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PROJECT DOCUMENT

The Maldives

Project Title: Demonstration Project for HCFC free low GWP alternatives in refrigeration in fisheries sector in the Maldives

Project Number: MDV/REF/76/DEM/30

Implementing Partner: National Ozone Unit, Ministry of Environment and Energy

Start Date: April 2017 **End Date:** April 2018 **PAC Meeting date:** 9 March 2017

Brief Description

Briefly describe the overall development challenge and the expected results of the project.

This demonstration project, upon successful completion, will identify and establish suitability of hydrochlorofluorocarbon (HCFC) free low Global Warming Potential (GWP) alternatives in fisheries applications in the Maldives. Currently, the fishing industry and, particularly, fishing vessels use HCFC-22 for refrigeration and freezing applications during sea borne fishing operations. Due to maintenance and the rough sea conditions, these vessels experience significant loss of refrigerants while at sea. This results in higher levels of HCFC-22 consumption in the country.

The project will identify low GWP alternatives that can replace HCFC-22 used in these vessels, processes for replacing HCFC-22 based refrigeration equipment used in fishing vessels, good practices that can be adopted for reducing refrigerant consumption and policies that can help in reducing HCFC-22 use in fishing vessels.

If successful, the demonstration project will contribute towards reduction in HCFC-22 consumption in existing fishing vessels and long term reduction in HCFC-22 consumption in fishing industry. The experiences and knowledge gained in this project would be helpful for countries that use HCFC-22 in fishing industry applications.

Contributing Outcome (UNDAF/CPD, RPD or GPD):

By 2020, growth and development are inclusive, sustainable, increase resilience to climate change and disasters, and contribute to enhanced food, energy and water security and natural resource management.

Indicative Output(s):

2.8 Solutions developed at national and subnational levels for sustainable management of natural resources, ecosystem services, chemicals and waste

Total resources required:		US$141,000
Total resources allocated:		
	UNDP TRAC:	
	MLF:	141,000
	Donor:	
	Government:	
	In-Kind:	
Unfunded:		

Agreed by:

Thoriq Ibrahim Minister Ministry of Environment and Energy	Shoko Noda Resident Representative UNDP
Date: 04 May 2017	Date: 04 May 2017

I. DEVELOPMENT CHALLENGE (1/4 PAGE – 2 PAGES RECOMMENDED)

Describe the development challenge that the project seeks to address and how it is relevant to national/regional/global development priorities, as relevant. Include evidence to support the analysis, such as data demonstrating the magnitude of the problem and how it affects different population groups (esp. women and men, and minority and other excluded groups) and why it is important for poverty reduction and addressing inequality and exclusion. Identify the immediate, underlying and root causes of the challenge (including capacity limitations) which have been identified in the problem tree analysis feeding into the Theory of Change. Please be specific.

The Maldives is a small island country and consumes HCFC-22 in refrigeration and air-conditioning applications. As per survey report of HPMP, about 76 MT of HCFC-22 was consumed in the Maldives in the year 2008. The consumption of HCFC-22 in the year 2015 was approximately 45 MT. The main reason for decrease in consumption is national activities, regulations and countries commitment towards Montreal Protocol that has reduced supply and use of HCFC-22. Of this total consumption, fisheries sector applications make for approximately 15-20% of the total consumption.

Fishery plays an important role in the Maldives economy. It is the second largest contributor to Maldives' economy and employs a significant population of the country. The fish catch of Maldives is stored and processed and exported globally. HCFC-22 is consumed in fisheries sector in a range of applications and predominantly in fishing vessels, processing and storage applications. Many of these equipment still have an economic life, although old and require continued use of HCFCs for their operations. Given that fishing vessels operate in sea and many times under rough sea and/or weather conditions, it is difficult to control leakage and adopt good servicing practices like in other equipment such as refrigeration equipment using HCFCs in land.

Under the HPMP Stage-I, targeted projects addressing consumption of HCFCs in fishing vessels were implemented. Due to technological constraints and the need for compliance of the country, they had to adopt ODS free alternatives which have GWP as retrofit/drop-in substitutes. Fishing industry agreed with the Government of the Maldives to continue their efforts to convert to low GWP alternatives which are technically feasible and economically viable, as and when such alternatives become available in the market. The need for identifying and promoting usage of low GWP alternatives in fishing industry was also emphasised by several members of Executive Committee on the Implementation of the Montreal Protocol.

It is noted that availability of HCFC free low-GWP alternative technologies which can substitute HCFCs are available in refrigeration applications. It must also be noted that many of these options cannot be direct drop-in substitutes and/or retrofit options with minimum changes in the existing equipment. Depending on the type of use, the specific option for existing fishing vessels would need to be chosen and adopted.

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II. STRATEGY (1/2 PAGE - 3 PAGES RECOMMENDED)

Explain the detailed theory of change (ToC) for this project and what UNDP with partners will do to address the development challenge described above. Identify the approach that has been selected, with a clear rationale backed by credible evidence, integrating gender concerns into the approach. Identify what knowledge, good practices and lessons learned (including from evaluation) have informed the analysis of available choices and the selected strategy.

Detail the project's selected approach and explain how it is expected to lead to change at the output level. Clearly link the project's ToC to the programme/CPD's ToC by stating how the project will contribute to the UNDAF/CPD outcome. State key assumptions about what will change, for whom, and how this will happen. Assumptions should include consideration of internal factors (relating to project design and implementation) and external factors (relating to other partners, stakeholders and context) that will be critical for achieving expected changes. Cite best available evidence which supports these key assumptions in the ToC, including findings from evaluation and other credible research, as well as knowledge, good practices and lessons learned from previous work by UNDP and others, in this country and in other relevant contexts.

It is good practice to include a theory of change diagram in the annex showing the linkages between the development challenge and the immediate, underlying and root causes.

The main objective of the project is to demonstrate low-GWP HCFC free alternative for use by fishing industry in the Maldives. The project results can be used in other countries that have similar HCFC use in fishing industry and thus help the countries address challenges in fishing industry, particularly sea-borne vessels' HCFC refrigerant use.

In this proposed project, demonstration of low-GWP alternatives for retrofitting equipment using HCFCs is proposed. Replacement options for fishing vessels which are HCFC free would also be considered for demonstration projects. Technical information on retrofit and replacement technologies would be provided for the benefit of industry. This will not only assist the Maldives in adoption of such technologies and promote their low GWP low carbon growth policy, but also help other countries which have a significant consumption of HCFCs in fishing industry – mainly in refrigeration applications, switch over to low GWP alternatives.

The project primarily aims at undertaking detailed technical assessment of the available low GWP options in terms of their feasibility in being used in HCFC-22 based refrigeration equipment in fishing industry – primarily as drop-in substitutes/alternatives and demonstration of use of these alternatives by the industry. As explained earlier, given the limited information available on actual performance of different technical options, the project will include both detailed research and analysis of existing options available and designing project interventions for testing performance of substitutes that are drop-ins or "near" drop-ins involving soft optimization.

III. RESULTS AND PARTNERSHIPS (1.5 - 5 PAGES RECOMMENDED)

Expected Results

- *The text under this heading should translate the strategy above into the work we will do through the project. Describe the planned interventions of the project and explain why those interventions are best suited to achieve the intended results, linking this to the theory of change. State what change we expect to see that will be attributable to the project. Expected development change should be included in the results framework and monitored regularly by the project. Link the expected results to the relevant higher level results (i.e., programme outcome, UNDAF, Strategic Plan.)*

The primary objective of the project would be to identify low GWP substitutes to HCFC-22 in the existing refrigeration equipment using HCFC-22. The equipment capacity would be in the range of 100 kgs to 150 kgs per unit in terms of HCFC-22 initial charge.

Research and analysis of alternative technologies

The research and analysis activities on alternative technologies would cover the afore-mentioned equipment. The primary focus will be on sea-borne vessels. It will, however, also cover storage and processing applications.

It is known that in the Maldives, the storage and processing applications for land based applications have alternatives such as ammonia and HFCs in use depending upon the nature of use. All attempts would be made to identify possible low GWP options that could substitute HCFCs as well as HFCs, if feasible.

Identification of technical options

Based on the above research and analysis, drop-in substitutes/substitutes with retrofit options of existing equipment by the industry for the identified applications. This would take into consideration technical feasibility, economic viability particularly timing of commercial availability and safety in operations. Presently, with the available information, the options that are likely to be available are HFOs or low GWP HFO blends.

Demonstration of technical options

Demonstration of use of low GWP alternatives in identified users in these applications that would include drop-in as well as replacement options. The specific number of units for demonstration would be decided by the National Ozone Unit (NOU) in close consultation with the fishing industry. For the purposes of estimation, it is proposed to undertake demonstration of technologies at 3 units or equivalent.

Resources Required to Achieve the Expected Results

- *Describe what resources are required to achieve the expected results. Thinking about the change pathway in your theory of change, state the key inputs (people, purchases, partnerships, etc.) that are required to deliver the outputs. This can include UNDP staff time from the country, region or HQ level, which must be adequately estimated, costed, and included in the project budget.*

  The total funding amounts to US$ 141,000. The project envisages in-kind co-financing from industry and the Government.

Partnerships

- *Describe how the project will work with partners to achieve results and briefly map what other stakeholders and initiatives are doing to address the development challenge. This should not be simply a list of partners, it should be linked to the theory of change. For example, what are the assumptions and expected results achieved by partners that are critical for the achievement of results of this project?*

  The National Ozone Unit (NOU) will be working in close consultation with the fishing industry.

Risks and Assumptions

- *Specify the key risks that can threaten the achievement of results through the chosen strategy and the assumptions on which the project results depends. Describe how project*

risks will be mitigated, especially how potential adverse social and environmental impacts will be avoided where possible and otherwise managed. Refer to the full risk log, which should be attached as an annex.

The alternative technology will be considered based on the following factors.

Technical factors

- Functionality in end-product
- Proven and mature technology
- Energy efficiency

Commercial factors

- Cost-effectiveness
- Reliable availability

Health and safety factors

- Low risk for occupational health
- Low risk for physical safety (flammability, etc.)

Environmental factors

- Direct ozone layer impacts
- Direct and indirect climate impacts

Some of the zero-ODP alternatives to HCFC-22 currently available for refrigeration applications are given below.

Substance	GWP	Application
R-407C	1774	Medium / High-temp applications
R-424A	2440	Medium / High – temp applications
R-438A	2268	Low / Medium / High – temp applications
R-417A	2346	Medium temp ref. applications
R-422D	2729	Low/Medium/High temp applications – ref.
HFC-32	675	Low/Medium temperature
HFOs	<10	Low/Medium/High temp applications – ref.

Source: Industry research reports. Rows marked in red colour relate to alternatives that are having a GWP of greater than 1000.

As per the Technology and Economic Assessment Panel (TEAP) report that made an assessment of low GWP options in different applications (2014), the following options can be used in refrigeration applications. It must be noted that these options include a range of refrigerants that can be "potentially used" not necessarily actually in use due to a range of technical and commercial considerations.

Status	Refrigerants
Limited trials	**HC-600a, HFC-1234yf, HFC-1234ze(E),** "L-40" R-444B "L-41" "DR-5" R-450A "XP-10" HFC-32
Potentially feasible	

Source: Executive Committee document no. 74/49

They are either at stage where they "are potentially feasible" or "have undergone limited trials". It must be noted that these alternatives are not strictly "drop-in" substitutes and would need modification in equipment at varying scales.

This aspect needs to be studied. The options shown in green colour are low GWP options but are flammable. The options not in green have a GWP ranging from 290 to 716.

Stakeholder Engagement

- Identify key stakeholders and outline a strategy to ensure stakeholders are engaged throughout, including:
  - *Target Groups: Identify the targeted groups that are the intended beneficiaries of the project. What strategy will the project take to identify and engage targeted groups?*
  - *Other Potentially Affected Groups: Identify potentially affected people and a strategy for engagement and ensuring they have access to and are aware of mechanisms to submit concerns about the social and environmental impacts of a project (e.g. UNDP's Social and Environmental Compliance Review and Stakeholder Response Mechanism).*

Target groups are Fisheries sector. During the project preparation (MDV/REF/74/PRP/27), several stakeholders consultations were held and the Fisheries industry were involved in this project development.

South-South and Triangular Cooperation (SSC/TrC)

- *Describe how the project intends to use SSC/TrC to achieve and sustain results, if applicable.*

This project is expected to have a significant impact on (a) HCFC phase-out in the country with low-GWP alternatives and (b) scaled up adoption of HCFC free alternatives in countries with large fishing industry consuming HCFCs for example Fiji, and other Pacific Island Countries.

Knowledge

- *Describe any specific knowledge products, besides evaluations, that will be produced by the project (e.g., publications, databases, media products, etc.) and how the project will create visibility for knowledge and lessons learned generated by the project so others can benefit.*

The successful implementation of this demonstration project will provide information on performance of a low GWP and cost-effective alternative for fisheries industry. The results of the project would also be shared with other countries with similar operating conditions. The findings would be documented and disseminated to countries in the region. UNEP Compliance Assistance Programme (CAP) would be used as one of the platforms for information dissemination. In addition, global/sub-regional meetings will also be used.

Information on HCFC free low GWP technologies will be collected by the technical expert during the research phase and during manual development phase. This will be shared with industry, Government and other national stakeholders in Maldives.

Sustainability and Scaling Up

- *Describe how the project will use relevant national systems, and specify the transition arrangement to sustain and/or scale-up results, as relevant. Describe how national capacities will be strengthened and monitored as relevant, and how national ownership will be ensured.*

The conversion will be carried out in close consultation with NOU and the industry personnel. Technical consultants would provide technical backstopping and guidance for project implementation.

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IV. PROJECT MANAGEMENT (1/2 PAGES - 2 PAGES RECOMMENDED)

Cost Efficiency and Effectiveness

- *Identify how the strategy is expected to deliver maximum results with available resources, with reference to evidence on similar approaches in this country or similar contexts. Include measures based on good practices and lessons learned. Explain why the selected pathway is the most efficient and effective of available options. Possible approaches can include:*
  - *i) Using the theory of change analysis to explore different options to achieve the maximum results with available resources*
  - *ii) Using a portfolio management approach to improve cost effectiveness by leveraging activities and partnerships with other initiatives/projects*
  - *iii) Through joint operations (e.g., monitoring or procurement) with other partners.*

Project Management

Information on the location(s) where the project will be operationalized, the number and location of physical project offices, arrangements for dedicated or shared operations support, how the project will work with other projects, etc. In this section, also describe the audit arrangements, collaborative arrangements with related projects and UNDP Direct Country Office Support Services and direct project costing, if applicable.

The project milestones and timelines from the date of receipt of funds is given in the table below. The estimated period over which the project would be completed is 12 months i.e., 4 quarters.

MILESTONE/QUARTERS	2017			2018
	Q2	Q3	Q4	Q1
1.1 Technology research and analysis conducted to identify options for using low GWP technologies.	X	X		
1.2 Procurement of equipment for demonstration of low GWP technologies.		X	X	
1.3 Compilation of findings of demonstration project and information dissemination			X	X
2.1 Project Monitoring and management	X	X	X	X

The project will be under the overall management and coordination of the National Ozone Unit, Government of the Maldives. UNDP Maldives will be the implementing agency for the project, which will provide international coordination and technical assistance as needed.

The procurement shall be organized fully in line with procedures followed by Government, so that the goods and services procured are high quality, most reasonable price and suitable for the purposes of the project activity. The detailed arrangement on procurement will be defined in the contract between Government of the Maldives and UNDP Maldives. After testing, the equipment will be utilized by the beneficiaries and demonstrated for the result and possibly replication.

Verification

1) **Periodical Performance Verification.** Before each payment, the NOU and UNDP will review the progress of activities based on documents and site visits/site visit reports. Upon satisfactory completion of the project.

2) **Technical Assessment.** Before the last instalment of payment, the NOU and UNDP will invite subject specialist expert(s) to verify the project performance and outcomes.

V. RESULTS FRAMEWORK[1]

	Intended Outcome as stated in the UNDAF/Country [or Global/Regional] Programme Results and Resource Framework:
	Outcome indicators as stated in the Country Programme [or Global/Regional] Results and Resources Framework, including baseline and targets:
	Applicable Output(s) from the UNDP Strategic Plan:
	Project title and Atlas Project Number: Demonstration Project for HCFC free low GWP alternatives in refrigeration in fisheries sector in the Maldives

EXPECTED OUTPUTS	OUTPUT INDICATORS[2]	DATA SOURCE	BASELINE		TARGETS (by frequency of data collection)					DATA COLLECTION METHODS & RISKS
			Value	Year	2017			2018	FINAL	
					Q2	Q3	Q4	Q1		
Output 1 Research and analysis of alternative technologies	***1.1*** Technology research and analysis conducted to identify options for low GWP technologies	Quarterly/annual reports by NOU	N/A	2017	Technology research and analysis conducted		N/A	N/A	Technology research and analysis conducted	Quarterly/annual reports by NOU
	1.2 Procurement of equipment for demonstration of low GWP technologies	Quarterly/annual reports by NOU	N/A	2017	N/A	Technology choice and retrofit options identified		N/A	Technology choice and retrofit options identified	Quarterly/annual reports by NOU
	1.3. Compilation of findings of demonstration project and information dissemination	Quarterly/annual reports by NOU	N/A	2017	N/A	N/A	Project results disseminated		Project results disseminated	Quarterly/annual reports by NOU

[1] UNDP publishes its project information (indicators, baselines, targets and results) to meet the International Aid Transparency Initiative (IATI) standards. Make sure that indicators are S.M.A.R.T. (Specific, Measurable, Attainable, Relevant and Time-bound), provide accurate baselines and targets underpinned by reliable evidence and data, and avoid acronyms so that external audience clearly understand the results of the project.

[2] 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.

Output 2 Project Management and coordination	***2.1*** Project Management and coordination functional	Quarterly/annual reports by NOU	N/A	2016	N/A	N/A	N/A		Project Management and coordination functional	Quarterly/annual reports by NOU

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: *[Note: monitoring and evaluation plans should be adapted to project context, as needed]*

Monitoring Plan

Monitoring Activity	Purpose	Frequency	Expected Action	Partners (if joint)	Cost (if any)
Track results progress	Progress data against the results indicators in the RRF will be collected and analysed to assess the progress of the project in achieving the agreed outputs.	Quarterly, or in the frequency required for each indicator.	Slower than expected progress will be addressed by project management.		
Monitor and Manage Risk	Identify specific risks that may threaten achievement of intended results. Identify and monitor risk management actions using a risk log. This includes monitoring measures and plans that may have been required as per UNDP's Social and Environmental Standards. Audits will be conducted in accordance with UNDP's audit policy to manage financial risk.	Quarterly	Risks are identified by project management and actions are taken to manage risk. The risk log is actively maintained to keep track of identified risks and actions taken.		
Learn	Knowledge, good practices and lessons will be captured regularly, as well as actively sourced from other projects and partners and integrated back into the project.	At least annually	Relevant lessons are captured by the project team and used to inform management decisions.		
Annual Project Quality Assurance	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 by project management and used to inform decisions to improve project performance.		
Review and Make Course Corrections	Internal review of data and evidence from all monitoring actions to inform decision making.	At least annually	Performance data, risks, lessons and quality will be discussed by the project board and used to make course corrections.		
Project Report	A progress report will be presented to the	Annually, and at			

	Project Board and key stakeholders, 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.	the end of the project (final report)			
Project Review (Project Board)	The project's governance mechanism (i.e., project board) will hold regular 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. In the project's final year, the Project Board 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.	Specify frequency (i.e., at least annually)	Any quality concerns or slower than expected progress should be discussed by the project board and management actions agreed to address the issues identified.		

Evaluation Plan[3] - N/A

Evaluation Title		Partners (if joint)	Related Strategic Plan Output	UNDAF/CPD Outcome	Planned Completion Date	Key Evaluation Stakeholders	Cost and Source of Funding
e.g., Mid-Term Evaluation							

[3] Optional, if needed

VII. MULTI-YEAR WORK PLAN [45]

All anticipated programmatic and operational costs to support the project, including development effectiveness and implementation support arrangements, need to be identified, estimated and fully costed in the project budget under the relevant output(s). This includes activities that directly support the project, such as communication, human resources, procurement, finance, audit, policy advisory, quality assurance, reporting, management, etc. Services that will result in direct project costs need to be disclosed transparently in the project document.

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year		RESPONSIBLE PARTY	PLANNED BUDGET		
		2017	2018		Funding Source	Budget Description	Amount
Output 1 Research and analysis of alternative technologies	***1.1*** Technology choice and retrofit options using low GWP technologies identified	20,000	0	NOU	MLF	National Consultant	20,000
	1.2 Procurement of equipment for demonstration of low GWP technologies for Fisheries Sector	70,000	0	NOU	MLF	Contractual services	70,000
	1.3. Compilation of findings of demonstration project and information dissemination	0	20,000	NOU	MLF	Contractual services	20,000
	Sub-Total for Output 1						
Output 2 Project Management and Coordination	***2.1*** Project Management and Coordination	16,000	15,000	NOU	MLF	Equipment	10,000
						Travel	10,000
						Miscellaneous	11,000
	Sub-Total for Output 2						
TOTAL							**141,000**

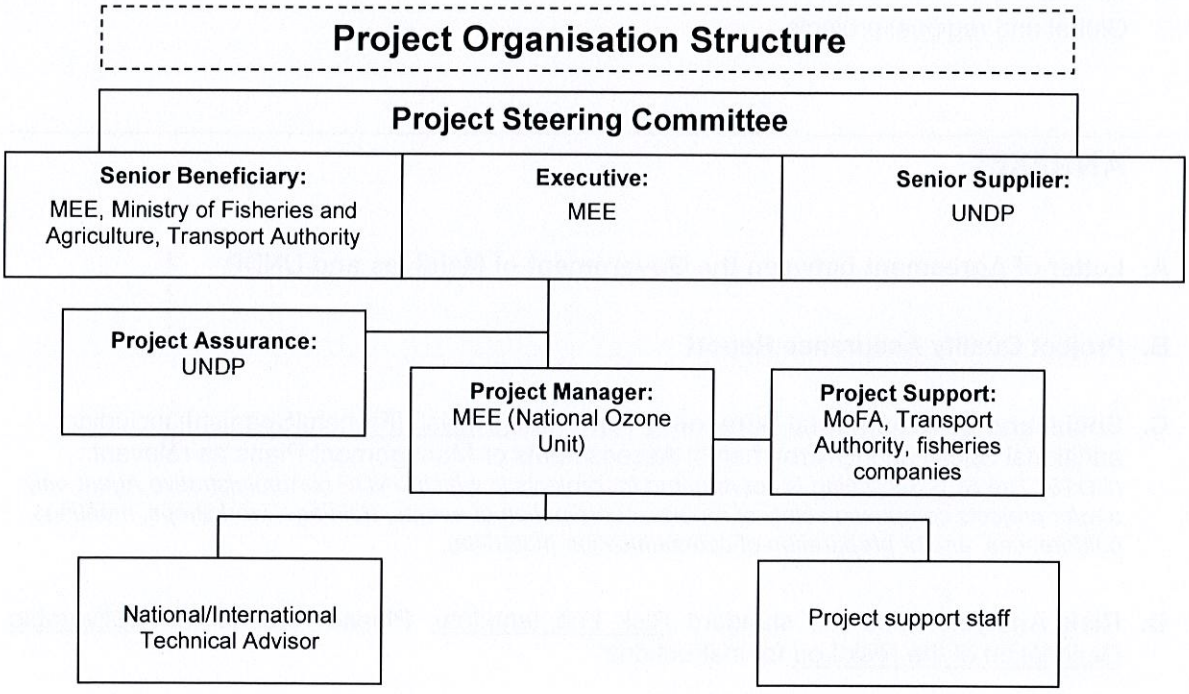
[45] Cost definitions and classifications for programme and development effectiveness costs to be charged to the project are defined in the Executive Board decision DP/2010/32

[5] Changes to a project budget affecting the scope (outputs), completion date, or total estimated project costs require a formal budget revision that must be signed by the project board. In other cases, the UNDP programme manager alone may sign the revision provided the other signatories have no objection. This procedure may be applied for example when the purpose of the revision is only to re-phase activities among years.

VIII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

Explain the roles and responsibilities of the parties involved in governing and managing the project. While an example diagram is below, it is not required to follow this diagram exactly. A project can be jointly governed with other projects, for example, through a national steering sub-committee linked to Results Groups under the UNDG Standard Operating Procedures for countries adopting the Delivering as One approach.

Minimum requirements for a project's governance arrangements include stakeholder representation (i.e., UNDP, national partners, beneficiary representatives, donors, etc.) with authority to make decisions regarding the project. Describe how target groups will be engaged in decision making for the project, to ensure their voice and participation. The project's management arrangements must include, at minimum, a project manager and project assurance that advises the project governance mechanism. This section should specify the minimum frequency the governance mechanism will convene (i.e., at least annually.)



IX. LEGAL CONTEXT AND RISK MANAGEMENT

Select the relevant one from each drop down below for the relevant standard legal text:

1. Legal Context:
   - ☐ Country has signed the Standard Basic Assistance Agreement (SBAA)
   - ☐ Country has not signed the Standard Basic Assistance Agreement (SBAA)
   - ☐ Regional or Global project

2. Implementing Partner:
   - ☐ Government Entity (NIM)
   - ☐ UNDP (DIM)
   - ☐ CSO/NGO/IGO
   - ☐ UN Agency (other than UNDP)
   - ☐ Global and regional projects

X. ANNEXES

A. Letter of Agreement between the Government of Maldives and UNDP

B. Project Quality Assurance Report

C. Social and Environmental Screening Template [English][French][Spanish], including additional Social and Environmental Assessments or Management Plans as relevant.
(NOTE: The SES Screening is not required for projects in which UNDP is Administrative Agent only and/or projects comprised solely of reports, coordination of events, trainings, workshops, meetings, conferences, and/or preparation of communication materials).

D. Risk Analysis. Use the standard Risk Log template. Please refer to the Deliverable Description of the Risk Log for instructions

E. Capacity Assessment: Results of capacity assessments of Implementing Partner (including HACT Micro Assessment)

F. Project Board Terms of Reference and TORs of key management positions

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Date: 04 May 2017

Dear Mr. Thoriq Ibrahim,

1. Reference is made to the consultations between officials of the United Nations Development Programme (hereinafter referred to as "UNDP") in Montreal Protocol Unit/Chemicals in Bangkok, and officials of the National Ozone Unit, Ministry of Environment and Energy, Government of Maldives (hereinafter referred to as "NOU") with respect to the realization of activities by NOU in the implementation of the project - **Demonstration project for HCFC-free low-GWP alternatives in refrigeration applications and in fishing industry (MDV/REF/76/DEM/30)** as specified in Annex 1: Project Document, to which UNDP has been selected as implementing partner.

2. In accordance with the Project Document and with the following terms and conditions, we confirm our acceptance of the activities to be provided towards the project, as specified in Annex 2: Description of Activities (hereinafter referred to as "Activities"). Close consultations will be held between NOU and UNDP on all aspects of the Activities.

3. The NOU shall be fully responsible for carrying out, with due diligence and efficiency, all Activities in accordance with the Project Document, the terms of this agreement and consistent with the agreement between Maldives and the Executive Committee, referred above.

4. In carrying out the Activities under this Letter, the personnel and sub-contractors of NOU shall not be considered in any respect as being the employees or agents of UNDP. UNDP does not accept any liability for claims arising out of acts or omission of NOU or its personnel, or of its contractors or their personnel, in performing the Activities or any claims for death, bodily injury, disability, damage to property or other hazards that may be suffered by NOU, and its personnel as a result of their work pertaining to the Activities.

5. Any subcontractors, including NGOs under contract with NOU, shall work under the supervision of the designated official of NOU. These subcontractors shall remain accountable to NOU for the manner in which assigned functions are discharged.

6 Upon signature of this Letter, UNDP will make payments to NOU, according to the schedule of payments specified in Annex 3: Schedule of Activities, Facilities and Payments.

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7. NOU shall not make any financial commitments or incur any expenses which would exceed the budget for the Activities as set forth in Annex 3. NOU shall regularly consult with UNDP concerning the status and use of funds and shall promptly advise UNDP any time when NOU is aware that the budget to carry out these Activities is insufficient to fully implement the Activities in the manner set out in the Annex 2. UNDP shall have no obligation to provide NOU with any funds or to make any reimbursement for expenses incurred by NOU in excess of the total budget as set forth in Annex 3.

8. NOU shall submit a cumulative financial report each year by 31 December of that year. UNDP will include the financial report by NOU in the financial report for the **Demonstration project for HCFC-free low-GWP alternatives in refrigeration applications and in fishing industry (MDV/REF/76/DEM/30).**

9. NOU shall submit such progress reports relating to the Activities as may reasonably be required by the project manager in the exercise of his or her duties.

10. NOU shall furnish a final report within 3 months after the completion or termination of the Activities, including a list of non-expendable equipment purchased by NOU and all relevant financial statements and records related to such Activities.

11. Equipment and supplies that may be furnished as a part of the Activities will be disposed as agreed, in writing, between UNDP and NOU.

12. Any changes to the Project Document which would affect the work being performed by NOU in accordance with Attachment 2 shall be recommended only after consultation between the parties.

13. For any matters not specifically covered by this Letter, the Parties would ensure that those matters shall be resolved in accordance with the appropriate provisions of the Project Document and any revisions thereof.

14. The arrangements described in this Letter will remain in effect until the end of the project, or the completion of Activities of NOU according to Annex 2, or until terminated in writing (with 30 days notice) by either party. The schedule of payments specified in Annex 3 remains in effect based on continued performance by NOU unless it receives written indication to the contrary from UNDP.

15. Any balance of funds that is undisbursed and uncommitted after the conclusion of the Activities shall be returned within 90 days to UNDP.

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16. Any amendment to this Letter shall be effected by mutual agreement, in writing.

17. All further correspondence regarding this Letter, other than signed letters of agreement or amendments thereto should be addressed to UNDP.

18. NOU shall keep the UNDP fully informed of all actions undertaken by them in carrying out this Letter.

19. UNDP may suspend this Letter, in whole or in part, upon written notice, should circumstances arise which jeopardize successful completion of the Activities.

20. Any dispute between the UNDP and NOU arising out of or relating to this Letter which is not settled by negotiation or other agreed mode of settlement, shall, at the request of either party, be submitted to a Tribunal of three arbitrators. Each party shall appoint one arbitrator, and the two arbitrators so appointed shall appoint a third arbitrator, who shall be the chairperson of the Tribunal. If, within 15 days of the appointment of two arbitrators, the third arbitrator has not been appointed, either party may request the President of the International Court of Justice to appoint the arbitrator referred to. The Tribunal shall determine its own procedures, provided that any two arbitrators shall constitute a quorum for all purposes, and all decisions shall require the agreement of any two arbitrators. The expenses of the Tribunal shall be borne by the parties as assessed by the Tribunal. The arbitral award shall contain a statement of the reasons on which it is based and shall be final and binding on the parties.

If you are in agreement with the provisions set forth above, please sign and return to this office two copies of this Letter. Your acceptance shall there by constitute the basis for your NOU participation in the implementation of the project.

Yours sincerely,

Signed on behalf of NOU:

Mr. Thoriq Ibrahim
Minister
Ministry of Environment and Energy
Maldives

Signed on behalf of UNDP:

Ms. Shoko Noda
Resident Representative
United Nations Development Programme
Maldives

Annex 1: Project Document, to which UNDP has been selected as implementing partner.

Annex 2: Description of Activities (hereinafter referred to as "Activities")

The following activities would be undertaken by NOU for implementation of components under this project. These activities will be undertaken in close coordination with responsible project officers in **UNDP.**

1. Finalisation of plan of action for completing the implementation of the project in accordance with approval obtained in the 76th Meeting of the Executive Committee.

2. Preparation of Terms of Reference (ToR) of the National / International consultant for technology options review and identification of suitable options for demonstration project in fisheries applications, in consultation with UNDP.

3. Recruitment of National / International consultant for the project. The consultant would work under direct supervision of NOU and technical guidance from UNDP.

4. Procurement of equipment for demonstration of low GWP technologies for fisheries applications. The specification of equipment would be finalized in consultation with technical experts and technical personnel in the industry.

5. Coordinate and review performance of equipment with low GWP technologies that are being demonstrated as given in para 4 above. This would be done by local experts with guidance, as required, from international experts.

6. Undertake information outreach activities regarding the product performance. Particularly, this would include national level outreach as well as outreach through appropriate platforms with other countries using HCFC based equipment in fisheries sector / applications. UNEP CAP program would also be consulted on a need basis for outreach activities.

7. Project management and monitoring including stakeholder consultations for various project related activities.

8. Submit the final report for the demonstration project and project completion report to the Multilateral Fund Secretariat for the consideration of the Executive Committee.

9. Provide necessary project progress reports and information updates, required by UNDP, relating to the project.

   In line with the Executive Committee guidance and decision 76/34 and 72/40, the project needs to be completed within 24 months of its approval.

For day to day coordination and project implementation, UNDP will communicate with Ms. Miruza Mohamed: miruza.mohamed@environment.gov.mv . Technical inputs would be provided by technical staff from Montreal Protocol unit/Chemicals in UNDP.

MINISTRY OF ENVIRONMENT AND ENERGY

UNITED NATIONS DEVELOPMENT PROGRAMME ★ MALE ★

Annex 3: Schedule of Activities, Facilities and Payments.

The milestones, indicators and timelines against which payments would be made are presented in the table below in columns B, C and D, respectively.

No.	Milestone	Indicator	Time Line	Amount (USD)
A	B	C	D	E
1	Upon signature of Letter of Agreement (LoA) and appointment of National / International consultant for technology selection and project support	i) LOA signed document ii) Award of contract to consultant confirmed by NOU	7 May 2017	31,000
2	Upon submission of draft report on technology selection	The draft report is submitted to NOU	30 June 2017	20,000
3	Upon finalisation of procurement of equipment for project	Award of procurement contract by NOU	31 July 2017	70,000
4	Upon submission of project implementation report (31 January 2018) and project completion report	Submission of project implementation report and completion report	31 March 2018	20,000
Total				**141,000**

MOORE STEPHENS

UNDP Micro Assessment

Ministry of Environment and Energy, Maldives

Moore Stephens LLP Chartered Accountants

London

14 November 2016

Moore Stephens LLP
150 Aldersgate Street
London
EC1A 4AB

Partner: Martin Daniel
martin.daniel@moorestephens.com

Contents

MICRO ASSESSMENT FINDINGS

1.1. BACKGROUND, SCOPE AND METHODOLOGY

Background

The micro assessment is part of the requirements under the Harmonized Approach to Cash Transfers (HACT) Framework. The HACT framework represents a common operational framework for UN agencies' transfer of cash to government and non-governmental implementing partners.

The micro assessment assesses the implementing partner's control framework. It results in a risk rating (low, moderate, significant or high). The overall risk rating is used by the UN agencies, along with other available information (e.g. history of engagement with the agency and previous assurance results), to determine the type and frequency of assurance activities as per each agency's guideline and can be taken into consideration when selecting the appropriate cash transfer modality for an implementing partner.

Scope

The micro assessment provides an overall assessment of the implementing partner's programme, financial and operations management policies, procedures, systems and internal controls. It includes:

- A review of the implementing partner legal status, governance structures and financial viability; programme management, organizational structure and staffing, accounting policies and procedures, fixed assets and inventory, financial reporting and monitoring, and procurement;
- A focus on compliance with policies, procedures, regulations and institutional arrangements that are issued both by the Government and the implementing partner.

It takes into account results of any previous micro assessments conducted of the implementing partner.

Methodology

We performed the micro assessment at the locations and on the dates set out in Annex I.

Through discussion with management, observation and walk-through tests of transactions, we have assessed the implementing partner's internal control system with emphasis on:

- The effectiveness of the systems in providing the implementing partner's management with accurate and timely information for management of funds and assets in accordance with work plans and agreements with the United Nations agencies;
- The general effectiveness of the internal control system in protecting the assets and resources of the implementing partner.

We discussed the results of the micro assessment with applicable UN agency personnel and the implementing partner prior to finalization of the report. The list of persons met and interviewed during the micro assessment is set out in Annex III.

Results

The results of our micro assessment are set out in section 1.2 below, and our detailed internal control findings and recommendations in section 1.3.

Martin Daniel
Partner
Moore Stephens LLP

14 November 2016

1.2. SUMMARY OF RISK ASSESSMENT RESULTS

The table below summarizes the results and main internal control gaps found during application of the micro assessment questionnaire (in Annex IV). Detailed findings and recommendations are set out in section 1.3 below.

Tested subject area	Risk assessment*	Comments
1. Implementing partner	Low	The IP is the Ministry of Environment and Energy (MEE) of the Maldives. The Ministry was established by Presidential Decree through the power vested in the constitution of the Maldives. It was previously known as the Ministry of Environment and Housing. It has many years experience in implementing UN projects through a PMU set up in the DG Water and Sanitation.
2. Programme management	Low	The IP has a system for programme management which is based on the use of a detailed Excel template called Work Schedule. This is combined with regular meetings among the relevant stakeholders.
3. Organisational structure and staffing	Low	The Ministry is fairly small (around 200 staff in total) and its organisational structure and staffing is considered sufficient for implementing UN projects, which it does by setting up a specific Programme Implementing Unit (PMU). It follows the Civil Service Regulation for HR issues.
4. Accounting policies and procedures	Low	The Ministry uses SAP as its financial management system and it has a robust system of internal controls and segregation of duties, which is based on government regulations. All payments are made by the Ministry of Finance, which also controls any bank account opened for receiving UN funds.
5. Fixed assets and inventory	Moderate	Assets and inventories are recorded and regularly counted, although there are some weaknesses in the system, such as an absence of identification tags and insurance.
6. Financial reporting and monitoring	Low	The Ministry uses the SAP financial management system into which it inputs data. Management of the system and compilation of reports is carried out by the Ministry of Finance, although the MEE is able to generate expenditure reports for specific projects.
7. Procurement	Low	Procurement is based on government procurement regulations and law, in particular the Public Finance Act and the Bidding Procedures Manual. These documents set out detailed procedures, which are followed by the Procurement Unit of the IP.
Overall risk assessment	**Low**	

* *High, Significant, Moderate, Low*

1.3. DETAILED INTERNAL CONTROL FINDINGS AND RECOMMENDATIONS

No.	Description of finding	Recommendation
1.	**Weaknesses in asset and inventory management**	
	Some assets and items of inventory do not carry identification tags, which may lead to difficulties in identifying which items have been purchased from UN funds. Bin cards are not placed near the inventory items for identification purposes. We also noted that the receiving, issuing and updating of inventory records is not segregated, it is all done by the Administrative Officer. While there is no government requirement for assets to be insured, it is currently unclear who would cover the costs of loss or damage.	In order to improve controls within the area of asset and inventory management, we recommend that all items should be tagged, bin cards should be placed near inventory items, and that the roles within the inventory management system should be segregated. We suggest that the IP clarifies whether assets and inventories will be insured, or if the government would cover any losses to UN funds arising from damage or loss.

1.4. ADDITIONAL QUESTIONS

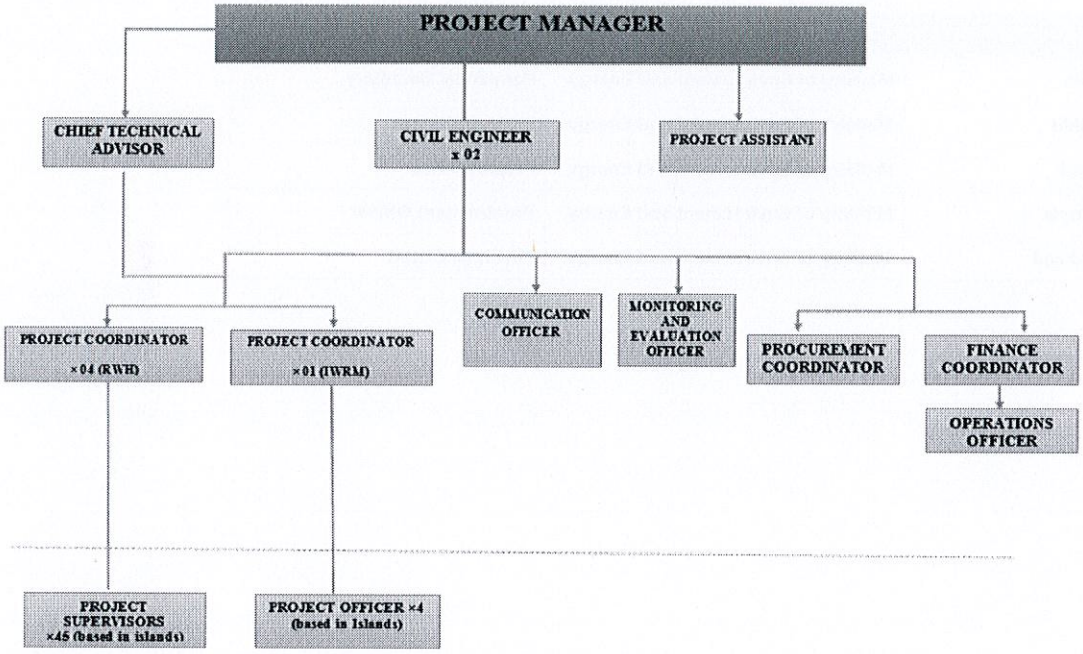
The UNDP Asia Pacific Regional Office asked us to add seventeen additional questions to the standard HACT Framework micro-assessment questionnaire in order to fulfil specific risk assessment objectives. The results of these additional questions are reported in Annex V below.

ANNEXES

ANNEX I: IMPLEMENTING PARTNER AND PROGRAMME INFORMATION

Implementing partner name:	Ministry of Environment and Energy
Implementing partner code or ID in UNICEF, UNDP, UNFPA records (as applicable)	936
Implementing partner contact details (contact name, email address and telephone number)	Ajwad Musthafa, Permanent Secretary, Ministry of Environment and Energy Ajwad.musthafa@environment.gov.mv +960 7958100
Main programmes implemented with the applicable UN agency/ies	• Increasing climate resilience through an Integrated Water Resource Management Programme in HA. Ihavandhoo, ADh. Mahibadhoo and GDh. Gadhdhoo Island • Integrating Climate Change Risks into Resilient Island Planning in the Maldives • Low-Emission Climate Resilient Development Programme
Key official in charge of the UN agency/ies' programme(s)	Abdul Matheen Mohamed, Minister of State, Ministry of Environment and Energy Abdul.matheen@environment.gov.mv +960 7941430
Programme location(s)	HA. Ihavandhoo, ADh. Mahibadhoo and GDh. Gadhdhoo, GA. Thinadhoo, HDh. Kulhudhuffushi
Location of records related to the UN Agency/ies' programme(s)	Ministry of Environment and Energy and UNDP
Currency of records maintained	MVR
Expenditures incurred/reported to UNICEF, UNDP and UNFPA (as applicable) during the most recent financial reporting period (in US$)	MEE expenditure with cash transfer: MVR 66,000 (USD 4,400)
Cash transfer modality/ies used by the UN agency/ies to the implementing partner	NEX Advances and Government Procurement with Direct Payment Requests
Intended start date of micro assessment	25 September
Number of days to be spent for visit to implementing partner	3
Any special requests to be considered during the micro assessment	-

ANNEX II: IMPLEMENTING PARTNER ORGANISATIONAL CHART FOR GREEN CLIMATE FUND (PROPOSED)



ANNEX III: LIST OF PERSONS MET

Name	Unit / organisation	Position
Ajwad Musthafa	Ministry of Environment and Energy	Permanent Secretary
Mohamed Shahid	Ministry of Environment and Energy	Project Director
Abdulla Waheed	Ministry of Environment and Energy	Project Officer
Fathimath Shirana	Ministry of Environment and Energy	Procurement Officer
Thaalooth Rasheed	Ministry of Environment and Energy	Financial Expert

ANNEX IV: MICRO ASSESSMENT QUESTIONNAIRE

Subject area *(key questions in bold)*	Yes	No	N/A	Risk Assessment	Risk points	Remarks/comments
1. Implementing partner						
1.1 Is the IP legally registered? If so, is it in compliance with registration requirements? Please note the legal status and date of registration of the entity.	Yes			Low	1	The IP is the Ministry of Environment and Energy (MEE) of Maldives. The Ministry was established by Presidential Decree through the power vested in the constitution of Maldives. It was previously known as the Ministry of Environment and Housing. Current UNDP projects are implemented through a PMU set up in the Directorate General of Water and Sanitation in the Ministry. The Green Climate Fund PMU has not yet been established, but it is planned to operate in the same way as the current PMU which is in operation for the UNDP project "Integrated water resource management programme".
1.2 If the IP received United Nations resources in the past, were significant issues reported in managing the resources, including from previous assurance activities.		No		Low	1	The IP has received UN resources in the past, and no significant issues have been reported in managing the resources.
1.3 Does the IP have statutory reporting requirements? If so, are they in compliance with such requirements in the prior three fiscal years?	Yes			Low	1	The Ministry has to submit an Annual Report to the President's Office, Parliament and Auditor General. The Annual Report includes details of funds received, funds spent, human resources, projects done during the year, workshops and meetings. The Annual Report is published on the Ministry's website. The last Annual Report published on the website is for 2014.
1.4 Does the governing body meet on a regular basis and perform oversight functions?	Yes			Low	1	The governing body at ministry level meets every week (on Sunday) for project monitoring and oversight.
1.5 If any other offices/ external entities participate in implementation, does the IP have policies and process to ensure appropriate oversight and monitoring of implementation?	Yes			Moderate	4	The UNDP PMU uses Work Schedule (a workplan set out as a Excel template) and Progress Reports to monitor project implementation done by external entities. Weekly (on Monday) they have a Project Meeting with the Minister of MEE. Present in the meeting are: DG Water & Sanitation, State Ministry, Project Manager, and Project Coordinator.

1.6 Does the IP show basic financial stability in-country (core resources; funding trend) ***Provide the amount of total assets, total liabilities, income and expenditure for the current and prior three fiscal years.***			N/A	N/A	-	Not applicable for a government ministry.
1.7 Can the IP easily receive funds? Have there been any major problems in the past in the receipt of funds, particularly where funds flow from government ministries?	Yes			Moderate	2	Funds from UNDP are deposited into a Ministry of Finance bank account. No major problems have been noted in the past in the receipt of funds, other than small delays in being able to access funds at the Ministry of Finance (usually 30-45 days from the date the funds are sent by the donor).
1.8 Does the IP have any pending legal actions against it or outstanding material/significant disputes with vendors/contractors? *If so, provide details and actions taken by the IP to resolve the legal action.*		No		Low	1	According to the DG Water Sanitation, the IP has no pending legal actions against it.
1.9 Does the IP have an anti-fraud and corruption policy?	Yes			Low	1	The IP has Anti Corruption Guidelines and there is a Maldives Anti Corruption Commission.
1.10 Has the IP advised employees, beneficiaries and other recipients to whom they should report if they suspect fraud, waste or misuse of agency resources or property? If so, does the IP have a policy against retaliation relating to such reporting?	Yes			Moderate	2	They should report it to the Anti Corruption Commission. The Commission is an independent body. The Bidding Procedures, section VI:" Fund Policy - Corrupt and Fraudulent Proctice" define what is fraud and corruption and sets out the sanctions applicable.
1.11 Does the IP have any key financial or operational risks that are not covered by this questionnaire? If so, please describe. *Examples: foreign exchange risk; cash receipts.*		No		Low	1	No other risk was identified.
Total number of questions in subject area:	**11**					
Total number of applicable questions in subject area:	**10**					
Total number of applicable key questions in subject area:	**4**					
Total number of risk points:	**15**					
Risk score	**1.5**					
Area risk rating	**Low**					

Subject area *(key questions in **bold**)*	Yes	No	N/A	Risk Assessment	Risk points	Remarks/comments
2. Programme management						
2.1. Does the IP have and use sufficiently detailed written policies, procedures and other tools (e.g. project development checklist, work planning templates, work planning schedule) to develop programmes and plans?	Yes			Low	1	The IP uses Work Schedule (a workplan set out as an Excel template) to develop programmes and plans, and to control the work progress of programme/projects and assess project expenditures using specific spreadsheets coherent with the allocated budget for each individual project. For UNDP funded projects, the IP uses an Annual Workplan and the FACE Form template from UNDP.
2.2. Do work plans specify expected results and the activities to be carried out to achieve results, with a time frame and budget for the activities?	Yes			Low	1	The Work Schedule template specifies expected results and the activities to be carried out to achieve results, with time frame and budget for the activities.
2.3 Does the IP identify the potential risks for programme delivery and mechanisms to mitigate them?	Yes			Moderate	2	Every Monday, the IP conducts a weekly project meeting with all relevant stakeholders including Director General, Project Manager, Project Coordinator and Focal Points. This meeting is chaired by the Minister of Environment and Energy, State Minister and Permanent Secretary. In the meeting they discuss work progress, issues, problems and how to solve the problems.
2.4 Does the IP have and use sufficiently detailed policies, procedures, guidelines and other tools (checklists, templates) for monitoring and evaluation?	Yes			Low	1	They IP uses Work Schedule for monitoring and evaluation. See point 2.1 above.
2.5 Does the IP have M&E frameworks for its programmes, with indicators, baselines, and targets to monitor achievement of programme results?	Yes			Low	1	The monitoring and evaluation framework is incorporated into the Work Schedule template, including indicators, baselines and targets.
2.6 Does the IP carry out and document regular monitoring activities such as review meetings, on-site project visits, etc.	Yes			Low	1	The IP carries out and documents regular monitoring activities. They prepare minutes of meetings and distribute them to the meeting participants. The Project Administration Officer files the documents.
2.7 Does the IP systematically collect, monitor and evaluate data on the achievement of project results?	Yes			Low	1	This is done every week in the Technical Project Meeting with the consultant/contractor.

2.8 Is it evident that the IP followed up on independent evaluation recommendations?□	Yes			Low	1	The follow up of recommendations are reflected in the Work Schedule template.
Total number of questions in subject area:	**8**					
Total number of applicable questions in subject area:	**8**					
Total number of applicable key questions in subject area:	**2**					
tal number of risk points:	**9**					
k score	**1.125**					
Area risk rating	**Low**					

Subject area *(key questions in **bold**)*	Yes	No	N/A	Risk Assessment	Risk points	Remarks/comments
3. Organizational structure and staffing						
3.1 Are the IP's recruitment, employment and personnel practices clearly defined and followed, and do they embrace transparency and competition?	Yes			Low	1	HR policies are implemented by the Human Resource Development and Management Committee of the Ministry in accordance with the Civil Service Regulation. These practices embrace transparency and competition.
3.2 Does the IP have clearly defined job descriptions?	Yes			Low	1	All employees have clearly defined job descriptions in accordance with the Civil Service Regulation
3.3 Is the organizational structure of the finance and programme management departments, and competency of staff, appropriate for the complexity of the IP and the scale of activities? Identify the key staff, including job titles, responsibilities, educational backgrounds and professional experience.	Yes			Moderate	4	MEE has 6 staff in its Finance Unit. The head of this unit is Mariyam Minna (Assistant Director). Each project has 1 Finance and Administration Staff. For big projects, 1 Finance Staff and 1 Administration Staff are assigned. For the current UNDP project, the IP has a Program Management Unit (PMU) consisting of 1 Project Manager, 1 Financial Officer and 1 Administration Officer. All of them have experience and training how to manage UNDP funds. The PMU for GCF has not yet been set up, however it is expected to follow the structure used for previous UN projects.
3.4 Is the IP's accounting/finance function staffed adequately to ensure sufficient controls are in place to manage agency funds?	Yes			Low	1	Agency funds are managed by the Ministry of Finance. Payment Vouchers reviewed by Project Coordinator/Project Manager and approved by Project Director (DG), before being sent to the Ministry of Finance for payment.
3.5 Does the IP have training policies for accounting/finance/ programme management staff? Are necessary training activities undertaken?	Yes			Moderate	2	The IP has a Human Resource Development and Management Committee which is set up under the Civil Service Regulation. Every year the IP prepares its training requirement for the staff approved by Ministry of Finance.The training is conducted in the Civil Service Commission Institute. For non civil service staff, for example those working in the PMU, they attended training run by the donors.

3.6 Does the IP perform background verification/checks on all new accounting/finance and management positions?	Yes			Low	1	Background checks are done by the Human Resource Development and Management Committee in accordance with the Civil Service Regulation.
3.7 Has there been significant turnover in key finance positions the past five years? If so, has the rate improved or worsened and appears to be a problem?		No		Low	1	No significant turnover in staff in the past 5 years
. Does the IP have a documented internal control framework? Is this framework distributed and made available to staff and updated periodically? If so, please describe.	Yes			Low	1	The internal control framework is included in the Public Finance Act and Public Finance Regulation, distributed to the staff, and updated periodically.
Total number of questions in subject area:	**8**					
Total number of applicable questions in subject area:	**8**					
Total number of applicable key questions in subject area:	**3**					
Total number of risk points:	**12**					
Risk score	**1.5**					
Area risk rating	**Low**					

Subject area *(key questions in **bold**)*	Yes	No	N/A	Risk Assessment	Risk points	Remarks/comments
4. Accounting policies and procedures						
4a. General						
4.1 Does the IP have an accounting system that allows for proper recording of financial transactions from United Nations agencies, including allocation of expenditures in accordance with the respective components, disbursement categories and sources of funds?	Yes			Low	1	The IP uses SAP, a complex financial management system, to record their financial transactions. Project codes and chart of accounts are used for allocation of expenditures to the correct funding source and budget heading
4.2 Does the IP have an appropriate cost allocation methodology that ensures accurate cost allocations to the various funding sources in accordance with established agreements?	Yes			Low	1	The IP uses Project Codes for cost allocation within the SAP system.
4.3 Are all accounting and supporting documents retained in an organized system that allows authorized users easy access?	Yes			Low	1	All original accounting and supporting documents are retained in the MEE Finance Department. The PMU keeps copies of the documents.
4.4 Are the general ledger and subsidiary ledgers reconciled at least monthly? Are explanations provided for significant reconciling items?	Yes			Low	1	This is done by the Ministry of Finance, based on MoF rules applicable to ledgers of all ministries. The IP can generate expense reports only.
4b. Segregation of duties						
4.5 Are the following functional responsibilities performed by different units or individuals: (a) authorization to execute a transaction; (b) recording of the transaction; and (c) custody of assets involved in the transaction?	Yes			Low	1	Authorization to execute a transaction done by the Project Director. Recording of transactions is done by the Finance Department. Custody of assets is the responsibility of the Procurement Department.
4.6 Are the functions of ordering, receiving, accounting for and paying for goods and services appropriately segregated?	Yes			Low	1	Ordering is done by the Procurement Department. Receiving is done by the Logistics Unit. Accounting is done by the Finance Department of MEE and payment is done by the Ministry of Finance.
4.7 Are bank reconciliations prepared by individuals other than those who make or approve payments?			N/A	N/A	-	This is done by the Ministry of Finance, which was not assessed.

4c. Budgeting system						
4.8 Are budgets prepared for all activities in sufficient detail to provide a meaningful tool for monitoring subsequent performance?	Yes			Low	1	Budgets are prepared for all activities in sufficient detail and are included in the work plan.
4.9 Are actual expenditures compared to the budget with reasonable frequency? Are explanations required for significant variations from the budget?	Yes			Low	1	Comparisons of budget to actual expenditure are done by the Project Coordinator/Project Manager every time the IP receives request for payment. Any variance from the budget should be explained before the payment will be approved.
4.10 Is prior approval sought for budget amendments in a timely way?	Yes			Low	1	Yes, prior approval is sought, at least 2 weeks before the budget amendment is due to take place.
4.11 Are IP budgets approved formally at an appropriate level?	Yes			Low	1	The overall budget for the Ministry is approved by the Minister of Finance and Parliament.
4d. Payments						
4.12 Do invoice processing procedures provide for: **· Copies of purchase orders and receiving reports to be obtained directly from issuing departments?** **· Comparison of invoice quantities, prices and terms with those indicated on the purchase order and with records of goods/services actually received?** **· Checking the accuracy of calculations?**	Yes			Low	1	Invoice processing is done in accordance with the Public Finance Act and the Public Finance Regulation. -PO is generated from the Procurement Department -Goods Received Note is from the Logistics Unit -Comparison of invoice is done by the Finance Department, Finance Officer and Project Coordinator/Project Manager.
4.13 Are payments authorized at an appropriate level? Does the IP have a table of payment approval thresholds?	Yes			Low	1	Payment is authorised by the Project Director and MEE Permanent Secretary.
4.14 Are all invoices stamped '*PAID*', approved, and marked with the project code and account code?			N/A	N/A	-	This is done by the Ministry of Finance, which was not assessed.
4.15 Do controls exist for preparation and approval of payroll expenditures? Are payroll changes properly authorized?	Yes			Low	1	Payroll payments are made in accordance with the Public Finance Act and Public Finance Regulation. For non civil service staff, payment of salaries is based on timesheets, progress reports and invoices from the Consultant. Payroll changes are approved by the Minister of Environment & Energy, Project Director, and Ministry of Finance.

4.16 Do controls exist to ensure that direct staff salary costs reflects the actual amount of staff time spent on a project?	Yes			Low	1	For non civil service staff, salary payment is based on time sheets, progress reports and invoices from the consultant. The documents are reviewed by the Project Coordinator and approved by the Project Director.
4.17 Do controls exist for expense categories that do not originate from invoice payments, such as DSAs, travel, and internal cost allocations?	Yes			Low	1	DSA and travel costs are paid based on the Travel Form approved by the Permanent Secretary and State Minister. It is initialled by Head of Department.
4e. Policies and procedures						
4.18 Does the IP have a stated basis of accounting (i.e. cash or accrual) and does it allow for compliance with the agency's requirement?	Yes			Low	1	The Ministry follows the accruals basis of accounting. The IP records expenditures based on supplier invoices. FACE forms are prepared on a cash basis.
4.19 Does the IP have an adequate policies and procedures manual and is it distributed to relevant staff?	Yes			Low	1	The IP has an adequate policy and procedures manual which is based on the Public Finance Act and Public Finance Regulation.
4f. Cash and bank						
4.20 Does the IP require dual signatories / authorization for bank transactions? Are new signatories approved at an appropriate level and timely updates made when signatories depart?	Yes			Low	1	Payment is made by the Ministry of Finance. Payment instructions from MEE to the Ministry of Finance are approved by the Permanent Secretary. Payment Vouchers are approved by the Project Director/Director General of Water and Sanitation.
4.21 Does the IP maintain an adequate, up-to-date cashbook, recording receipts and payments?			N/A	N/A	-	This is done by the Ministry of Finance, not by the IP.
4.22 If the partner is participating in micro-finance advances, do controls exist for the collection, timely deposit and recording of receipts at each collection location?			N/A	N/A	-	The partner does not participate in micro-finance advances.
4.23 Are bank balances and cash ledger reconciled monthly and properly approved? Are explanations provided for significant, unusual and aged reconciling items?	Yes			Low	1	This is done by the Ministry of Finance. Bank accounts are held at the Ministry of Finance, and management of the bank account follows MoF rules.
4.24 Is substantial expenditure paid in cash? If so, does the IP have adequate controls over cash payments?		No		Low	1	The IP does not pay any expenditure in cash.
4.25 Does the IP carry out a regular petty cash reconciliation?	Yes			Low	1	No petty cash is held by MEE, therefore the area of petty cash is regarded as low risk.

4.26 Are cash and cheques maintained in a secure location with restricted access? Are bank accounts protected with appropriate remote access controls?	Yes			Low	1	This is done by the Ministry of Finance. Bank accounts are held at the Ministry of Finance, and management of the bank accounts follows MoF rules.
4.27 Are there adequate controls over submission of electronic payment files that ensure no unauthorized amendments once payments are approved and files are transmitted over secure / crypted networks?	Yes			Low	1	This is done by the Ministry of Finance. Bank accounts are held at the Ministry of Finance, and management of the bank accounts follows MoF rules.
4g. Other offices or entities						
4.28 Does the IP have a process to ensure expenditures of subsidiary offices/ external entities are in compliance with the work plan and/or contractual agreement?			N/A	N/A	-	The IP has no subsidiary offices and does not work with external entities.
4h. Internal audit						
4.29 Is the internal auditor sufficiently independent to make critical assessments? To whom does the internal auditor report?			N/A	N/A	-	The IP has no internal auditor itself, however it is audited by the Auditor General office.
4.30 Does the IP have stated qualifications and experience requirements for internal audit department staff?			N/A	N/A	-	The IP has no internal auditor itself, however it is audited by the Auditor General office.
4.31 Are the activities financed by the agencies included in the internal audit department's work programme?			N/A	N/A	-	The IP has no internal auditor itself, however it is audited by the Auditor General office.
4.32 Does the IP act on the internal auditor's recommendations?			N/A	N/A	-	The IP has acted on recommendations from the Auditor General office.
Total number of questions in subject area:	**32**					
Total number of applicable questions in subject area:	**23**					
Total number of applicable key questions in subject area:	**15**					
Total number of risk points:	**23**					
Risk score	**1**					
ea risk rating	**Low**					

Subject area *(key questions in **bold**)*	Yes	No	N/A	Risk Assessment	Risk points	Remarks/comments
5. Fixed assets and inventory						
5a. Safeguards over assets						
5.1 Is there a system of adequate safeguards to protect assets from fraud, waste and abuse?	Yes			Moderate	2	There is a system of adequate safeguards to protect assets from fraud, waste and abuse. It is set out in the Public Finance Act. However not all fixed assets have fixed assets tag on them. **Refer to internal control finding 1.**
5.2 Are subsidiary records of fixed assets and inventory kept up to date and reconciled with control accounts?	Yes			Low	1	Records are maintained by the Logistics Unit. They use an Excel template designed by the Ministry of Finance for recording Fixed Assets and Quick Books software for inventory records.
5.3 Are there periodic physical verification and/or count of fixed assets and inventory? If so, please describe?	Yes			Moderate	2	Physical verification of assets is done annually by the Auditor General's Office (State Auditor).
5.4 Are fixed assets and inventory adequately covered by insurance policies?	Yes			Significant	3	As a government body, fixed assets and inventory are not covered by insurance policies. There is no requirement from the Ministry of Finance to insure fixed assets. **Refer to internal control finding 1.**
5b. Warehousing and inventory management						
5.5 Do warehouse facilities have adequate physical security?	Yes			Low	1	The inventory items comprise only office supplies. They are stored in a locked room. Only the Administrative Officer and Head of Procurement have a key.
5.6 Is inventory stored so that it is identifiable, protected from damage, and countable?	Yes			Significant	3	Inventory items are stored on racks. There are no inventory tags on the rack to identify the inventory items. **Refer to internal control finding 1.**
5.7 Does the IP have an inventory management system that enables monitoring of supply distribution?	Yes			Low	1	The IP uses Quick Books software to manage inventory.
5.8 Is responsibility for receiving and issuing inventory segregated from that for updating the inventory records?		No		Significant	3	Receiving, issuing and updating inventory records is not segregated, it is all done by the Administrative Officer. **Refer to internal control finding 1.**

5.9 Are regular physical counts of inventory carried out?	Yes			Moderate	2	Physical verification of inventory is done annually by the Auditor General's Office (State Auditor).
Total number of questions in subject area:	**9**					
Total number of applicable questions in subject area:	**9**					
Total number of applicable key questions in subject area:	**2**					
tal number of risk points:	**18**					
k score	**2**					
Area risk rating	**Mode rate**					

Subject area *(key questions in bold)*	Yes	No	N/A	Risk Assessment	Risk points	Remarks/comments
6. Financial reporting and monitoring						
6.1 Does the IP have established financial reporting procedures that specify what reports are to be prepared, the source system for key reports, the frequency of preparation, what they are to contain and how they are to be used?			N/A	N/A	-	The Ministry does not have to prepare an annual financial report itself, It is done by the Ministry of Finance based on data that is in the SAP accounting system. The Ministry is able to generate an Expenditure Report for individual donor-funded projects from the SAP system.
6.2 Does the IP prepare overall financial statements?			N/A	N/A	-	The Ministry does not have to prepare an annual financial report itself, It is done by the Ministry of Finance based on data that is in the SAP accounting system.
6.3 Are the IP's overall financial statements audited regularly by an independent auditor in accordance with appropriate national or international auditing standards? If so, please describe the auditor.	Yes			Low	1	The Ministry's overall financial statements, prepared by the Ministry of Finance, are audited in accordance with Maldives government regulation and policy, by the Auditor General.
6.4 Were there any major issues related to ineligible expenditure involving donor funds reported in the audit reports of the IP over the past three years?		No		Low	1	No major issues have been reported.
6.5 Have any significant recommendations made by auditors in the prior five audit reports and/or management letters over the past five years and have not yet been implemented?		No		Low	1	No significant recommendations have been noted.
6.6 Is the financial management system computerized?	Yes			Low	1	MEE uses the SAP accounting system for their accounting records. They input expenditures transactions to the system based on invoices and an Expenditures Report can be generated at the end of the month. The SAP system is managed by and servers are located at the Ministry of Finance.
6.7 Can the computerized financial management system produce the necessary financial reports?	Yes			Moderate	2	The IP can generate Expenditure Reports from the system, more complex reports must be requested from the Ministry of Finance.

6.8 Does the IP have appropriate safeguards to ensure the confidentiality, integrity and availability of the financial data? *E.g. password access controls; regular data back-up.*	Yes			Low	1	Password access controls are used, using the functionality in the SAP system
Total number of questions in subject area:	**8**					
Total number of applicable questions in subject area:	**6**					
Total number of applicable key questions in subject area:	**3**					
[illegible]al number of risk points:	**7**					
Risk score	**1.167**					
Area risk rating	**Low**					

Subject area *(key questions in bold)*	Yes	No	N/A	Risk Assessment	Risk points	Remarks/comments
7. Procurement and contract administration						
7a. Procurement						
7.1 Does the IP have written procurement policies and procedures?	Yes			Low	1	Procurement policies and procedures used by the IP include: 1. Public Finance Act (Financial Regulation) 2. Bidding Procedures Manual. 3. FIDIC Yellow Book For procurement related to donor-funded projects, the IP is usually required to follow donor procurement policies and procedures.
7.2 Are exceptions to procurement procedures approved by management and documented ?	Yes			Low	1	Any exceptions to procurement procedures are approved by the Ministry of Finance.
7.3 Does the IP have a computerized procurement system with adequate access controls and segregation of duties between entering purchase orders, approval and receipting of goods? Provide a description of the procurement system.	Yes			Moderate	2	Procurement is done manually with adequate segregation of duties. The Purchase Order is prepared by the Administrative Officer and approved by Head of Procurement. Goods are received by the Administrative Officer.
7.4 Are procurement reports generated and reviewed regularly? Describe reports generated, frequency and review & approvers.	Yes			Moderate	2	Procurement reports are compiled manually.
7.5 Does the IP have a structured procurement unit with defined reporting lines that foster efficiency and accountability?	Yes			Low	1	Yes, there is a Procurement Unit located within the MEE and it has a Permanent Secretary.
7.6 Is the IP's procurement unit resourced with qualified staff who are trained and certified and considered experts in procurement and conversant with UN / World Bank / European Union procurement requirements in addition to the a IP's procurement rules and regulations?	Yes			Low	1	Procurement staff are qualified, and they are familiar with the donor procurement requirements, especially those of UNDP, which they have used in prior projects.
7.7 Have any significant recommendations related to procurement made by auditors in the prior five audit reports and/or management letters over the past five years and have not yet been implemented?		No		Low	1	No significant recommendation related to procurement has been made by auditors in the last 5 years.
7.8 Does the IP require written or system authorizations for purchases? If so, evaluate if the authorization thresholds are appropriate?	Yes			Low	1	Authorization of purchases is done by the Project Director

7.9 Do the procurement procedures and templates of contracts integrate references to ethical procurement principles and exclusion and ineligibility criteria?	Yes			Low	1	Yes, ethics and ineligibility criteria are integrated into the procurement policies and procedures.
7.10 Does the IP obtain sufficient approvals before signing a contract?	Yes			Low	1	Contracts are signed after donors have approved the selected vendor/contractor.
1 Does the IP have and apply formal guidelines and cedures to assist in identifying, monitoring and dealing with potential conflicts of interest with potential suppliers/procurement agents? If so, how does the IP proceed in cases of conflict of interest?	Yes			Low	1	Bidding Procedures Manual, Section I, point 4.2. stated: "A Bidder shall not have a conflict of interest. Any Bidder found to have a conflict of interest shall be disqualified".
7.12 Does the IP follow a well-defined process for sourcing suppliers? Do formal procurement methods include wide broadcasting of procurement opportunities?	Yes			Low	1	The process for sourcing suppliers is part of the Bidding Procedures Manual. The request for proposal is advertised in the government's gazette and website in 2 weeks.
7.13 Does the IP keep track of past performance of suppliers? E.g. database of trusted suppliers.	Yes			Low	1	MEE has a database of trusted suppliers. The Ministry of Finance has a database of black listed suppliers/contractors.
7.14 Does the IP follow a well-defined process to ensure a secure and transparent bid and evaluation process? If so, describe the process.	Yes			Low	1	The bid and evaluation processes are described in the Bidding Procedures Manual.
7.15 When a formal invitation to bid has been issued, does the IP award the contract on a pre-defined basis set out in the solicitation documentation taking into account technical responsiveness and price?	Yes			Low	1	Section 52(1) of the Bidding Procedures Manual states that "The recommended tenderer shall be determined by the evaluation methodology and criteria specified in the invitation document"
7.16 If the IP is managing major contracts, does the IP have a policy on contracts management / administration?	Yes			Low	1	The IP does not manage major contracts, it carries out implementation itself.
Contract Management - To be completed only for the IPs managing contracts as part of programme implementation. Otherwise select N/A for risk assessment						
7 Are there personnel specifically designated to manage contracts or monitor contract expirations?			N/A	N/A	-	Not applicable for this IP.
7.18 Are there staff designated to monitor expiration of performance securities, warranties, liquidated damages and other risk management instruments?			N/A	N/A	-	Not applicable for this IP.
7.19 Does the IP have a policy on post-facto actions on contracts?			N/A	N/A	-	Not applicable for this IP.

7.20 How frequent do post-facto contract actions occur?			N/A	N/A	-	Not applicable for this IP.
Total number of questions in subject area:	**20**					
Total number of applicable questions in subject area:	**16**					
Total number of applicable key questions in subject area:	**5**					
Total number of risk points:	**18**					
Risk score	**1.125**					
Area risk rating	**Low**					

Totals	
Total number of questions:	96
Total number of applicable questions:	80
Total number of applicable key questions:	34
Total number of risk points:	102
Total risk score	1.275
Overall risk rating	Low

ANNEX V: ADDITIONAL QUESTIONS

Question	Yes	No	N/A	Risk Assessment	Remarks/comments
Additional questions					
1. Can the IP easily and quickly disburse funds? How long does it take to disburse funds upon receipt of invoice? Have there been any major problems in the past in the disbursement of funds?	Yes			Moderate	The IP can easily disburse funds but the speed of disbursement is slowed by the fact that payments are handled by the Ministry of Finance. When the IP requests cash advances (Direct Cash Transfer modality) from UNDP, it takes about 30 to 45 calendar days from the day they submit the FACE form until the money can be used. The IP receives a cheque from UNDP, the cheque is then submitted to Ministry of Finance for depositing in the account. To pay suppliers, it takes an average of 3 months from the day the IP submits the supplier invoice to the Ministry of Finance until the supplier receives the cheque from the Ministry of Finance. For urgent payment (e.g travelling expenses), the IP asks for the payment to be made directly from UNDP (direct payment modality). It takes only 2 weeks from the day the IP submits the FACE form until they get the payment (cheque or transfer to bank account) under direct payment modality.
2. Does the IP systematically review the workplan and adjust activities as necessary? If yes, how often does it happen and are those agreements recorded and formally reflected in a project budget revision? Does the IP systematically forward to the donor partner a record of such reviews and formal project / budget revisions?	Yes			Low	The IP systematically reviews the workplan and adjust activities as necessary, as follows: The PMU has a weekly technical project meeting with the consultant/contractor, donor and stakeholders to discuss work progress, issues, problems and how to resolve the problems. The Project Manager has weekly non-technical project meetings with the Minister of Environment and Energy, Permanent Secretary of MEE and other Ministers to update issues and to solve problems, if any. The Project Manager, Finance Officer and Administration Officer meet every Sunday to discuss weekly planning based on the result of project meetings (technical and non-technical meetings). Minutes of Meetings are prepared and distributed to the meeting participants by email. If required a budget revision is prepared based on the agreements made at the weekly meeting.
3. Is there a logical system where the IP checks to ensure that there is cause effect relationship between the planned activities and the goods and services being procured? Are the proposed goods and services to be procured approved by the appropriate IP/RP authority level?	Yes			Low	The IP discusses the cause effect relationship between the planned activities and the goods and services being procured in the weekly project meeting with consultant/contractor who has been hired to provide the goods or services. The proposed goods and services to be procured are approved by donors and the Ministry of Environment and Energy. Procurement is approved by the Minister himself.

4. Are there decisions not being made or activities not being implemented due to staff unavailability and engagement in other projects, travels, and or meetings?	No			Low	The availability of staff is also discussed in the weekly technical project meeting. The IP will adjust the Workplan if the staff are unavailable. There are no significant instances of activities not being implemented due to staff unavailability.
5. Is there an effective back up system in the absence of staff? Does the IP/RP have a leave plan in place to support business continuity in the absence of staff?	Yes			Low	The IP operates a formal work handover system to cover for staff who are away due to leave or travel. The current UNDP Program Management Unit (PMU) at the MEE consists of 1 Project Manager, 1 Financial Officer and 1 Administration Officer. The PMU report to Project Director (DG Water Sanitation). The staff who will take vacation leave have to fill in a vacation leave form attached to a Work Handover List and submit it to HR Department at least 2 weeks before the vacation. The form is then approved by the Project Director, and signed by the person who applies for vacation leave and the person who will deputise. The staff who will travel, should fill in Travel Form attached with Work Hand Over List and submit it to HR Department at least 2 weeks before. The form is approved by the Permanent Secretary and State Minister.
6. Is there a systematic process of handing over duties through briefing session and notes?	Yes			Low	The duties to be handed over are listed and explained in work handover list as explain in question 5 above. Briefings are given if needed.
7. Are there performance agreements in place for the staff, which incorporate achievement of the planned outputs of their allocated projects?	No			Moderate	The IP staff at the PMU are contracted employees. While there is no formal performance agreement in place for PMU staff, their contracts are renewed every year based on performance, and this process involves a formal consideration of their performance which is documented. They receive a fixed monthly salary, with no bonus and no overtime payment.
8. Is there a data / records back up plan to ensure business continuity when the system goes down?	N/a			N/a	The IP uses SAP to record expenditures. Data back up is done by the Ministry of Finance, which is where the servers are located. The IP performs a data input role only. This assessment did not assess the Ministry of Finance. FACE forms are prepared using Excel templates provided by UNDP.
9. Does the IP have a filing and records retention policy?	Yes			Low	The IP follows UNDP and MEE filing and records retention policies, which is to keep documents for 5 years. The Financial Officer of the project keeps copies of expenditure documents, the original documents are in the MEE Finance Department. Other project documentation is kept by the project Administration Officer.
10. Can the IP open a dedicated project bank account?	No			Low	For UNDP projects, the IP cannot open its own bank account, because under government rules the bank account must be opened at the Ministry of Finance.
11. Does the IP understand that it needs to comply with the UNDP Financial Rules and Regulations when applying for project advances?	Yes			Low	The IP staff understand that they need to comply with the UNDP Financial Rules and Regulations when applying for project advances. The staff undergoes training on this matter annually by UNDP.

12. Does the IP understand the requirements for receiving project advances from UNDP?	Yes			Low	Yes, the IP understand the requirements for receiving project advances from UNDP. The PMU have been trained by UNDP regarding this matter.
13. Does the staff actively refer to the procurement policies and abide by them?	Yes			Low	Yes, the staff actively refer to the MEE and UNDP procurement policies and abide by them. They can choose which procurement procedures they will use, depend on the type of goods/services they need and the time constraint. If they follow MEE procurement procedures, the system in place currently is that the final decision still remains with UNDP.
14. Does the IP have experience with procuring the types of goods and services included in the attached Project Document?	Yes			Low	Yes, the IP has experience with procuring the types of goods and services related with Green Climate Fund project. They have experience handling climate change projects, including: 1. Integrated Climate Change Risk Into Reliance Island Planning (ICCR): 2009 - 2015. 2. Integrated Water Resource Management (IWRM): 2011 - 2016.
15. Are the contracts payments linked to satisfactory receipt of clearly stated goods and services?	Yes			Low	Yes, the contract payments are linked to satisfactory receipt of clearly stated goods and services. The contractor/consultant has to submit progress report together with their invoice. The Project Manager and Project Director will evaluate the progress report before payment is made.
16. Is there a systematic management arrangement to ensure the IP actively monitors the work of the consultants, so that at the end of their contracts, the planned deliverables are actually delivered?	Yes			Low	Monitoring the work of consultants is done weekly in the weekly project meeting as described in point 2 above.
17. If there is a policy, is it actively used?	No			Moderate	There is no formal policy for monitoring the work of consultants but the weekly meeting mentioned above has been scheduled permanently, and considers the work of consultants.

Annex [#]. Social and Environmental Screening Template

The completed template, which constitutes the Social and Environmental Screening Report, must be included as an annex to the Project Document. Please refer to the Social and Environmental Screening Procedure for guidance on how to answer the 6 questions.]

Project Information

Project Information	
1. Project Title	Demonstration Project for HCFC free low GWP alternatives in refrigeration in fisheries sector in the Maldives
2. Project Number	(to be filled)
3. Location (Global/Region/Country)	The Republic of Maldives

Part A. Integrating Overarching Principles to Strengthen Social and Environmental Sustainability

QUESTION 1: How Does the Project Integrate the Overarching Principles in order to Strengthen Social and Environmental Sustainability?
Briefly describe in the space below how the Project mainstreams the human-rights based approach
This demonstration project, upon successful completion, will identify and establish suitability of hydrochlorofluorocarbon (HCFC) free low Global Warming Potential (GWP) alternatives in fisheries applications in the Maldives. Currently, the fishing industry and, particularly, fishing vessels use HCFC-22 for refrigeration and freezing applications during sea borne fishing operations. Due to maintenance and rough sea conditions, these vessels experience significant loss of refrigerants while at sea. This results in higher levels of HCFC-22 consumption in the country. The project will identify low GWP alternatives that replace HCFC-22 in these vessels, processes for replacing HCFC-22 based refrigeration equipment used in fishing vessels, good practices that can be adopted for reducing refrigerant consumption and policies that can help in reducing HCFC-22 use in fishing vessels. If successful, the demonstration project will contribute towards reduction in HCFC-22 consumption in existing fishing vessels and long term reduction in HCFC-22 consumption in fishing industry. The experiences and knowledge gained in this project would be useful for countries that use HCFC-22 in fishing industry applications. It is expected that through the project implementation the consumption of these hazardous substances will be substantially reduced. Sustainable use of refrigerants would contribute to sustainable fishery, which also means sustainable food security and ultimately sustainable resource. As living in a healthy environment is one of the fundamental human rights, the project also mainstreams human rights. Knowledge-sharing of the project demonstration lessons is also a key human right's access to environmental information.
Briefly describe in the space below how the Project is likely to improve gender equality and women's empowerment
Although the primary focus will be on sea-borne vessels, the project will also cover storage and processing applications. It is known that in the Maldives, the storage and processing applications for land based applications have alternatives such as ammonia and HFCs in use depending upon the nature of use. All attempts would be made to identify possible low GWP options that could substitute HFCs, if feasible. The alternatives would provide a more sustainable use of refrigerants, and therefore better safety and environment, which could also benefits women who are a part of the seafood processing industry.

Briefly describe in the space below how the Project mainstreams environmental sustainability
The project will identify low GWP alternatives that can replace HCFC-22 in fishing vessels, processes for replacing HCFC-22 based refrigeration equipment used in the vessels, good practices that can be adopted for reducing refrigerant consumption and policies that can help in reducing HCFC-22 use in fishing vessels. The mainstreaming environmental sustainability can be ensured through: - Replication of lessons learned and successes; - Application of regulatory measures which can help reduce HCFC-22 in fishery; - Awareness raising in industries and decision makers on low GWP alternatives for refrigerants used in fishing vessels.

Part B. Identifying and Managing Social and Environmental Risks

QUESTION 2: What are the Potential Social and Environmental Risks? *Note: Describe briefly potential social and environmental risks identified in Attachment 1 – Risk Screening Checklist (based on any "Yes" responses).*	**QUESTION 3: What is the level of significance of the potential social and environmental risks?** *Note: Respond to Questions 4 and 5 below before proceeding to Question 6*			**QUESTION 6: What social and environmental assessment and management measures have been conducted and/or are required to address potential risks (for Risks with Moderate and High Significance)?**
Risk Description	***Impact and Probability (1-5)***	***Significance (Low, Moderate, High)***	***Comments***	***Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.***
Risk 1: 7.2 The proposed Project would potentially result in the generation of waste (both hazardous and non-hazardous).	I = 2 P = 3	**Low**	As the project supports the adoption of low-GWP alternatives, the used HCFC-22 based refrigeration equipment in fishing vessels will be discarded.	The project would ensure the used HCFC-22 based refrigeration equipment could be re-used, if not, be discarded in a proper manner according to the country's waste regulation.
Risk 2	I = P =			
Risk 3:	I = P =			
Risk 4:	I = P =			
[add additional rows as needed]				

	QUESTION 4: What is the overall Project risk categorization?		
	Select one (see SESP for guidance)		**Comments**
	Low Risk	☒	The project will support the adoption of low-GWP alternatives in Fisheries industry. The project will ensure

			smooth transition to the new alternatives and contribute to reduction of HCFC22 consumption in Maldives. By taking appropriate management measures, the risks identified above could be mitigated thus assessed as "low."
	Moderate Risk	☐	
	High Risk	☐	
	QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are relevant?		
	Check all that apply		**Comments**
	Principle 1: Human Rights	☐	
	Principle 2: Gender Equality and Women's Empowerment	☐	
	1. Biodiversity Conservation and Natural Resource Management	☐	
	2. Climate Change Mitigation and Adaptation	☒	
	3. Community Health, Safety and Working Conditions	☐	
	4. Cultural Heritage	☐	
	5. Displacement and Resettlement	☐	
	6. Indigenous Peoples	☐	
	7. Pollution Prevention and Resource Efficiency	☒	

Final Sign Off

Signature	***Date***	***Description***
QA Assessor		UNDP staff member responsible for the Project, typically a UNDP Programme Officer. Final signature confirms they have "checked" to ensure that the SESP is adequately conducted.
QA Approver		UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD), Deputy Resident Representative (DRR), or Resident Representative (RR). The QA Approver cannot also be the QA Assessor. Final signature confirms they have "cleared" the SESP prior to submittal to the PAC.
PAC Chair		UNDP chair of the PAC. In some cases PAC Chair may also be the QA Approver. Final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC.

SESP Attachment 1. Social and Environmental Risk Screening Checklist

Checklist Potential Social and Environmental Risks		
Principles 1: Human Rights		**Answer (Yes/No)**
1.	Could the Project lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	No
2.	Is there a likelihood that the Project would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups? [1]	No
3.	Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups?	No
4.	Is there a likelihood that the Project would exclude any potentially affected stakeholders, in particular marginalized groups, from fully participating in decisions that may affect them?	No
5.	Are there measures or mechanisms in place to respond to local community grievances?	No
6.	Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project?	No
7.	Is there a risk that rights-holders do not have the capacity to claim their rights?	No
8.	Have local communities or individuals, given the opportunity, raised human rights concerns regarding the Project during the stakeholder engagement process?	No
9.	Is there a risk that the Project would exacerbate conflicts among and/or the risk of violence to project-affected communities and individuals?	No
Principle 2: Gender Equality and Women's Empowerment		
1.	Is there a likelihood that the proposed Project would have adverse impacts on gender equality and/or the situation of women and girls?	No
2.	Would the Project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	No
3.	Have women's groups/leaders raised gender equality concerns regarding the Project during the stakeholder engagement process and has this been included in the overall Project proposal and in the risk assessment?	No
3.	Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? *For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being*	No
Principle 3: Environmental Sustainability: Screening questions regarding environmental risks are encompassed by the specific Standard-related questions below		
Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management		
1.1	Would the Project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical	No

[1] Prohibited grounds of discrimination include race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender people and transsexuals.

	habitats) and/or ecosystems and ecosystem services? *For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes*	
1.2	Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	No
1.3	Does the Project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)	No
1.4	Would Project activities pose risks to endangered species?	No
1.5	Would the Project pose a risk of introducing invasive alien species?	No
1.6	Does the Project involve harvesting of natural forests, plantation development, or reforestation?	No
1.7	Does the Project involve the production and/or harvesting of fish populations or other aquatic species?	No
1.8	Does the Project involve significant extraction, diversion or containment of surface or ground water? *For example, construction of dams, reservoirs, river basin developments, groundwater extraction*	No
1.9	Does the Project involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)	No
1.10	Would the Project generate potential adverse transboundary or global environmental concerns?	No
1.11	Would the Project result in secondary or consequential development activities which could lead to adverse social and environmental effects, or would it generate cumulative impacts with other known existing or planned activities in the area? *For example, a new road through forested lands will generate direct environmental and social impacts (e.g. felling of trees, earthworks, potential relocation of inhabitants). The new road may also facilitate encroachment on lands by illegal settlers or generate unplanned commercial development along the route, potentially in sensitive areas. These are indirect, secondary, or induced impacts that need to be considered. Also, if similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.*	No
Standard 2: Climate Change Mitigation and Adaptation		
2.1	Will the proposed Project result in significant[2] greenhouse gas emissions or may exacerbate climate change?	No
2.2	Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?	No
2.3	Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)? *For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding*	No
Standard 3: Community Health, Safety and Working Conditions		
3.1	Would elements of Project construction, operation, or decommissioning pose potential safety risks to local communities?	No
3.2	Would the Project pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during	No

[2] In regards to CO_2, 'significant emissions' corresponds generally to more than 25,000 tons per year (from both direct and indirect sources). [The Guidance Note on Climate Change Mitigation and Adaptation provides additional information on GHG emissions.]

	construction and operation)?	
3.3	Does the Project involve large-scale infrastructure development (e.g. dams, roads, buildings)?	No
3.4	Would failure of structural elements of the Project pose risks to communities? (e.g. collapse of buildings or infrastructure)	No
3.5	Would the proposed Project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions?	No
3.6	Would the Project result in potential increased health risks (e.g. from water-borne or other vector-borne diseases or communicable infections such as HIV/AIDS)?	No
3.7	Does the Project pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during Project construction, operation, or decommissioning?	No
3.8	Does the Project involve support for employment or livelihoods that may fail to comply with national and international labor standards (i.e. principles and standards of ILO fundamental conventions)?	No
3.9	Does the Project engage security personnel that may pose a potential risk to health and safety of communities and/or individuals (e.g. due to a lack of adequate training or accountability)?	No
Standard 4: Cultural Heritage		
4.1	Will the proposed Project result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: Projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	No
4.2	Does the Project propose utilizing tangible and/or intangible forms of cultural heritage for commercial or other purposes?	No
Standard 5: Displacement and Resettlement		
5.1	Would the Project potentially involve temporary or permanent and full or partial physical displacement?	No
5.2	Would the Project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	No
5.3	Is there a risk that the Project would lead to forced evictions?[3]	No
5.4	Would the proposed Project possibly affect land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?	No
Standard 6: Indigenous Peoples		
6.1	Are indigenous peoples present in the Project area (including Project area of influence)?	No
6.2	Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples?	No
6.3	Would the proposed Project potentially affect the rights, lands and territories of indigenous peoples (regardless of whether Indigenous Peoples possess the legal titles to such areas)?	No
6.4	Has there been an absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	No

[3] Forced evictions include acts and/or omissions involving the coerced or involuntary displacement of individuals, groups, or communities from homes and/or lands and common property resources that were occupied or depended upon, thus eliminating the ability of an individual, group, or community to reside or work in a particular dwelling, residence, or location without the provision of, and access to, appropriate forms of legal or other protections.

6.4	Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No
6.5	Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?	No
6.6	Would the Project adversely affect the development priorities of indigenous peoples as defined by them?	No
6.7	Would the Project potentially affect the traditional livelihoods, physical and cultural survival of indigenous peoples?	No
6.8	Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	No
Standard 7: Pollution Prevention and Resource Efficiency		
7.1	Would the Project potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	No
7.2	Would the proposed Project potentially result in the generation of waste (both hazardous and non-hazardous)?	Yes
7.3	Will the proposed Project potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? Does the Project propose use of chemicals or materials subject to international bans or phase-outs? *For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Conventions on Persistent Organic Pollutants or the Montreal Protocol*	No
7.4	Will the proposed Project involve the application of pesticides that may have a negative effect on the environment or human health?	No
7.5	Does the Project include activities that require significant consumption of raw materials, energy, and/or water?	No

UNDP Project Quality Assessment Report

PROJECT QA ASSESSMENT: DESIGN AND APPRAISAL

OVERALL PROJECT

EXEMPLARY (5) ●●●●●	HIGHLY SATISFACTORY (4) ●●●●○	SATISFACTORY (3) ●●●○○	NEEDS IMPROVEMENT (2) ●●○○○	INADEQUATE (1) ●○○○○
At least four criteria are rated Exemplary, and all criteria are rated High or Exemplary.	All criteria are rated Satisfactory or higher, and at least four criteria are rated High or Exemplary.	At least six criteria are rated Satisfactory or higher, and only one may be rated Needs Improvement. The SES criterion must be rated Satisfactory or above.	At least three criteria are rated Satisfactory or higher, and only four criteria may be rated Needs Improvement.	One or more criteria are rated Inadequate, or five or more criteria are rated Needs Improvement.

DECISION

- **APPROVE** – the project is of sufficient quality to continue as planned. Any management actions must be addressed in a timely manner.
- **APPROVE WITH QUALIFICATIONS** – the project has issues that must be addressed before the project document can be approved. Any management actions must be addressed in a timely manner.
- **DISAPPROVE** – the project has significant issues that should prevent the project from being approved as drafted.

RATING CRITERIA

STRATEGIC

1. Does the project's Theory of Change specify how it will contribute to higher level change? (Select the option from 1-3 that best reflects the project): • **3:** The project has a theory of change with explicit assumptions and clear change pathway describing how the project will contribute to outcome level change as specified in the programme/CPD, backed by credible evidence of what works effectively in this context. The project document clearly describes why the project's strategy is the best approach at this point in time. • **2:** The project has a theory of change. It has an explicit change pathway that explains how the project intends to contribute to outcome-level change and why the project strategy is the best approach at this point in time, but is backed by limited evidence. • **1:** The project does not have a theory of change, but the project document may describe in generic terms how the project will contribute to development results, without specifying the key assumptions. It does not make an explicit link to the programme/CPD's theory of change. *Note: Management Action or strong management justification must be given for a score of 1	3	2 1 **Evidence:** **Project Document**
2. Is the project aligned with the thematic focus of the UNDP Strategic Plan? (select the option from 1-3 that best reflects the project): • **3:** The project responds to one of the three areas of development work[1] as specified in the Strategic Plan; it addresses at least one of the proposed new and emerging areas[2]; an issues-based analysis has been incorporated into the project design; and the project's RRF includes all the relevant SP output indicators. *(all must be true to select this option)* • **2:** The project responds to one of the three areas of development work[1] as specified in the Strategic Plan. The project's RRF includes at least one SP output indicator, if relevant. *(both must be true to select this option)* • **1:** While the project may respond to one of the three areas of development work[1] as specified in the Strategic Plan, it is based on a sectoral approach without addressing the complexity of the development	3	2 1 **Evidence:** **-Project Document** **-Country Programme Document**

[1] 1. Sustainable development pathways; 2. Inclusive and effective democratic governance; 3. Resilience building

[2] sustainable production technologies, access to modern energy services and energy efficiency, natural resources management, extractive industries, urbanization, citizen security, social protection, and risk management for resilience

issue. None of the relevant SP indicators are included in the RRF. This answer is also selected if the project does not respond to any of the three areas of development work in the Strategic Plan.	
RELEVANT	
3. Does the project have strategies to effectively identify, engage and ensure the meaningful participation of targeted groups/geographic areas with a priority focus on the excluded and marginalized? (select the option from 1-3 that best reflects this project): • 3: The target groups/geographic areas are appropriately specified, prioritising the excluded and/or marginalised. Beneficiaries will be identified through a rigorous process based on evidence (if applicable.)The project has an explicit strategy to identify, engage and ensure the meaningful participation of specified target groups/geographic areas throughout the project, including through monitoring and decision-making (such as representation on the project board) *(all must be true to select this option)* • 2: The target groups/geographic areas are appropriately specified, prioritising the excluded and/or marginalised. The project document states how beneficiaries will be identified, engaged and how meaningful participation will be ensured throughout the project. *(both must be true to select this option)* • 1: The target groups/geographic areas are not specified, or do not prioritize excluded and/or marginalised populations. The project does not have a written strategy to identify or engage or ensure the meaningful participation of the target groups/geographic areas throughout the project. *Note: Management Action must be taken for a score of 1, or select not applicable.	3 | 2 1 **N/A**
4. Have knowledge, good practices, and past lessons learned of UNDP and others informed the project design? (select the option from 1-3 that best reflects this project): • 3: Knowledge and lessons learned (gained e.g. through peer assist sessions) backed by credible evidence from evaluation, corporate policies/strategies, and monitoring have been explicitly used, with appropriate referencing, to develop the project's theory of change and justify the approach used by the project over alternatives. • 2: The project design mentions knowledge and lessons learned backed by evidence/sources, which inform the project's theory of change but have not been used/are not sufficient to justify the approach selected over alternatives. • 1: There is only scant or no mention of knowledge and lessons learned informing the project design. Any references that are made are not backed by evidence. *Note: Management Action or strong management justification must be given for a score of 1	3 | 2 1 **Management justification: Since the nature of a demo project is that it is a pioneer project, limited information is available on performance of different technical options**
5. Does the project use gender analysis in the project design and does the project respond to this gender analysis with concrete measures to address gender inequities and empower women? (select the option from 1-3 that best reflects this project): • 3: A participatory gender analysis on the project has been conducted. This analysis reflects on the different needs, roles and access to/control over resources of women and men, and it is fully integrated into the project document. The project establishes concrete priorities to address gender inequalities in its strategy. The results framework includes outputs and activities that specifically respond to this gender analysis, with indicators that measure and monitor results contributing to gender equality. *(all must be true to select this option)* • 2: A gender analysis on the project has been conducted. This analysis reflects on the different needs, roles and access to/control over resources of women and men. Gender concerns are integrated in the development challenge and strategy sections of the project document. The results framework includes outputs and activities that specifically respond to this gender analysis, with indicators that measure and monitor results contributing to gender equality. *(all must be true to select this option)* • 1: The project design may or may not mention information and/or data on the differential impact of the project's development situation on gender relations, women and men, but the constraints have not been clearly identified and interventions have not been considered. *Note: Management Action or strong management justification must be given for a score of 1	3 | 2 1 **Evidence: SESP**
6. Does UNDP have a clear advantage to engage in the role envisioned by the project vis-à-vis national partners	3 | 2

other development partners, and other actors? (select from options 1-3 that best reflects this project): • **3:** An analysis has been conducted on the role of other partners in the area where the project intends to work, and credible evidence supports the proposed engagement of UNDP and partners through the project. It is clear how results achieved by relevant partners will contribute to outcome level change complementing the project's intended results. If relevant, options for south-south and triangular cooperation have been considered, as appropriate. *(all must be true to select this option)* • **2:** Some analysis has been conducted on the role of other partners where the project intends to work, and relatively limited evidence supports the proposed engagement of and division of labour between UNDP and partners through the project. Options for south-south and triangular cooperation may not have not been fully developed during project design, even if relevant opportunities have been identified. • **1:** No clear analysis has been conducted on the role of other partners in the area that the project intends to work, and relatively limited evidence supports the proposed engagement of UNDP and partners through the project. There is risk that the project overlaps and/or does not coordinate with partners' interventions in this area. Options for south-south and triangular cooperation have not been considered, despite its potential relevance. *Note: Management Action or strong management justification must be given for a score of 1	1 **Evidence:** **Project Document** **SESP**
SOCIAL & ENVIRONMENTAL STANDARDS	
7. Does the project seek to further the realization of human rights using a human rights based approach? (select from options 1-3 that best reflects this project): • **3:** Credible evidence that the project aims to further the realization of human rights, upholding the relevant international and national laws and standards in the area of the project. Any potential adverse impacts on enjoyment of human rights were rigorously identified and assessed as relevant, with appropriate mitigation and management measures incorporated into project design and budget. *(all must be true to select this option)* • **2:** Some evidence that the project aims to further the realization of human rights. Potential adverse impacts on enjoyment of human rights were identified and assessed as relevant, and appropriate mitigation and management measures incorporated into the project design and budget. • **1:** No evidence that the project aims to further the realization of human rights. Limited or no evidence that potential adverse impacts on enjoyment of human rights were considered. *Note: Management action or strong management justification must be given for a score of 1	3 | 2 1 **Evidence:** **SESP**
8. Did the project consider potential environmental opportunities and adverse impacts, applying a precautionary approach? (select from options 1-3 that best reflects this project): • **3:** Credible evidence that opportunities to enhance environmental sustainability and integrate poverty-environment linkages were fully considered as relevant, and integrated in project strategy and design. Credible evidence that potential adverse environmental impacts have been identified and rigorously assessed with appropriate management and mitigation measures incorporated into project design and budget. *(all must be true to select this option).* • **2:** No evidence that opportunities to strengthen environmental sustainability and poverty-environment linkages were considered. Credible evidence that potential adverse environmental impacts have been identified and assessed, if relevant, and appropriate management and mitigation measures incorporated into project design and budget. • **1:** No evidence that opportunities to strengthen environmental sustainability and poverty-environment linkages were considered. Limited or no evidence that potential adverse environmental impacts were adequately considered. *Note: Management action or strong management justification must be given for a score of 1	3 | 2 1 **Evidence:** **SESP**
9. Has the Social and Environmental Screening Procedure (SESP) been conducted to identify potential social and environmental impacts and risks? The SESP is not required for projects in which UNDP is Administrative Agent only and/or projects comprised solely of reports, coordination of events, trainings, workshops, meetings, conferences and/or communication materials and information dissemination. [if yes, upload the completed checklist. If SESP is not required, provide the reason for the exemption in the evidence section.]	Yes | No **Evidence:** **SESP**
MANAGEMENT & MONITORING	

10. Does the project have a strong results framework? (select from options 1-3 that best reflects this project): • **3:** The project's selection of outputs and activities are at an appropriate level and relate in a clear way to the project's theory of change. Outputs are accompanied by SMART, results-oriented indicators that measure all of the key expected changes identified in the theory of change, each with credible data sources, and populated baselines and targets, including gender sensitive, sex-disaggregated indicators where appropriate. *(all must be true to select this option)* • **2:** The project's selection of outputs and activities are at an appropriate level, but may not cover all aspects of the project's theory of change. Outputs are accompanied by SMART, results-oriented indicators, but baselines, targets and data sources may not yet be fully specified. Some use of gender sensitive, sex-disaggregated indicators, as appropriate. *(all must be true to select this option)* • **1:** The results framework does not meet all of the conditions specified in selection "2" above. This includes: the project's selection of outputs and activities are not at an appropriate level and do not relate in a clear way to the project's theory of change; outputs are not accompanied by SMART, results-oriented indicators that measure the expected change, and have not been populated with baselines and targets; data sources are not specified, and/or no gender sensitive, sex-disaggregation of indicators. *Note: Management Action or strong management justification must be given for a score of 1	3 / 2 / 1 **Evidence:** **Project Document** **Management justification: the activities are not gender specific, and thus do not measure sex-disaggregated results**
11. Is there a comprehensive and costed M&E plan in place with specified data collection sources and methods to support evidence-based management, monitoring and evaluation of the project?	Yes (3) / No (1)
12. Is the project's governance mechanism clearly defined in the project document, including planned composition of the project board? (select from options 1-3 that best reflects this project): • **3:** The project's governance mechanism is fully defined in the project composition. Individuals have been specified for each position in the governance mechanism (especially all members of the project board.) Project Board members have agreed on their roles and responsibilities as specified in the terms of reference. The ToR of the project board has been attached to the project document. *(all must be true to select this option).* • **2:** The project's governance mechanism is defined in the project document; specific institutions are noted as holding key governance roles, but individuals may not have been specified yet. The prodoc lists the most important responsibilities of the project board, project director/manager and quality assurance roles. *(all must be true to select this option)* • **1:** The project's governance mechanism is loosely defined in the project document, only mentioning key roles that will need to be filled at a later date. No information on the responsibilities of key positions in the governance mechanism is provided. *Note: Management Action or strong management justification must be given for a score of 1	3 / 2 / 1 **Evidence:** **Project Document**
13. Have the project risks been identified with clear plans stated to manage and mitigate each risks? (select from options 1-3 that best reflects this project): • **3:** Project risks related to the achievement of results are fully described in the project risk log, based on comprehensive analysis drawing on the theory of change, Social and Environmental Standards and screening, situation analysis, capacity assessments and other analysis. Clear and complete plan in place to manage and mitigate each risk. *(both must be true to select this option)* • **2:** Project risks related to the achievement of results identified in the initial project risk log with mitigation measures identified for each risk. • **1:** Some risks may be identified in the initial project risk log, but no evidence of analysis and no clear risk mitigation measures identified. This option is also selected if risks are not clearly identified and no initial risk log is included with the project document. *Note: Management Action must be taken for a score of 1	3 / 2 / 1 **Evidence** **Project Document** **SESP** **Risk log**
EFFICIENT	
14. Have specific measures for ensuring cost-efficient use of resources been explicitly mentioned as part of the project design? This can include: i) using the theory of change analysis to explore different options of achieving the maximum results with the resources available; ii) using a portfolio management approach to improve cost	Yes (3) / No (1)

effectiveness through synergies with other interventions; iii) through joint operations (e.g., monitoring or procurement) with other partners.		
15. Are explicit plans in place to ensure the project links up with other relevant on-going projects and initiatives, whether led by UNDP, national or other partners, to achieve more efficient results (including, for example, through sharing resources or coordinating delivery?)	Yes (3)	No (1)
16. Is the budget justified and supported with valid estimates? • **3:** The project's budget is at the activity level with funding sources, and is specified for the duration of the project period in a multi-year budget. Costs are supported with valid estimates using benchmarks from similar projects or activities. Cost implications from inflation and foreign exchange exposure have been estimated and incorporated in the budget. • **2:** The project's budget is at the activity level with funding sources, when possible, and is specified for the duration of the project in a multi-year budget. Costs are supported with valid estimates based on prevailing rates. • **1:** The project's budget is not specified at the activity level, and/or may not be captured in a multi-year budget.	3	2 1 **Evidence: Project Document**
17. Is the Country Office fully recovering the costs involved with project implementation? • **3:** The budget fully covers all project costs that are attributable to the project, including programme management and development effectiveness services related to strategic country programme planning, quality assurance, pipeline development, policy advocacy services, finance, procurement, human resources, administration, issuance of contracts, security, travel, assets, general services, information and communications based on full costing in accordance with prevailing UNDP policies (i.e., UPL, LPL.) • **2:** The budget covers significant project costs that are attributable to the project based on prevailing UNDP policies (i.e., UPL, LPL) as relevant. • **1:** The budget does not adequately cover project costs that are attributable to the project, and UNDP is cross-subsidizing the project. *Note: Management Action must be given for a score of 1. The budget must be revised to fully reflect the costs of implementation before the project commences.	3	2 1 **Evidence** **Management justification: Project is implemented by NOU, therefore no cost recovery is required.**
EFFECTIVE		
18. Is the chosen implementation modality most appropriate? (select from options 1-3 that best reflects this project): • **3:** The required implementing partner assessments (capacity assessment, HACT micro assessment) have been conducted, and there is evidence that options for implementation modalities have been thoroughly considered. There is a strong justification for choosing the selected modality, based on the development context. *(both must be true to select this option)* • **2:** The required implementing partner assessments (capacity assessment, HACT micro assessment) have been conducted and the implementation modality chosen is consistent with the results of the assessments. • **1:** The required assessments have not been conducted, but there may be evidence that options for implementation modalities have been considered. *Note: Management Action or strong management justification must be given for a score of 1	3	2 1 **Evidence** **Project Document** **Results of capacity assessment**
19. Have targeted groups, prioritizing marginalized and excluded populations that will be affected by the project, been engaged in the design of the project in a way that addresses any underlying causes of exclusion and discrimination? • 3: Credible evidence that all targeted groups, prioritising marginalized and excluded populations that will be involved in or affected by the project, have been actively engaged in the design of the project. Their views, rights and any constraints have been analysed and incorporated into the root cause analysis of the theory of change which seeks to address any underlying causes of exclusion and discrimination and the selection of project interventions.	3	2 1 **Targeted Demonstration project. Extensive engagement outside is not warranted.**

• 2: Some evidence that key targeted groups, prioritising marginalized and excluded populations that will be involved in the project, have been engaged in the design of the project. Some evidence that their views, rights and any constraints have been analysed and incorporated into the root cause analysis of the theory of change and the selection of project interventions. • 1: No evidence of engagement with marginalized and excluded populations that will be involved in the project during project design. No evidence that the views, rights and constraints of populations have been incorporated into the project.	
20. Does the project conduct regular monitoring activities, have explicit plans for evaluation, and include other lesson learning (e.g. through After Action Reviews or Lessons Learned Workshops), timed to inform course corrections if needed during project implementation?	Yes (3) / No (1)
21. The gender marker for all project outputs are scored at GEN2 or GEN3, indicating that gender has been fully mainstreamed into all project outputs at a minimum. *Note: Management Action or strong management justification must be given for a score of "no"	Yes (3) / No (1) **Evidence: Project Document Management justification: Nature of this project is not gender-specific.**
22. Is there a realistic multi-year work plan and budget to ensure outputs are delivered on time and within allotted resources? (select from options 1-3 that best reflects this project): • 3: The project has a realistic work plan & budget covering the duration of the project *at the activity* level to ensure outputs are delivered on time and within the allotted resources. • 2: The project has a work plan & budget covering the duration of the project at the output level. • 1: The project does not yet have a work plan & budget covering the duration of the project.	3 / 2 / 1 **Evidence: Project Document**
SUSTAINABILITY & NATIONAL OWNERSHIP	
23. Have national partners led, or proactively engaged in, the design of the project? (select from options 1-3 that best reflects this project): • 3: National partners have full ownership of the project and led the process of the development of the project jointly with UNDP. • 2: The project has been developed by UNDP in close consultation with national partners. • 1: The project has been developed by UNDP with limited or no engagement with national partners.	3 / 2 / 1 **Evidence: Project Document**
24. Are key institutions and systems identified, and is there a strategy for strengthening specific/ comprehensive capacities based on capacity assessments conducted? (select from options 0-4 that best reflects this project): • 3: The project has a comprehensive strategy for strengthening specific capacities of national institutions based on a systematic and detailed capacity assessment that has been completed. This strategy includes an approach to regularly monitor national capacities using clear indicators and rigorous methods of data collection, and adjust the strategy to strengthen national capacities accordingly. • 2.5: A capacity assessment has been completed. The project document has identified activities that will be undertaken to strengthen capacity of national institutions, but these activities are not part of a comprehensive strategy to monitor and strengthen national capacities. • 2: A capacity assessment is planned after the start of the project. There are plans to develop a strategy to strengthen specific capacities of national institutions based on the results of the capacity assessment. • 1.5: There is mention in the project document of capacities of national institutions to be strengthened through the project, but no capacity assessments or specific strategy development are planned. • 1: Capacity assessments have not been carried out and are not foreseen. There is no strategy for strengthening specific capacities of national institutions.	3 / 2.5 / 2 / 1.5 / 1 **Evidence** **Project Document** **Annex: Results of capacity assessment**
25. Is there is a clear strategy embedded in the project specifying how the project will use national systems (i.e., procurement, monitoring, evaluations, etc.,) to the extent possible?	Yes (3) / No (1)

26. Is there a clear transition arrangement/ phase-out plan developed with key stakeholders in order to sustain or scale up results (including resource mobilisation strategy)?	Yes (3)	**No (1)**

OFFLINE RISK LOG

(see Deliverable Description for the Risk Log regarding its purpose and use)

Project Title: Demonstration Project for HCFC free low GWP alternatives in refrigeration in fisheries sector in the Maldives	**Award ID:**	**Date:**

#	Description	Date Identified	Type	Impact & Probability	Countermeasures / Mngt response	Owner	Submitted, updated by	Last Update	Status
	Enter a brief description of the risk	When was the risk first identified	Environmental Financial Operational Organizational Political Regulatory Strategic Other	Describe the potential effect on the project if this risk were to occur Enter probability on a scale from 1 (low) to 5 (high) P = Enter impact on a scale from 1 (low) to 5 (high) I =	What actions have been taken/will be taken to counter this risk	Who has been appointed to keep an eye on this risk	Who submitted the risk	When was the status of the risk last checked	e.g. dead, reducing, increasing, no change
1	Limited pool of local knowledge and expertise on the retrofitting of fisheries vessels.	Project preparation	Operational	P = 2 I = 2	UNDP Regional Technical Advisors closely monitor project and provide timely technical support.	IP, UNDP	IP, UNDP	Project submission	No change
2	Technological barrier: Limited availability of alternatives for sea borne fisheries vessels	Project preparation	Operational	P = 3 I = 3	If low GWP options are not available, to explore options beyond the 700 GWP threshold.	IP, UNDP	IP, UNDP	Project submission	No change
3	Limitations in predicting the cost of retrofitting.	Project preparation	Financial	P =2 I = 2	Considerations given in the design of retrofitting to minimise the cost without compromising on zero-ODP and low-GWP.	IP, UNDP	IP, UNDP	Project submission	No change

Ministry of Environment and Energy
Male', Republic of Maldives.

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Advertisement Reference:

TERMS OF REFERENCE

Recruitment of a Technical consultant for research and analysis of low GWP alternatives

Background

Maldives is a Party to the Montreal Protocol on Substances that Deplete the Ozone Layer and has acceded to the Vienna Convention and Montreal Protocol in May 1998. As a party to the Vienna Convention and Montreal Protocol on Substances that Deplete the Ozone Layer, Maldives has phased out several ozone depleting substances including the early phase-out of CFCs in 2008. To comply with its obligations under the Montreal Protocol, Maldives is currently implementing the phase-out of HCFCs by 2020.

At the 60th Meeting of the Executive Committee, the HCFC Phase-out Management Plan (HPMP) of Maldives was approved, for an accelerated phase-out, 10 years earlier than the dates set in the accelerated phase-out schedule agreed in the 19th Meeting of the Parties (Decision XIX/6).

HCFC is the most commonly used refrigerant in the Maldives. In early 2006, HCFC accounted for over 85% of the total refrigerant consumption in refrigeration and air-conditioning sector in the Maldives. The consumption of HCFC-22 in the year 2013 was about 60.3 MT. Of this total consumption, fisheries sector applications consume about 15-20% of the total consumption.

Fisheries sector is an important sector for Maldives economy. The fish catch of Maldives is stored and processed and exported to different countries across the globe. HCFC-22 is consumed in fisheries sector in a range of applications and predominantly in fishing vessels, processing and storage applications.

The fisheries enterprises have various types of facilities - namely, shore-based facilities, factories/processing units, cold storages, and off-shore platforms such as collecting vessels and mother vessels. Cold storages in the various facilities owned by the enterprises use HCFCs, HFCs, ammonia and other refrigerants. However, vessels used by these companies for fish collecting, holding, transportation and storage, mainly use HCFC-22. Most of these

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enterprises have shore based and offshore-based facilities, servicing needs of equipment are carried out by the company technicians based in the site or on boats. Sometimes servicing activities are outsourced to smaller servicing workshops based in Male. Servicing need is very high in the fisheries industry mainly on account of (a) operations conducted in highly salty environment which contributes to higher levels of corrosion and (b) turbulent sea accompanied by vacillating conditions which results higher levels of leakage at joints. Annual servicing needs are estimated to be as high as 50% due to high leakage rate as a consequence of corrosion.

Given the high HCFC consumption in fisheries sector and the importance of fisheries to Maldives' economy in terms of employment and income levels, support for HCFC phase-out for this industry is accorded highest priority by Government and prioritized assistance needs to be provided to assist HCFC consumers in this industry in converting to low GWP alternatives.

As such, Ministry of Environment and Energy is implementing a number of projects through Multilateral Fund for the implementation of the Montreal Protocol on Substances that deplete the Ozone Layer including the demonstration project; "HCFC free low GWP alternatives in refrigeration in fisheries sector in the Maldives" in collaboration with UNDP. The primary objective of the project is to identify low GWP substitutes to HCFC-22 in the existing refrigeration equipment using HCFC-22 and demonstrate low-GWP ODS free alternatives for use by fishing industry in Maldives. Given the limited information available on actual performance of different technical options, the project will include both detailed research and analysis of existing options available and designing project interventions for testing performance of substitutes that are drop-ins or "near" to drop-ins involving soft optimization. Replacement options for fishing vessels which are HCFC free would also be considered for demonstration projects. This demonstration project is expected to have a significant impact on (a) HCFC phase-out in the country with low-GWP ODS free alternatives and (b) scaled up adoption of ODS free alternatives in countries with large fishing industry consuming HCFCs. On this basis, the demonstration project intends to identify low-GWP alternative technologies to HCFCs for use in refrigeration equipment with a charge of 150 kg to 200 kg of refrigerant in the fisheries sector. The beneficiary enterprise for demonstration will be selected during project implementation.

The successful implementation of this demonstration project will provide information on performance of a low GWP and cost-effective alternative for fisheries industry. The results of the project would also be shared with other countries with similar operating conditions. The findings would be documented and disseminated to countries in the region.

The demonstration project will research and analysis existing technology options used in both sea-borne refrigeration equipment and in land storage and processing applications; it will undertake a technical assessment of low-GWP options in terms of their feasibility as drop-in refrigerants as well as replacement options; test the performance of substitutes including

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optimization of drop-in or replacement systems; and demonstrate the use of the selected substitutes. The project proposes to convert the HCFC-22-based refrigeration equipment in three fishing vessels to low-GWP technologies, assess its performance, and evaluate the suitability of the selected technology. Based on the evaluation, suitable technologies will be disseminated to the fishing industry during HCFC phase-out. The project will eliminate the use of 0.6 mt of HCFC-22 in fishing vessels.

In this regard, the Ministry of Environment and Energy is seeking a qualified individual (national) to undertake research and analysis on alternative technologies to HCFC-22 in the existing refrigeration equipment using HCFC-22 in fishing industry and demonstrate low-GWP HCFC free alternatives for use by fishing industry in Maldives.

Objective

The main objective of this is to demonstrate low-GWP HCFC free alternatives for use by fishing industry in Maldives.

Scope of services

1. Detail research and analysis of existing options available designing project interventions for testing performance of substitutes that are drop-ins or "near" to drop-ins involving soft optimization as well as replacement options

2. Research and analysis should include technology options used in both sea-borne refrigeration equipment and in land storage and processing applications;

3. Test the performance of substitutes including optimization of drop-in or "near" to drop-ins or replacement systems; assess its performance, and evaluate the suitability of the selected technology;

4. Carryout information sessions to the stakeholders to dominate the findings;

5. Advise Ozone unit on selecting the beneficiaries based on the detail research and analysis of the existing equipment in the fisheries sector and on project implementation.

6. Visit equipment location of the beneficiary enterprises (islands) and follow-up monitoring of the operation and maintenance of the equipment as requested by the Ozone Unit;

    a. A minimum of atleast 2 visits per year after the completion of the demonstration project for 2 years.

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b. Prepare and submit reports upon completion of monitoring visits to Ozone Officer

7. Demonstrate the use of the selected substitutes in the selected three equipment;

8. Energy Efficiency comparison of the equipment prior and after

9. Develop manuals for the selected three equipment for demonstration; this should include a checklist for replacement or drop-in activities; operation and maintenance on servicing.

10. Prepare bid documents for the procurement of selected technology items including the technical specifications;

11. Prepare a work schedule for the duration of the consultancy, providing details of the works to be undertaken including the training schedule and the monitoring visits and finalize the work schedule with Ozone Unit.

12. Undertake trainings to the technical staff of the selected three beneficiary enterprises on replacement, drop-in, and the selected technology options, and on maintenance and servicing including good practices for minimizing refrigerant leakage

13. Take pictures of all the important steps needs due consideration for future retrofitting.

14. Develop 3 separate reports on;

    a. the technology research and analysis conducted
    b. the technology choice and retrofit options using low GWP technologies identified
    c. the compilation of findings of demonstration project and information dissemination to be disseminated to countries in the region and for the countries like Maldives

15. Carryout a stakeholder workshop to disseminate the findings of the detail research and analysis

16. Carryout a stakeholder workshop to disseminate the findings of the demonstration project after the completion of one project;

Qualifications

- Hold an undergraduate degree in a relevant field.
- Must have at least 5 years' experience in RAC field.
- Excellent verbal and written skills in English

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- Sound understanding of Montreal Protocol targets and the schedule of phase out activities carried in Maldives.
- Demonstrated experience in HCFC phase-out project activities.
- Ability to work in close cooperation with all key stakeholders including the fisheries enterprises, government authorities and other stakeholders.

Financial Proposal

The consultant is expected to include in his/her proposal a lump sum fee in MVR for carrying out the tasks.

Schedule for the assignment

The consultant is expected to complete the tasks within 6 months

Institutional Arrangement

The Consultant will report directly to Ozone Unit at MEE.

Once a week a meeting will be scheduled at MEE with Ozone Unit and UNDP and other required institutions to provide updates, targets for the week, share and gather information and discuss way forward.

Local travel will be arranged by MEE. A field visit report will have to be submitted to the Ozone Unit, MEE no later than 3 days after every field visit.

Selection Criteria

Selection will be based on academic qualification and experience. The consultant will be selected based on the following criteria:

Criterion	Weightage
Academic qualification	30%
Experience in (number of years) with Montreal Protocol activities relating to HCFC phase-out	30%
Record of successful implementation of similar projects	20%
Financial Proposal	20%

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Application and Submission

Interested consultant/firm may submit their proposals in a sealed envelope indicating the following:

- Summary of similar assignments performed in the past
- Curriculum Vitae of the consultant
- Attested copies of the academic certificates
- Financial proposal (fees for the assignment)

Interested consultants/firm may submit their proposals no later than 1100hrs of 27 March 2017 to the following address.

National Ozone Unit
Ministry of Environment and Energy
Green Building, Handhuvaree Hingun, Maafannu
Male', 20392, Republic of Maldives

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