

**BUILDING SECTOR INTERVENTION UNDER HCFC PHASE-OUT MANAGEMENT
PLAN (HPMP) STAGE-II PROJECT**

Terms of Reference (TOR)

1. Background

India is a Party to the Montreal Protocol since 1992 and has been implementing phase-out of production and consumption of Ozone Depleting Substances (ODSs). The production and consumption of Chlorofluorocarbons (CFCs), Carbon tetrachloride (CTC) and Halons has been successfully phased out in India as of 1st January, 2010. The phase-out of Hydrochlorofluorocarbons (HCFCs) is ongoing as per the accelerated phase-out schedule of HCFCs under the Montreal Protocol.

The HCFC Phase-out Management Plan (HPMP) is being implemented in the country. The Executive Committee (ExCom) of the Multilateral Fund (MLF) in its 77th meeting vide decision 77/43 approved the HPMP Stage-II for India. The UNDP is the lead implementing agency for implementation of HPMP Stage-II. United Nations Environment Programme (UNEP) and Deutsche Gesellschaft für Internationale Zusammenarbeit, (GIZ) Proklima, Government of Germany are the cooperating agencies.

UNEP is the implementing agency, to implement the enabling activities under the non-investment component of India's HPMP Stage-II. Under sector based policy development for Ozone depleting substance phase-out, activities related to Building sector Interventions is part of HPMP Stage-II. The UNEP implements the programme through the Project Management Unit (PMU), Ozone Cell, Ministry of Environment, Forest and Climate Change (MoEF&CC).

The building sector is one of the most important sectors of the economy and its growth is linked with development in the country. It is also a major consumer of energy in urban centres. The built environment is set to grow with rapid urbanisation in the country; subsequently the air-conditioning and refrigeration requirement will also grow. Building sector interventions not only offer substantial potential for bringing in energy efficiency to

reduce energy consumption but also to phase-out ODSs, which are used as refrigerants in Refrigeration and Air-conditioning (RAC) equipment.

The PMU, Ozone Cell, MoEF&CC invites proposal for carrying out the activities listed in scope of work and deliverables given in Section 3 and 4 with the objective set forth in Section 2 below.

2. Objective

The activities related to Building Sector of HPMP Stage-II inter alia relate to application of non-ODS and low Global Warming Potential (GWP) alternatives in the Building sector covering inter alia application of non-ODS and low GWP alternatives in built spaces, climate appropriate and energy efficient building design for Affordable Housing segment in the country, emphasis on better O&M practices with an overall focus on reduction of cooling load and refrigerant requirement.

3. Scope of Work

- I. To undertake a study on the application of non-ODS and low Global Warming Potential (GWP) alternatives in Building Sector in India involving collection, collation and analysis of information through desk study as well as field visit, where required.

The study shall be for building sector with specific reference to climate appropriate and energy efficient building design specifically in Affordable Housing segment in the country, with an overall focus on reduction of cooling load and refrigerant requirement, and cover the state of art on the topics mentioned above, survey existing infrastructure, identify gaps and the likely interventions to achieve building sector infrastructure. The scope of study shall be approved by Ozone cell and UN Environment.

II. Workshops

1. Organize 2 workshops for architecture colleges, Urban Planning policy makers, building developers, Building development association etc. for HCFC phase-out and Energy efficiency linkages.

Workshops inter-alia include:

- i. Finalization of venue, which should be able to accommodate at least 60 participants, have audio-visual facilities, internet, seating arrangement, separate area for refreshments, requisite approval for holding such events.
- ii. Secure participation for the workshop, which shall be the target audience and a minimum participation of 60 participants shall be ensured.
- iii. Preparation of background material for distribution to delegates.
- iv. Finalization of agenda/ programme structure for the workshop including the dates and faculty/speakers in consultation with Ozone Cell, MoEF&CC.
- v. Preparation of Workshop Completion Report (WCR) covering the following:
 - a. Workshop structure/agenda
 - b. Date and venue
 - c. Details regarding faculty/speakers for each topic in the structure/agenda
 - d. No of Participants attended along with contact details
 - e. Analysis of feedback
 - f. Conclusions and recommendations
 - g. Photographs for each workshop both in print and soft copies

4. Schedule

The duration of completion of all the activities as per the scope of work is 6 months from the date of award of the assignment.

5. Timeline and reporting

1. Inception report– Within 1st month of project inception, covering the following:
 - a. Venue, agenda, list of speakers and tentative dates for the workshops.
 - b. Exact scope for study and timeline for completion of study.
 - c. Format of WCR
2. Mid-term report– End of 3rd month, covering progress on each activity, submission of draft study report and submission of WCR for one workshop on draft report for study.
3. Final report - End of 6th month, submission of final study report and WCR for second workshop.

6. Terms of Payment

- a. 50% after signing the agreement.
- b. 30% after submission of mid-term report.
- c. 20% after submission of final report and WCR and acceptance by MoEF&CC.

7. Eligibility Criteria

- a. Average Annual financial turnover/ grants received/research projects/income from consultancy and industry projects during the last three years, ending 31st March, 2020, should be at least INR 10 lakhs (to be supported with financial statements / audited balance sheets/sanction letter/letter of award of the last three financial years). Financial reporting for institutions created under statute and /or recognized by regulatory bodies are as per applicable rules/guidelines.

- b. Minimum 3 years' experience working in the field of Montreal Protocol and related areas such as energy efficiency, building sector, ODS phase-out, awareness generation and content development for ODS phase-out, monitoring and verification of ODS phase-out projects for government/ PSUs, autonomous bodies, international organizations, bilateral and multilateral bodies (to be supported by letter of award and contract).
- c. Experience of executing at least 3 assignments of order value INR 15 lakhs in the field of Montreal Protocol, international/ multilateral conventions for government/ PSUs, autonomous bodies, international organizations, bilateral and multilateral bodies (to be supported by Sanction letter /letter of award / contract etc.).

8. Submission of Proposal

The proposal will be submitted in two parts involving Technical and Financial Proposals in two separate sealed envelopes. Proposal sent by Email/Fax will not be entertained. Last date of acceptance of the duly filled and completed bids is 22nd July, 2020 by 17:30 Hours at the following address:

The Additional Director
Ozone Cell
Ministry of Environment, Forest and Climate Change (MoEF&CC)
Core 4B, 2nd Floor, India Habitat Centre, Lodhi Road
New Delhi - 110 003

a. Technical Proposal

The Technical Proposal should include the following:

- i. Introduction.
- ii. Details of experience of similar work.
- iii. Approach and Methodology.
- iv. Work Plan.

- v. Details of Technical Team (include one page CV each of the persons to be associated) including qualification in relevant areas.

b. Financial Proposal

The Financial Proposals should include the total lump-sum cost in INR inclusive of all taxes, travel and other expenses related to the assignment.

9. Evaluation and Selection

Evaluation Criteria (will be applied only to those who meet the eligibility criteria)

A. Technical proposal including competency

Sr. No.	Criteria	Marks	
	Sub-criteria	Total criteria	Sub-criteria
1	Past Experience of the Firm	40	
	<ul style="list-style-type: none"> • Number of years relevant experience <ul style="list-style-type: none"> ○ 3 -6 Years ○ More than 6 Years • Experience of working with government/ PSUs, autonomous bodies, international organizations, bilateral and multilateral bodies <ul style="list-style-type: none"> ○ 3 -6 Assignments ○ More than 6 Assignments 		20 10 20 20 10 20
2	Methodology, Work Plan and Understanding of TOR	20	
	<ul style="list-style-type: none"> • Understanding of TOR • Approach and methodology • Work plan with timelines 		06 08 06
3	General profile of qualifications, experience and number of key staff	25	
	<ul style="list-style-type: none"> • Qualifications • Relevant experience 		10 15

4	Overall financial strength of the firm in terms of turnover, profitability and cash flow (liquid assets) situation	15	
	Turnover figure for last three years <ul style="list-style-type: none"> • 10 - 15 lakhs • 15 - 20 lakhs • 20 lakhs and above 		5 10 15
5	Total	100	

The minimum cut off will be 75 (Seventy Five) marks for Technical proposal and competency.

Selection Methodology

Quality and cost based selection

- a. Technical proposal -70%
- b. Financial proposal -30%

Financial proposals will be opened only for the technically qualified bidders and will be given cost score based on relative ranking of prices, with 100 marks for the lowest bidder and pro-rated lower marks for higher priced offers. The total score shall be obtained by weighting the quality and cost scores and the bidder that obtains the combined highest score will be considered for award.