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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
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Item 6(c) of the provisional agenda¹

**TERMS OF REFERENCE FOR THE DESK STUDY FOR THE EVALUATION OF
TRAINING, CAPACITY BUILDING AND CERTIFICATION SCHEMES IN THE
REFRIGERATION SERVICING SECTOR UNDER HCFC PHASE-OUT
MANAGEMENT PLANS**

Introduction

1. At its 95th meeting, the Executive Committee approved the updated monitoring and evaluation work programme for the year 2025² which included the preparation of the terms of reference (TORs) for a desk study for the evaluation of training, capacity building and certification schemes in the refrigeration servicing sector under the HCFC phase-out management plans (HPMPs).³
2. Subsequently, the Senior Evaluation Officer (SEO) has prepared the present document for the consideration of the Executive Committee, following consultations with the Secretariat and the implementing and bilateral agencies.

Rationale for the desk study

3. The proposed desk study aims to assess the contribution of training and capacity-building activities for technicians in the refrigeration servicing sector, including certification schemes, to achieving compliance with the Montreal Protocol targets. It also intends to analyze how these activities have been delivered, including a consideration of their impacts' sustainability beyond the project's implementation period. The study would aim at identifying what kind of training and certification schemes have been put in place, voluntary, mandatory or otherwise, and how effective have they been to create well performing technicians in the refrigeration sector to facilitate compliance with the Montreal Protocol. The results of the desk study will provide lessons learned, findings and recommendations to help design similar activities to assist Article 5 countries in the implementation of their Kigali HFC implementation plans (KIPs).

¹ UNEP/OzL.Pro/ExCom/96/1

² Decision 95/11 and annex IV to document UNEP/OzL.Pro/ExCom/95/94.

³ UNEP/OzL.Pro/ExCom/93/13/Rev.1.

Objective

4. The objective of this desk study evaluation is to assess the quality and effectiveness of the activities delivered as part of the HPMPs to create the required technical professional environment in the refrigeration sector to implement the technological transition and related servicing and maintenance. The training of a skilled work force is a key element to ensure the feasibility and long-term sustainability of the sectoral changes needed to ensure timely compliance with the Montreal Protocol targets.

5. The desk study should also look into the issue of training of trainers and identify success stories that could be replicated to strengthen the professional associations' capacity to promote the installation of technologies that can help reach compliance targets. The study should help identify the downstream effects of training, including job creation, and the extent to which the gender component is also considered when designing the courses. Analysis of courses and curricula should verify the component regarding risk assessment to ensure that training is updated and aligned with the technological requirements for the equipment to be installed.

6. Lessons learned from the implementation of HPMPs are expected to be an instrumental source of information to enrich the design and development of the KIPs. The desk study will identify key factors which facilitated the implementation of training, in terms of target sector (formal and informal), training infrastructure and personnel, training curriculum, capacity-building component and certification scheme.

7. The findings will help replicate good practices and avoid potential pitfalls and could be incorporated into project design to develop training, capacity building and certification schemes for technicians for the KIPs. Good practices, failures and challenges will all provide relevant information, and the results of the study will generate a number of recommendations to be implemented by stakeholders when designing and implementing future projects.

Scope and methodology

8. The HPMP projects for 145 countries were approved between 2010 and 2024. A significant number of them have been completed, while others are ongoing at different stages of implementation. The desk study will draw on the information available in the Fund's databases and related documentation to examine a sample of projects that should provide coverage of the diverse types of projects and countries to be assessed.

9. The evaluation unit will hire a consultant to conduct the desk study according to an agreed methodology, reporting to the SEO at established milestones. A combination of both quantitative and qualitative methods will be used, producing facts and figures to support the final findings and recommendations. The preparation of the desk study will require an exhaustive desk review of the existing project documentation, such as project proposals, progress reports, verification and project completion reports, reports on projects with specific requirements and evaluation reports. The evaluation unit, the Secretariat, and the implementing and bilateral agencies will give the consultant access to the necessary documentation for the desk-review research upon request.⁴

⁴ For example, relevant information and data collected from internal project-related documentation and the inventory of approved projects database, as well as relevant decisions of the Executive Committee including those resulting from past evaluations.

10. The desk study will assess the effectiveness of the training infrastructure, of formal and informal training types (i.e., after-sales service, service providers), of vocational education and training courses, and of the design of training curricula and materials reflecting market needs, in line with the latest technological and digital developments. It will also assess how the different types of training contribute to compliance, the relevance of the establishment of certification schemes, and their implications for the overall impact of achieving and sustaining Montreal Protocol goals.

11. The exercise may be complemented with *ad hoc* concise questionnaires or on-line surveys to targeted stakeholders (i.e., national ozone units), including consultations with the Multilateral Fund Secretariat and the implementing and bilateral agencies, if needed. The evaluation questions listed in annex I to the present document are an integral part of these TORs and should be addressed by the desk study.

12. If the findings were to lead to a recommendation for a second phase of evaluation, the desk study should include a draft inception paper to serve as potential terms of reference for the second phase, including a tentative budget, to facilitate an informed decision by the Executive Committee in this regard. In particular, a potential second phase should shed light on how the lessons learned from the desk study could be replicated for the KIPs. The proposal should include a tentative budget to undertake the second phase.

Budget and timeframe

13. A budget of US \$25,000 was approved at the 93rd meeting for this desk study, included in the monitoring and evaluation work programme for 2024 and 2025.⁵ The consultant is expected to deliver the final draft of the desk study within five months after the initial date of contract issuance, to be consolidated by the SEO for its further presentation to the Executive Committee, at a meeting yet to be determined.⁶

Recommendation

14. The Executive Committee may wish to approve the terms of reference for the desk study for the evaluation of training, capacity building and certification schemes in the refrigeration servicing sector under HCFC phase-out management plans, as contained in document UNEP/OzL.Pro/ExCom/96/8/Rev.1.

⁵ See UNEP/OzL.Pro/ExCom/93/13/Rev.1, table 3, proposal 3. This funding should be carried forward to the 2026 work programme to facilitate the undertaking of the desk-study.

⁶ The timeline for delivery and presentation of the desk study depends on the entry date of duty of the new Senior Evaluation Officer (SEO) to replace the outgoing SMEO.

Annex I

EVALUATION QUESTIONS

- (a) ***Effective design and implementation of training:*** What are the core elements that have been put in place for the design and implementation of training to facilitate compliance with the Montreal Protocol targets (i.e. in-depth needs assessment, selection criteria for trainees and tailored training curricula)?
 - (b) ***Training facilities and support to training courses:*** What are the key elements of infrastructure required to support the training activities, programmes, curricula and education centres and what mechanisms have been used to ensure effectiveness in delivery?
 - (c) ***Typology of the certification schemes:*** What certification schemes (voluntary, mandatory or other) have been established in different Article 5 countries and how useful have they been to create a professionalized workforce to implement good practices in the refrigeration servicing sector?
 - (d) ***Role of National Ozone Units and implementing and bilateral agencies:*** What have been the respective roles of the implementing agencies, bilateral agencies and national ozone units and project management units to ensure successful implementation of training, capacity-building activities and certification schemes in the refrigeration and air-conditioning (RAC) sector?
 - (e) ***Regulatory entities for certification:*** How are countries developing their regulatory frameworks and the recognized entities required to introduce mandatory certification as a condition to enter the installation and maintenance job market?
 - (f) ***Measures to ensure the sustainability of achievements:*** Are there any measures considered in the design and implementation of the projects under analysis to keep track of the results of the training programmes, to measure and verify sustainability of achievements beyond funding by the Multilateral Fund?
 - (g) ***Competency development strategies:*** What have been the elements for an effective national strategy for competency development, involving collaboration between national institutions such as ministries, industry, training institutes and certification bodies to foster the development of skilled technicians, both in formal and informal sectors?
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