L=2	Moderate	The risk will be mitigated through the technical assistance and project oversight provided by UNDP.
There is a risk that the companies participating in the project, particularly MSMEs, can face financial challenges to operate in the competitive markets after adoption of refrigerant alternatives.	I=3 L=2	Moderate	Legal Agreements (MOAs) will be signed with each company. The MOA will establish conversion procedures and security instruments to assure the

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			conversion is completed and company operation is maintained.

Digital Solutions[4]

The demonstration projects will be implemented under the institutional framework of Montreal Protocol and will avail the digital solutions such as web-based MIS developed through other Montreal Protocol programmes and projects for data reporting and other requirements.

South-South and Triangular Cooperation (SSC/TrC)

Not applicable.

Stakeholder Engagement

Besides the participating enterprises, the stakeholders comprise, the industry associations, line Ministries, R&D and academic institutions, traders including importers and exporters of ODSs, equipment suppliers. Periodic stakeholder consultation will be carried out for effective implementation of the HFC demonstration projects.

Periodic consultation and review meetings with the selected enterprises will also be conducted to address issues of concern which will facilitate timely and effective implementation of the project.

Knowledge

The data and knowledge generated from the project will be documented in various forms and will be disseminated and shared using different platforms. To ensure timely and effective implementation, the web-based MIS will have a module for ODS projects being implemented, which can be used as an effective tool for monitoring the implementation of the project.

Sustainability and scaling up.

A structured project implementation framework based on the learnings from the implementation of HPMP Stage-I and HPMP Stage-II has been developed for implementing HPMP Stage-III ProDoc, which has been apprised and approved by the DEA. Similar framework would be used for implementing the HFC demonstration projects.

IV. PROJECT MANAGEMENT

Cost Efficiency and Effectiveness

The project "Hydrofluorocarbon (HFC) demonstration projects funded by the Multilateral Fund for Implementation of the Montreal Protocol" is fully funded by Multilateral Fund (MLF) of the Montreal Protocol. To ensure cost efficiency, the project team will collaborate with other teams, Government and UN and bilateral agencies.

Project Management

The HFC demonstration project shall be implemented by UNDP in close consultation with the Ozone Cell, MoEFCC. The activities of project shall be carried out as per approved Annual Work Plans, to be approved by the Project Steering Committee (PSC), the composition of which is given in the following sections.

[4] *Please see the Guideline "Embedding Digital in Project Design".*

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Specific funding has been made available for the project management unit component for HPMP Stage-III to UNDP. UNDP shall facilitate utilisation of funding approved for project management component under HPMP Stage-III, for activities and implementation of the HFC projects, as decided by the Project Steering Committee (PSC).

The UNDP Country office shall sign a separate Letter of Agreement (LOA) with Ozone Cell, MoEFCC, for the disbursement of payments directly to the enterprises. The LOA enclosed at Annexure- II shall be part of this ProDoc.

The project shall be reviewed and modified as deemed necessary by the Project Steering Committee Co-Chaired by the Joint Secretary/equivalent, MoEFCC and the Deputy Resident Representative, UNDP.

Project Implementation Procedure

Preparation of Annual Work Plan (AWP)

For each year of the duration of the HFC projects, an AWP indicating both physical and financial targets shall be prepared, which shall be approved by the Project Steering Committee (PSC).

Performance-based Memorandum of Agreement with enterprises

The implementation of conversion activities with M/s Rockwell Industries and M/s Voltas Limited will be through a Memorandum of Agreement (MOA) to be signed with each participating enterprise by the Ozone Cell, MoEFCC and containing schedule of milestones to be achieved by the participating enterprises for the conversion of the enterprise from HFC to low-GWP technology. The template of MOA shall be finalised by the Ozone Cell, MoEFCC, with assistance from UNDP and approved by the Competent Authority in the MoEFCC.

Gender Equality and the Empowerment of Women

While the HFC projects being individual projects with specific targets and deliverables, will have limited applicability of gender principles. However, the activities identified in the gender action plan for ongoing HPMP Stage-3 implementation shall be considered while mainstreaming gender in the HFC projects.

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V. RESULTS FRAMEWORK

	Intended Outcome: By 2027, Government of India, state governments, communities, private sector and other actors take informed actions to address climate change, pollution, biodiversity loss and restore ecological integrity through improved knowledge, capacity and mainstreaming of relevant actions across sectoral programmes, policies and plans.
	Outcome indicators as stated in the Country Programme Document Results and Resources Framework, including baseline and targets: Output 3.1. Institutional and policy frameworks developed and strengthened to address climate change, enhance green recovery, prevent environmental degradation and promote conservation and circular economy Indicator 3.1.1: Number of climate and gender-responsive development strategies (policies, schemes, programmes, and action plans) informed, through technical / advisory support, for achieving national priorities and global commitments under multilateral environmental agreements (global, national, subnational level) Baseline (2022): 7 Target (2027): 14
	Applicable Output(s) from the UNDP Strategic Plan as mentioned in the CPD: Solutions developed at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste
	Project title and Quantum Project Number: Demonstrating Low Global Warming Potential (GWP) Alternatives to Hydrofluorocarbons (HFCs) funded by the Multilateral Fund for Implementation of the Montreal Protocol [Project No. 01004654 (Voltas) and 01004655 (Rockwell)]

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EXPECTED OUTPUTS	OUTPUT INDICATORS[5]	DATA SOURCE	BASELINE		TARGETS (by frequency of data collection)			DATA COLLECTION METHODS & RISKS
			Value	Year	Year 1 (2025)	Year 2 (2026)	FINAL	
Output 1 Conversion of two manufacturing of commercial refrigeration appliances at **Rockwell Industries Limited** from HFC-134a to propane (R-290) *GEN 1*	***1.1*** Quantity of phase-out of HFC-134a	*Project Proposal & Site Verification Report*	0	2023	0	21.91 metric tonnes	21.91 metric tonnes	*Final project report*
	1.2 GHG emission reduction	*Project Proposal & Site Verification Report*	0	2023	0	31,328 tonnes of CO2-eq	31,328 tonnes of CO2-eq	*Final project report*
Output 2 Conversion of the manufacturing of commercial refrigeration appliances at **Rockwell Industries Limited** from HFC-134a to propane (R-290) **(technical assistance** to enhance the energy efficiency of the converted equipment) (decision 91/65) *GEN 1*	***2.1*** Number of pilot project to enhance energy efficiency while converting from HFCs to R-290	*Project Proposal & Site Verification Report*	0	2023	0	1	1	*Final project report*

[5] It is recommended that projects use output indicators from the Strategic Plan IRRF, as relevant, in addition to project-specific results indicators. Indicators should be disaggregated by sex or for other targeted groups where relevant.

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EXPECTED OUTPUTS	OUTPUT INDICATORS[5]	DATA SOURCE	BASELINE		TARGETS (by frequency of data collection)			DATA COLLECTION METHODS & RISKS
			Value	Year	Year 1 (2025)	Year 2 (2026)	FINAL	
Output 3 One commercial air-conditioner manufacturing line of **M/s Voltas Limited** is converted from R-407C and R-410A to HFC-32 *GEN 1*	***3.1*** Quantity of phase-out of R-407C	*Project Proposal & Site Verification Report*	0	2023	0	30.29 metric tonnes	30.29 metric tonnes	*Final project report*
	3.2 Quantity of phase-out of R-410A	*Project Proposal & Site Verification Report*	0	2023	0	4.63 metric tonnes	4.63 metric tonnes	*Final project report*
	3.3 GHG emission reduction	*Project Proposal & Site Verification Report*	0	2023	0	63,383 tonnes of CO2-eq	63,383 tonnes of CO2-eq	*Final project report*

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VI. MONITORING AND EVALUATION

In accordance with UNDP's programming policies and procedures, the project will be monitored through the following monitoring and evaluation plans: The project results will be monitored and evaluated periodically during project implementation to ensure the project effectively achieves these results. The monitoring and evaluation framework shall be developed by the PSC.

Monitoring Plan

Monitoring Activity	Purpose	Frequency	Expected Action	Partners	Cost (if any)
Track results progress	To ensure progress of the project is as per the timelines prescribed in the agreement between the ExCom and the Government of India is complied with. To assess the progress of the project in achieving the agreed outputs shall be reviewed by the Project Steering Committee (PSC) A MIS tool will be used for tracking the progress of the project and take corrective actions as required.	Quarterly	Slower than expected progress will be addressed by the Project Steering Committee (PSC).	Ozone Cell, MoEFCC and UNDP	Subsumed in the Planned budget of IS project
Monitor and Manage Risk	Identify specific risks that may threaten achievement of intended results. Identify and monitor risk management actions using a risk log. UNDP, in consultation with the Ozone Cell, MoEFCC will appoint an agency for carrying out independent verification of each of the 2 participating enterprise and give its recommendations on achieving the milestones by the enterprise. The report of the verifying agency will be reviewed by UNDP and submit its recommendations to the Ozone Cell, MoEFCC for taking further necessary action for releasing of payment due to the enterprise in accordance the provisions of the MOA.	Subject to accomplishment of milestones by each participating enterprises, verification by an independent consultant, appointed by UNDP will be carried out.	The risks identified will be addressed by the PSC and appropriate action, as needed will be taken.	Ozone Cell, MoEFCC and UNDP	Subsumed in the Planned budget of IS project

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Learn	Knowledge, good practices and lessons will be captured regularly, as well as actively sourced from projects implemented in other countries and integrated back into the project.	At least annually	The lessons and good practices will be put up to the PSC for consideration.	Ozone Cell, MoEFCC and UNDP	Subsumed in the Planned budget of IS project
Annual Project Quality Assurance	The project shall be implemented under the overall oversight of Empowered Steering Committee and the quality of project implementation shall be reviewed by the Project Steering Committee. Additionally, the quality of the project will be assessed against UNDP's quality standards to identify project strengths and weaknesses and to inform management decision making to improve the project.	Annually	Areas of strength and weakness will be reviewed, and suggestions will be put up to the PSC for consideration	UNDP	Subsumed in the Planned budget of IS project
Review and Mid Course Corrections	Internal review of data and evidence from all monitoring actions to inform decision making.	At least annually, PSC shall meet at least once a year and as per requirement	Performance data, risks, lessons and quality will be discussed PSC and used to make course corrections.	Ozone Cell, MoEFCC	Subsumed in the Planned budget of IS project
Project Report	A progress report will be presented to the ESC consisting of progress data showing the results achieved against pre-defined annual targets at the output level, the annual project quality rating summary, an updated risk long with mitigation measures, and any evaluation or review reports prepared over the period.	Annually, and at the end of the project (final report)	Actions as proposed by the ESC will be taken	Ozone Cell, MoEFCC	Subsumed in the Planned budget of IS project
Project Review (Project Board)	The project's governance mechanism (PSC) will hold project reviews to assess the performance of the project and review the Multi-Year Work Plan to ensure realistic budgeting over the life of the project. The progress of the project will be also presented to the ESC	At least annually	Any quality concerns or slower than expected progress shall be discussed by the PSC and actions agreed to address the issues identified will be taken	Ozone Cell, MoEF&CC and UNDP	Subsumed in the Planned budget of IS project

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	In the project's final year, the PSC shall hold an end-of project review to capture lessons learned and discuss opportunities for scaling up and to socialize project results and lessons learned with relevant audiences. The outcomes will be presented to the ESC				

Evaluation Plan

Evaluation Title	Partners (if joint)	Related Strategic Plan Output	UNDAF/CPD Outcome	Planned Completion Date	Key Evaluation Stakeholders	Cost and Source of Funding
Not applicable						

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VII. MULTI-YEAR WORK PLAN

EXPECTED OUTPUT	PLANNED ACTIVITIES	Planned Budget by Year		RESPONSI BLE PARTY	PLANNED BUDGET		
		2025	2026[6]		Funding Source	Budget Description	Amount
Output Result: **Output 1** Conversion of the manufacturing of commercial refrigeration appliances at Rockwell Industries Limited from HFC-134a to propane (R-290) Indicator: Quantity of phase-out of HFC-134a. Baseline: 0 Target: 21.91 metric tonnes Indicator: GHG emission reduction. Baseline: 0 Target: 31,328 tonnes of CO2-eq	Technology conversion support to 2 CRM Lines of M/s Rockwell Industries	**423,765**	0	National Ozone Unit (NOU) 1125	MLF	72100, 64300, 74500	**423,765**

[6] Activities will be implemented in 2026, with costs already committed in 2025.

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Output 2 Conversion of the manufacturing of commercial refrigeration appliances at Rockwell Industries Limited from HFC-134a to propane (R-290) (technical assistance to enhance the energy efficiency of the converted equipment) (decision 91/65) Indicator: Number of pilot project to enhance energy efficiency while converting from HFCs to R-290. Baseline: 0 Target: 1	Technical assistance to enhance the energy efficiency of the converted equipment	**150,000**	0	National Ozone Unit (NOU) 1125	MLF	72100, 64300, 74500	**150,000**
Output 3: One commercial air-conditioner manufacturing line of M/s Voltas Limited converted from R-407C and R-410A to HFC-32 Indicator: Quantity of phase-out of R-407C Baseline: 0 Target: 30.29 metric tonnes Indicator: Quantity of phase-out of R-410A Baseline: 0 Target: 4.63 metric tonnes Indicator: GHG emission reduction Baseline: 0 Target: 63,383 tonnes of CO2-eq	Technology conversion support to M/s Voltas Limited	**422,561**	0	National Ozone Unit (NOU) 1125	MLF	72100, 64300, 74500	**422,561**
							996,326

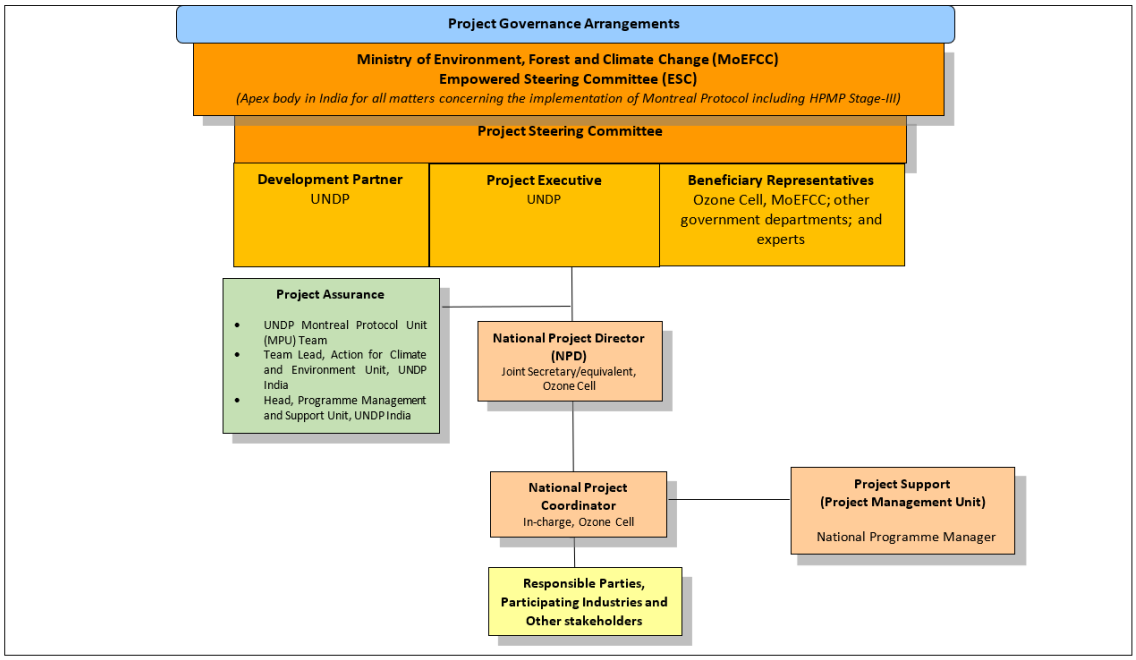
Note: The yearly work plan (AWP) shall be prepared by UNDP and Ozone Cell, MoEF&CC and approved by the PSC.

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VIII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

The HFC demonstration project shall be implemented by UNDP with support from the Ozone Cell, MoEF&CC. The institutional arrangements for implementation of the project would be as follows:

Figure 1: Institutional arrangements for implementation of the project



Empowered Steering Committee

The ESC is the apex body for all matters concerning the implementation of Montreal Protocol in the country including this project, vide cabinet decision no. 47/1/94 dated 27.1.94.

Ozone Cell

The Ozone Cell set up by the MoEF&CC is the National Ozone Unit to coordinate the implementation of the Montreal Protocol activities in India, shall be responsible for implementation of the project in close coordination with the UNDP, participating enterprises, line ministries and other concerned stakeholders.

National Project Director (NPD)

The Joint Secretary/equivalent in the MoEF&CC handling the affairs of the Ozone Cell shall be the NPD.

Project Steering Committee (PSC)

The PSC shall be co-Chaired by the National Project Director and Deputy Resident Representative, UNDP and shall oversee, guide and steer the implementation of the project. The PSC shall comprise representatives from UNDP, Ozone Cell, MoEF&CC, concerned line ministries/departments. The PSC can co-opt members/experts, as deemed necessary.

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The PSC will meet, as required, and would *inter-alia* review the progress of implementation of the project including the following:

- Review and finalise the Annual Work Plan and its implementation.
- Allocate project resources required by Annual Work Plan
- Review physical and financial activities undertaken as part of project implementation including quarterly progress report (both activities and financial), to be submitted by UNDP.
- Review the progress on the achievement of performance-based milestones indicated in the MOA signed with the enterprise
- Assure that all projected outputs are delivered.
- Any other issues arising, if any, in project implementation and suggest midcourse corrections
- Address project-level grievances
- Any other action required for implementation of the above project.

National Project Coordinator (NPC)

The in-Charge of the Ozone Cell shall be the NPC.

National Programme Manager (NPM)

UNDP, as lead implementing agency, will place the services of a National Programme Manager, who will assist the Ozone Cell, MoEFCC in the timely and effective implementation of the project, as the agreement with the Ex-Com for the project.

Implementation modality

This project shall be implemented by UNDP in close consultation with the Ozone Cell, MoEF&CC. The activities of the project shall be carried out as per approved Annual Work Plans, to be approved by the PSC. UNDP shall also provide Project Assurance services.

The funds made available by the MLF to projects in developing countries are distinct from development assistance and funding of the country. The funding provided by MLF to developing countries is for meeting the provisions of agreement with the ExCom of the MLF and the compliance obligations of the country.

Roles and Responsibilities

- Ozone Cell, MoEF&CC and UNDP shall assume the roles and responsibilities stated in the agreement between the Ex-Com of the MLF and the Government of India and the Executive Primer: An introduction to the Ex-Com of the MLF for the Implementation of the Montreal Protocol with specific reference to the project.
- MoEF&CC, as Party to the Montreal Protocol, will have the responsibility for meeting the compliance obligations of the Montreal Protocol and achievement of targets specified in the agreement between the Ex-Com and the Government of India.

UNDP

- The project will be directly implemented by UNDP in close cooperation and consultation of MoEFCC. UNDP Montreal Protocol Unit (MPU) shall be the focal point for the Montreal Protocol for all communications with the MLF Secretariat, technical backstopping for implementation,

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including providing technical advice and resolve eligibility issues with respect to enterprises as well as monitoring and oversight, as Implementing Agency for the Project.

- UNDP Country office shall be involved in disbursement of funds, project activities including organization of supervision missions, verifications, awareness initiatives and training programmes in line with the approved annual work plan and consultation with Ozone Cell, MoEF&CC.
- UNDP Country office shall submit financial progress report on a quarterly basis to the Ozone Cell, which shall include the charges of UNDP for activities associated with the project implementation.

Ozone Cell, MoEF&CC

- Overall responsibility for achieving milestones and deliverables specified in the Agreement between the Ex-Com and the Government of India
- Monitoring implementation with the assistance of the UNDP.
- Endorse all information/documents concerning project implementation to be submitted to the Ex-Com through the MLF by the UNDP
- Enter into a separate performance-based MOA with the participating enterprise
- Provide necessary and facilitation where required to UNDP for successful achievements of the objectives of this agreement and the project.
- Endorse disbursements relating to the project.

Agreement on the intellectual property rights and use of logo on the project's deliverables

Ministry of Environment, Forests & Climate Change, Ozone Cell and UNDP logos shall appear on all relevant project publications with due adherence to the respective branding guidelines.

Funds Flow Arrangements and Financial Management:

1. This project shall follow DIM (Direct Implementation) modality and UNDP takes on the role of implementing partner.
2. The project will be directly implemented by UNDP in close cooperation and consultation of MoEF&CC. Ozone Cell, MOEF&CC will support furtherance of project mandate and engage with industries in the capacity of Responsible party.
3. UNDP would follow all policies and procedures established for its own operations and will be responsible for all financial management, reporting, procurement services relating to the project in line with the proposals approved by the PSC. UNDP would manage requests for the provision of financial resources through funding advances, direct payments, or reimbursement using the FACE form.
4. UNDP may also identify other Responsible Party to carry out activities within the project. A responsible party is defined as an entity that has been selected to act on behalf of the UNDP on the basis of a written agreement or contract to purchase goods or provide services using the project budget. All Responsible Parties are directly accountable to UNDP in accordance with the terms of their agreement or contract with UNDP. The Responsible party may follow its own procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of the Responsible party does not provide the required guidance to ensure best value for money, fairness, integrity, transparency and effective international competition, then the financial rules of UNDP shall apply.

Audit: The audit will be done as per UNDP rules and regulations.

Project closure: The project would be closed as per UNDP rules and regulations.

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IX. LEGAL CONTEXT

The project document shall be the instrument envisaged and defined in the Supplemental Provisions to the Project Document, attached hereto and forming an integral part hereof, as "the Project Document".

This project will be implemented by UNDP ("Implementing Partner") in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

Consistent with the provisions to this project document, UNDP, as custodian of the funds for two HFC demonstration projects approved by the Ex-Com of the MLF, shall follow its financial regulations, rules, practices and procedures and ensure best value for money, fairness, integrity, transparency, and effective international competition. UNDP project assurance should ensure that:

- Funds are made available to the project.
- The project is making progress towards intended outputs.
- Regular monitoring and assurance activities take place, including periodic monitoring visits and 'spot checks' of expenses and results achieved.
- Resources entrusted to UNDP are utilized appropriately.
- Critical project information is monitored and updated in the UNDP Quantum
- Financial reports are submitted on time, and combined delivery reports are prepared quarterly and submitted.
- Risks are properly managed, and the risk log in Quantum is regularly update.
- Reports from the government are reviewed and used to design assurance procedures.
- DIM audit reports are reviewed and identified corrective actions are taken.

- All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments. This includes providing access to project sites, relevant personnel, information, and documentation.
- The signatories to this Project Document will promptly inform one another in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.
- Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing.
- All obligations set forth under this section entitled "Risk Management" are passed on to each responsible party, subcontractor and sub-recipient and that all the clauses under this section entitled "Risk Management Standard Clauses" are included, *mutatis mutandis*, in all sub-contracts or sub-agreements entered into further to this document.

X. RISK MANAGEMENT

1. UNDP as the Implementing Partner will comply with the policies, procedures and practices of the United Nations Security Management System (UNSMS.)

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2. UNDP as the Implementing Partner will undertake all reasonable efforts to ensure that none of the [project funds]7 [UNDP funds received pursuant to the Project Document]8 are used to provide support to individuals or entities associated with terrorism , that the recipients of any amounts provided by UNDP hereunder do not appear on the United Nations Security Council Consolidated Sanctions List, and that no UNDP funds received pursuant to the Project Document are used for money laundering activities. The United Nations Security Council Consolidated Sanctions List can be accessed via https://www.un.org/securitycouncil/content/un-sc-consolidated-list. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

3. Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (http://www.undp.org/ses) and related Accountability Mechanism (http://www.undp.org/secu-srm).

4. UNDP as the Implementing Partner will: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.

5. In the implementation of the activities under this Project Document, UNDP as the Implementing Partner will handle any sexual exploitation and abuse ("SEA") and sexual harassment ("SH") allegations in accordance with its regulations, rules, policies and procedures.

6. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.

7. UNDP as the Implementing Partner will ensure that the following obligations are binding on each responsible party, subcontractor, and sub-recipient:

a. Consistent with the Article III of the SBAA [or the Supplemental Provisions to the Project Document], the responsibility for the safety and security of each responsible party, subcontractor and sub-recipient and its personnel and property, and of UNDP's property in such responsible party's, subcontractor's and sub-recipient's custody, rests with such responsible party, subcontractor and sub-recipient. To this end, each responsible party, subcontractor and sub-recipient shall:
   i. put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
   ii. assume all risks and liabilities related to such responsible party's, subcontractor's and sub-recipient's security, and the full implementation of the security plan.

b. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the responsible party's, subcontractor's and sub-recipient's obligations under this Project Document.

c. Each responsible party, subcontractor and sub-recipient (each a "sub-party" and together "sub-parties") acknowledges and agrees that UNDP will not tolerate sexual harassment and sexual exploitation and abuse of anyone by the sub-parties, and other entities involved in Project implementation, either as contractors or subcontractors and their personnel, and any individuals performing services for them under the Project Document.

[7] To be used where UNDP is the Implementing Partner

[8] To be used where the UN, a UN fund/programme or a specialized agency is the Implementing Partner

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(a) In the implementation of the activities under this Project Document, each sub-party shall comply with the standards of conduct set forth in the Secretary General's Bulletin ST/SGB/2003/13 of 9 October 2003, concerning "Special measures for protection from sexual exploitation and sexual abuse" ("SEA").

(b) Moreover, and without limitation to the application of other regulations, rules, policies and procedures bearing upon the performance of the activities under this Project Document, in the implementation of activities, each sub-party, shall not engage in any form of sexual harassment ("SH"). SH is defined as any unwelcome conduct of a sexual nature that might reasonably be expected or be perceived to cause offense or humiliation, when such conduct interferes with work, is made a condition of employment or creates an intimidating, hostile or offensive work environment. SH may occur in the workplace or in connection with work. While typically involving a pattern of conduct, SH may take the form of a single incident. In assessing the reasonableness of expectations or perceptions, the perspective of the person who is the target of the conduct shall be considered.

d. In the performance of the activities under this Project Document, each sub-party shall (with respect to its own activities), and shall require from its sub-parties (with respect to their activities) that they, have minimum standards and procedures in place, or a plan to develop and/or improve such standards and procedures in order to be able to take effective preventive and investigative action. These should include: policies on sexual harassment and sexual exploitation and abuse; policies on whistleblowing/protection against retaliation; and complaints, disciplinary and investigative mechanisms. In line with this, sub-parties will and will require that their respective sub-parties will take all appropriate measures to:
   i. Prevent its employees, agents or any other persons engaged to perform any services under this Project Document, from engaging in SH or SEA;
   ii. Offer employees and associated personnel training on prevention and response to SH and SEA, where sub-parties have not put in place its own training regarding the prevention of SH and SEA, sub-parties may use the training material available at UNDP;
   iii. Report and monitor allegations of SH and SEA of which any of the sub-parties have been informed or have otherwise become aware, and status thereof;
   iv. Refer victims/survivors of SH and SEA to safe and confidential victim assistance; and
   v. Promptly and confidentially record and investigate any allegations credible enough to warrant an investigation of SH or SEA. Each sub-party shall advise UNDP of any such allegations received and investigations being conducted by itself or any of its sub-parties with respect to their activities under the Project Document, and shall keep UNDP informed during the investigation by it or any of such sub-parties, to the extent that such notification (i) does not jeopardize the conduct of the investigation, including but not limited to the safety or security of persons, and/or (ii) is not in contravention of any laws applicable to it. Following the investigation, the relevant sub-party shall advise UNDP of any actions taken by it or any of the other entities further to the investigation.
e. Each sub-party shall establish that it has complied with the foregoing, to the satisfaction of UNDP, when requested by UNDP or any party acting on its behalf to provide such confirmation. Failure of the relevant sub-party to comply of the foregoing, as determined by UNDP, shall be considered grounds for suspension or termination of the Project.
f. Each responsible party, subcontractor and sub-recipient will ensure that any project activities undertaken by them will be implemented in a manner consistent with the UNDP Social and Environmental Standards and shall ensure that any incidents or issues of non-compliance shall be reported to UNDP in accordance with UNDP Social and Environmental Standards.
g. Each responsible party, subcontractor and sub-recipient will take appropriate steps to prevent misuse of funds, fraud, corruption or other financial irregularities, by its officials, consultants, subcontractors and sub-recipients in implementing the project or programme or using the UNDP funds. It will ensure that its financial management, anti-corruption, anti-fraud and anti money laundering and countering the financing of terrorism policies are in place and enforced for all funding received from or through UNDP.

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h. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to each responsible party, subcontractor and sub-recipient: (a) UNDP Policy on Fraud and other Corrupt Practices (b) UNDP Anti-Money Laundering and Countering the Financing of Terrorism Policy; and (c) UNDP Office of Audit and Investigations Investigation Guidelines. Each responsible party, subcontractor and sub-recipient agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.

i. In the event that an investigation is required, UNDP will conduct investigations relating to any aspect of UNDP programmes and projects. Each responsible party, subcontractor and sub-recipient will provide its full cooperation, including making available personnel, relevant documentation, and granting access to its (and its consultants', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with it to find a solution.

j. Each responsible party, subcontractor and sub-recipient will promptly inform UNDP as the Implementing Partner in case of any incidence of inappropriate use of funds, or credible allegation of fraud, corruption other financial irregularities with due confidentiality.

Where it becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, each responsible party, subcontractor and sub-recipient will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). It will provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

k. Choose one of the three following options:

Option 1: UNDP will be entitled to a refund from the responsible party, subcontractor or sub-recipient of any funds provided that have been used inappropriately, including through fraud corruption, other financial irregularities or otherwise paid other than in accordance with the terms and conditions of this Project Document. Such amount may be deducted by UNDP from any payment due to the responsible party, subcontractor or sub-recipient under this or any other agreement. Recovery of such amount by UNDP shall not diminish or curtail any responsible party's, subcontractor's or sub-recipient's obligations under this Project Document.

Where such funds have not been refunded to UNDP, the responsible party, subcontractor or sub-recipient agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to such responsible party, subcontractor or sub-recipient for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud, corruption or other financial irregularities, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

Note: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

l. Each contract issued by the responsible party, subcontractor or sub-recipient in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from it shall cooperate with any and all investigations and post-payment audits.

m. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project or programme, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.

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n. Each responsible party, subcontractor and sub-recipient shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to its subcontractors and sub-recipients and that all the clauses under this section entitled "Risk Management Standard Clauses" are adequately reflected, mutatis mutandis, in all its sub-contracts or sub-agreements entered into further to this Project Document.

LIST OF ANNEXURES:

1. Risk Analysis and Register
2. Social and Environmental Screening Procedure
3. Project Quality Assurance Report

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Annexure I- Risk Register

- **PROJECT RISK REGISTER**

Project Title: Demonstrating Low Global Warming Potential (GWP) Alternatives to Hydrofluorocarbons (HFCs) funded by the Multilateral Fund for Implementation of the Montreal Protocol	**Project Number:** 01004654 (Voltas) and 01004655 (Rockwell)	**Date:** 25-Jun-25

#	Event	Caused by	Impact(s)	Risk Category and Sub-category *(including Risk Appetite)*	Impact, Likelihood & Risk Level *(see Annex 3 Risk Matrix)*	Risk Valid From/To	Risk Owner *(individual accountable for managing the risk)*	Risk Treatment and Treatment Owner
1	There is a risk of project delays due to limited capacity of implementing partners to perform oversight roles as defined in the Project Governance Arrangements.	This could be due to inadequate capacities of the implementing partners to perform oversight to execute, manage and monitor their assigned roles effectively under the Project Governance Mechanism	This could negatively impact on the effectiveness and quality of the project and lead to delays in reaching project milestones.	**4. ORGANIZATIONAL (4.2. Execution capacity) - UNDP Risk Appetite: EXPLORATORY TO OPEN**	Likelihood: **2 - Low likelihood** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Jan-24 To: 08-Apr-27	Team Lead, Action for Climate and Environment (ACE) Unit	**Treatment 1.1:** The risk will be mitigated through provision of continuous technical support from UNDP to guide partners through the complex oversight functions, with the aim to progressively building capacities while being supported. **Treatment owner:** Project Manager

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#	Event	Caused by	Impact(s)	Risk Category and Sub-category *(including Risk Appetite)*	Impact, Likelihood & Risk Level *(see Annex 3 Risk Matrix)*	Risk Valid From/To	Risk Owner *(individual accountable for managing the risk)*	Risk Treatment and Treatment Owner
2	There is a risk that the companies participating in the project, particularly MSMEs, can face financial challenges to operate in the competitive markets after adoption of refrigerant alternatives	Manufacturing companies, particularly MSMEs, could face low profitability of new products considering other alternatives in the market.	Long term sustainability of project conversions. Business continuation of assisted companies.	**2. FINANCIAL (2.2. Value for money) - UNDP Risk Appetite: MINIMAL TO CAUTIOUS**	Likelihood: **2 - Low likelihood** Impact: **3 - Intermediate** Risk level: **MODERATE (equates to a risk appetite of EXPLORATORY)**	From: 01-Jan-24 To: 08-Apr-27	MOEF&CC UNDP	Risk Management Mechanisms are divided into two phases: *For Project Preparation:* • All companies proposed to be assisted by the project were visited for physical verification and checked the financial records comprising Income tax returns to jointly determine the past operations and financial capacities of the companies. *For Project Implementation:* By Project Design: the project will provide financial and technical assistance for Companies to minimize the economic/financial impacts of the conversion. The project will provide Operational Costs reimbursement so companies can place their products in the market. By Risk Mitigation Instrument(s) and Procedures: Legal Agreements (MOAs) will be signed with each company. The MOA will establish conversion

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#	Event	Caused by	Impact(s)	Risk Category and Sub-category *(including Risk Appetite)*	Impact, Likelihood & Risk Level *(see Annex 3 Risk Matrix)*	Risk Valid From/To	Risk Owner *(individual accountable for managing the risk)*	Risk Treatment and Treatment Owner
								procedures and security instruments to assure the conversion is completed and company operation is maintained. **Treatment owner:** Project Manager
3	There is a risk of occupational health and safety (OHS) hazards affecting workers during the manufacturing, storage, and refrigerant charging processes.	This may arise due to exposure to physical hazards (such as handling heavy equipment or machinery) and chemical hazards linked to the nature of selected refrigerants. Inadequate handling procedures, potential refrigerant leakage, insufficient ventilation, or lack of awareness may increase these risks.	This could result in physical injuries, respiratory difficulties, and reduced worker well-being, which may affect productivity and safety if not properly managed.	**1. SOCIAL AND ENVIRONMENTAL (1.10. Labour and working conditions) - UNDP Risk Appetite: CAUTIOUS**	Likelihood: **2 - Low likelihood** Impact: **2 - Minor** Risk level: **LOW (equates to a risk appetite of CAUTIOUS)**	From: 01-Jan-24 To: 08-Apr-27	Team Lead, Action for Climate and Environment (ACE) Unit	Risk Treatment 3.1: The project incorporates a comprehensive set of measures to mitigate the risk occupational health and safety (OHS) hazards during manufacturing, storage, and refrigerant charging processes. These measures include: • upgrading refrigerant charging stations, enhancing ventilation systems, and installing advanced leak detection equipment. • Manufacturing areas will be modified to include flame-proof zones with continuous monitoring systems, ensuring early detection and control of any potential leaks. • Critical areas for refrigerant storage and finished products will be equipped with hydrocarbon sensors, alarms, fire extinguishers, and hydrant systems, and will be designed to maintain proper ventilation to prevent gas accumulation.

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#	Event	Caused by	Impact(s)	Risk Category and Sub-category *(including Risk Appetite)*	Impact, Likelihood & Risk Level *(see Annex 3 Risk Matrix)*	Risk Valid From/To	Risk Owner *(individual accountable for managing the risk)*	Risk Treatment and Treatment Owner
								• The project will also adopt spark-free and solid-state electrical components, and utilize compressors specifically designed for compatibility with R-290 and HFC-32 to minimize ignition risks. **Treatment owner:** Project Manager
								Risk Treatment 3.2: To ensure these safeguards are functioning effectively, thorough safety audits will be conducted post-conversion. **Treatment owner:** Project Manager
								Risk Treatment 3.3: In addition, all personnel involved will receive targeted training to enhance their awareness and capacity for safely handling flammable refrigerants, including appropriate emergency response procedures. **Treatment owner:** Project Manager