DRAFT MONITORING AND EVALUATION WORK PROGRAMME FOR 2016

Introduction

1. This document presents the draft Monitoring and Evaluation work programme for 2016 for consideration by the Executive Committee. The monitoring and evaluation activities in the work programme have been proposed based on discussions by the Executive Committee on issues pertaining to monitoring and evaluation on previous meetings; the review of progress reports of on-going projects and project completion reports; and on discussions with implementing agencies and the Secretariat.

2. Accordingly, the draft Monitoring and Evaluation work programme consists of the following:

Evaluation activities

- Final evaluation of HCFC phase-out projects in the refrigeration and air conditioning (RAC) manufacturing sector

Monitoring activities

- Consolidated project completion report (PCR) for multi-year agreement (MYA) projects
- Consolidated PCR for individual projects
- Report on the HCFC phase-out management plan (HPMP) database (MYA tables)

3. Additional issues of interest may arise during the implementation of the 2016 work programme that may need to be addressed by the Executive Committee. A certain degree of flexibility therefore might be allowed in its implementation as well as in the allocation of its budget in order to accommodate any such issues.
Evaluation activities for 2016

Final evaluation of HCFC phase-out projects in the RAC manufacturing sector

4. This activity is to finalize the evaluation of the HCFC phase-out projects in the RAC manufacturing sector that was initiated with the work programme for 2015 approved at the 73rd meeting. The first phase, the desk study, which follows the terms of reference approved at the 74th meeting and included a thorough review of existing documentation and information gathered from implementing agencies, has been completed and submitted to the 75th meeting. The desk study analysed a sample of 25 projects, including standalone projects approved before the HPMP, conversion projects which are part of the HPMP as well as demonstration projects.

5. Some findings of the desk study should be used during the second phase of the evaluation, which includes field work in several countries. These findings focus, inter alia, on issues related to the availability of standards for the use of alternative technologies particularly those related to flammable refrigerants; causes of major delays in implementation of several projects; the added value of demonstration projects in the selection and introduction of technologies for conversion; means of dissemination of conversion-related information to the stakeholders; long term sustainability of the conversion; issues relating to the expectations for improved energy efficiency of the converted enterprises.

6. During the second stage, evaluation missions will visit the following eight countries with HCFC phase-out projects in the RAC manufacturing sector: Argentina, China, Indonesia, the Islamic Republic of Iran, Jordan, Nigeria, Serbia and Thailand. The basis for selecting these countries can be found in Annex I to the present document. Case studies will be prepared for each of these countries based on the terms of references for the evaluation contained in Annex I to the present document. A final report will be prepared, including information from both desk study and case studies.

Monitoring activities for 2016

Consolidated PCRs for MYA and individual projects

7. The Senior Monitoring and Evaluation Officer will work closely with relevant bilateral and implementing agencies to submit all outstanding PCRs related to MYA and individual projects to the 76th and 77th meetings.

8. The consolidated PCRs will provide the Executive Committee with an overview of the results and lessons learned as reported on the completion reports. It is also expected that PCRs for stage I of HPMPs may be submitted in 2016.

Report on the HPMP database

9. In response to decision 74/6(b)(i), the Secretariat recommended changes be made to the HPMP database as presented in the MYA database report to be considered at the 75th meeting. The Senior

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1 Decision 73/7.
2 UNEP/OzL.Pro/ExCom/74/10/Corr.1.
3 UNEP/OzL.Pro/ExCom/75/9.
4 The new template for HPMP PCR has been developed and presented in the 2015 consolidated project completion report (UNEP/OzL.Pro/ExCom/75/7).
5 The Senior Monitoring and Evaluation Officer, in consultation with the bilateral and implementing agencies, was requested to make a recommendation to the Executive Committee, for consideration at its 75th meeting on options to reduce the burden on bilateral and implementing agencies when submitting information for the MYA database (decision 74/6(b)(i)).
Monitoring and Evaluation Officer will present to the 76th meeting additional changes to the database, based on the decision of the Executive Committee, if any, and information on the status of updates of information contained in the database tables.

**Schedule for submission**

10. An overview of the activities contained in the proposed draft monitoring and evaluation work programme for 2016 is presented in Table 1.

**Table 1. Schedule for submission of activities in the monitoring and evaluation work programme 2016**

<table>
<thead>
<tr>
<th>Activity</th>
<th>1st meeting (76th)</th>
<th>2nd meeting (77th)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidated MYA and individual project completion report</td>
<td></td>
<td>Final report of the evaluation of HCFC phase-out projects in the RAC manufacturing sector</td>
</tr>
<tr>
<td>Report on the HPMP database</td>
<td></td>
<td>Consolidated MYA and individual project completion report</td>
</tr>
</tbody>
</table>

**Budget**

11. Table 2 presents the budget for the monitoring and evaluation work programme for 2016. It includes the fees and travel costs for consultants as well as for the Senior Monitoring and Evaluation Officer, who will participate in the case studies and attend regional meetings.

**Table 2. Proposed budget for the 2016 monitoring and evaluation work programme**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (US $)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Final evaluation of HCFC phase-out in the RAC manufacturing sector</strong></td>
<td></td>
</tr>
<tr>
<td>Field visits (8 countries ¹)</td>
<td></td>
</tr>
<tr>
<td><em>Staff</em>: 7 days/6 weeks</td>
<td></td>
</tr>
<tr>
<td>• Travel (6*US $6,000)</td>
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<tr>
<td>Synthesis report (12 days*US $500/day)</td>
<td>6,000</td>
</tr>
</tbody>
</table>

¹ UNEP/OzL.Pro/ExCom/75/8
<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (US $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-total</td>
<td>173,226</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>4,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>177,226</strong></td>
</tr>
</tbody>
</table>

1 Seven days per country except for China and Indonesia (14 days).
2 The number of staff missions might be rationalized if a consultant can be identified with both the required technical expertise and a thorough understanding of the Multilateral Fund.

**Action expected from the Executive Committee**

12. The Executive Committee may wish to consider approving the proposed monitoring and evaluation work programme for 2016 at a budget of US $177,226 as shown in Table 2 of document UNEP/OzL.Pro/ExCom/75/11/Rev.2.
Annex I

TERMS OF REFERENCE FOR PHASE TWO OF THE EVALUATION OF HCFC PHASE-OUT PROJECTS IN THE REFRIGERATION AND AIR-CONDITIONING (RAC) MANUFACTURING SECTOR

Background

1. The desk study prepared during the first phase of the evaluation of HCFC phase-out projects in the RAC manufacturing sector identified a number of issues and provided recommendations that could be applicable to future similar projects. These concern the generalization of the policy framework for the control of import/export and trade of HCFCs as well as bans of new production facilities relying on HCFCs; the application of measures for curbing the growth of the installed base of HCFC-based equipment; the selection of alternatives based on energy efficiency criteria. The study also stresses the importance of the demonstration projects in demonstrating the feasibility of the new technology, as well as in helping promote the acceptability of the new technology and products in the local market. The study also states that project completion reports would increase their usefulness if delivered in a timely manner and following a minimum set of requirements in order to provide the most relevant and useful information.

2. The desk study points out as a cause for concern that important supporting measures, such as relevant safety standards and the associated product certification infrastructure for the chosen alternative are not in place in a timely manner. This could be the cause for problems with the product quality, safety, sustainability and project delays in the future. In addition, the study recommends further inquiry in the issue of energy efficiency as a condition for sustainability for the results of the project.

3. The second phase of the evaluation, based on the collection and analyses of information gathered at the enterprise level during field visits in several countries, will yield a final report which will also use some of the findings of the previously prepared desk study with conclusions and recommendations for the implementation of stage II of HPMPs.

Objective and scope

4. The second phase of the evaluation of RAC manufacturing sector will collect, analyse and review information at the enterprise level, and assess the progress made in the phasing-out of HCFC in the RAC manufacturing sector in projects where the conversion process has been completed or is close to completion. The fieldwork will focus on the following.

Policy, legal and regulatory frameworks

5. The following issues will be addressed:

   (a) Were existing policies reviewed to facilitate the phase-out of HCFCs in the RAC sector and in the introduction of HCFC-free RAC technology? What actions were taken in the area of policies, legislations and regulations?

   (b) Were there new enforcement procedures and monitoring tools developed to control HCFC use in the sector as well as HCFC-based equipment imports?

   (c) Were the policies and regulations including import/export legislations concerning the HCFC and HCFC-based equipment effective? How did the timing of legislation affect the projects? Were there any related incentives?
(d) How has energy efficiency been addressed relative to policies and regulations identified? What incentives and disincentives were included into policies and regulations and what were their impacts on the projects?

(e) Were there inspections and certifications of infrastructure, standardized technical testings, and enforceable technical standards for the alternative technology?

(f) Were there activities to assess standards and codes relevant to the RAC sector use of alternatives to HCFCs?

Technology-related issues

6. Using HCFC-free technology implies adopting innovating approaches leading to environmental benefits, but also overcoming barriers. The evaluation will assess issues related to the use of low GWP technologies and alternatives and will address the following issues:

(a) What was the basis of the alternative technologies selected? Were technologies selected in line with the HPMP or were there other influential factors? What were incentives and barriers for technology choices and implementation? Were there issues related to intellectual property rights and how was this dealt with?

(b) Were there delays in project implementation due to the choice of technology and if so what were their causes?

(c) What was the role of demonstration projects in testing alternative technologies and facilitating the collection of accurate data on costs and application of the technologies and the conditions relevant for the introduction of the alternative technology in the country on a larger scale?

(d) What were the main issues related to the introduction of required standards for the use of flammable and mildly flammable refrigerants related to all the relevant alternatives in the country? What were the barriers and to what extent and how were these removed? Did the length of standards introduction influence the implementation process, and if so how?

(e) Which were the actions taken with regards to those obstacles and to the completion of the relevant conversion projects, with special attention to safety, product quality, and sustainability issues?

(f) Were there requirements for additional investments on safety equipment and systems? Were the various components needed available? How was the commissioning of equipment done?

(g) How did the international companies influence the adoption of the alternative technology; and how that influenced project design and implementation? How did small and medium-size enterprises implement the phase-out process?

(h) Were the manufacturing plant equipment destroyed, and if not why? What was the fate of the ODS in the equipment?

(i) Under what conditions can the alternative technology be replicated to other Article 5 countries, and if not why?
Technical assistance and awareness

7. Many project documents mention the need of improving the technical capacities of the RAC manufacturing enterprises in using alternative technology and in applying appropriate safety and security measures. The evaluation will assess the availability and use of updated information on technically and economically feasible alternative technologies that can be applied by local RAC manufacturers. It will examine the capacity building activities implemented by the project.

8. In some countries the users are not aware of the availability and benefits of the energy efficient variety of RAC technology. The evaluation will examine how technical assistance projects addressed awareness-related challenges. What awareness-raising strategy was used and what were the results? How did the RAC community changed following these activities? What was the role of professional refrigeration associations in helping with and disseminating the information about the new technology?

Financing-related issues

9. The evaluation will examine, appropriately and to the degree possible, the information related to the incremental capital cost (ICC), the incremental operational costs (IOC) and sub-categories for implementing the project (comparing planned to actual costs); what was the cost-effectiveness of the projects and whether there were any changes, when applicable; and the split between energy costs and other operating costs when applicable.

10. It will investigate the co-funding from enterprises for implementing the project and compare this to the planned co-funding. The desk study will draw lessons from co-funding experiences, in terms of both challenges and opportunities.

Post-sale servicing

11. The evaluation will tackle issues related to inter alia, training, availability and affordability of spare parts and refrigerants, installation and post-sale costs issues, including market acceptance of the new product. It will also evaluate how the servicing sector managed with the introduction of low GWP alternatives?

Sustainability

12. What happened after project completion? How is the sustainability of the project being ensured? How is the project designed to guarantee and monitor sustainable outcomes? What needs to be in place to ensure that there is buy-in at the consumer level to purchase alternative-based AC that are more energy efficient? Are the new appliances more costly, and how much?

Methodology and schedule of submission

13. The evaluation will yield eight country reports and a final report which will include an analysis of the data collected from the field work through open ended interviews, observations at the plants’ location and documents analysis. In addition, the study will take into account the previously prepared desk study, the most recent progress reports submitted by relevant agencies, as well as information gathered from interviews and discussions with members of the Secretariat, bilateral and implementing agencies and National Ozone Offices.

14. It is proposed to visit enterprises at the following countries: Argentina, China, Indonesia, the Islamic Republic of Iran, Jordan, Nigeria, Serbia and Thailand. The sample of countries includes countries with project completed or in the final phase of implementation. Argentina, China, Indonesia, Nigeria, and Thailand have been selected for their advanced status in project implementation; their use of
alternatives requiring specific standards, not always in use in the countries; and their use of innovative approaches that will shed additional light into the complexities and challenges of these conversions; the Islamic Republic of Iran as the project has been completed ahead of schedule; Jordan for its stand-alone project and Serbia as a low-volume-consuming country.

15. The final report will be presented to the Executive Committee for consideration at the 77th meeting.

Evaluation organization

16. A team of consultant will be hired to carry on this evaluation. Each consultant will be in charge of elaborating the country evaluation report. The team leader, in cooperation with the other team members will draft the synthesis report. Bilateral and implementing agencies will be involved in participating in the evaluation missions and in providing comments on the reports. The synthesis report will be presented at the 77th Executive Committee meeting and the lessons learnt will be posted on the Secretariat’s website. Table 1 presents the proposed evaluation budget.

Table 1. Proposed budget for the final evaluation of HCFC phase-out in the RAC manufacturing sector

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