



**Programme des
Nations Unies pour
l'environnement**

Distr.
GENERALE

UNEP/OzL.Pro/ExCom/71/16
11 novembre 2013

FRANÇAIS
ORIGINAL : ANGLAIS

COMITE EXECUTIF
DU FONDS MULTILATERAL AUX FINS
D'APPLICATION DU PROTOCOLE DE MONTREAL
Soixante et onzième réunion
Montréal, 2 – 6 décembre 2013

**PROJET DE PROGRAMME DE TRAVAIL DE SUIVI ET ÉVALUATION
POUR L'ANNÉE 2014**

INTRODUCTION

1. Le Projet de programme de travail de suivi et évaluation pour l'année 2014 a été préparé à partir des résultats des débats avec les Administrateurs des Bureaux nationaux de l'ozone concernés, les agences d'exécution et le Secrétariat du Fonds.

2. Des questions d'intérêt supplémentaires pourraient être soulevées aux fins de règlement en 2014. Une certaine souplesse pourrait donc être de mise dans la mise en œuvre du programme de travail et dans l'allocation du budget, afin de faire face à ces questions.

Activités d'évaluation : Les trois évaluations ci-dessous sont proposées en 2014 :

Évaluation des projets sur le bromure de méthyle en Amérique latine et dans les Caraïbes

3. Plusieurs raisons justifient une évaluation des projets sur le bromure de méthyle en Amérique latine et dans les Caraïbes : plusieurs pays de la région affichent la plus petite réduction relative de la consommation de bromure de méthyle par rapport à leur valeur de référence, certains pays ont été temporairement en situation de non-respect de leurs obligations aux termes du Protocole de Montréal (Barbade, Équateur, Chili, Honduras, Guatemala, Paraguay, Saint-Kitts-et-Nevis et Uruguay) et d'autres ont connu des retards dans la mise en œuvre et ont dû modifier leur calendrier d'élimination. La pérennité de l'utilisation de substances de remplacement a aussi été remise en question dans certains pays.

4. L'évaluation offrira une analyse d'éléments précis de la consommation et de l'élimination du bromure de méthyle dans certains pays de l'Amérique latine et des Caraïbes, expliquera les raisons d'une consommation restante assez importante de bromure de méthyle, se penchera sur la pérennité de l'utilisation des substances de remplacement et analysera le renforcement institutionnel après la mise en œuvre du projet. Le mandat détaillé de l'évaluation est joint à l'annexe I au présent rapport.

Évaluation de la formation dans le secteur de l'entretien de l'équipement de réfrigération

5. Certains pays font face à des obstacles dans l'élimination des SAO dans le secteur de l'entretien de l'équipement de réfrigération en raison de l'accélération de l'élimination des HCFC et de la décision XIX/6 de la Réunion des Parties. Certains de ces obstacles n'existaient pas ou n'avaient pas la même importance lors de l'élimination des CFC. La formation dans le secteur de l'entretien de l'équipement de réfrigération devrait être adaptée afin de faire face à ces difficultés. Plusieurs exemples de ces nouvelles situations sont fournis ci-dessous.

6. Plusieurs solutions de remplacement à faible potentiel de réchauffement de la planète du HCFC-22 proposées à l'heure actuelle sont inflammables et même toxiques. Les programmes de formation devront être élargis afin d'inclure un volet sur la manipulation sans danger des frigorigènes inflammables et les usines qui les utilisent, ainsi que sur les liens avec les règlements et les normes. Ils doivent être suffisamment complets et conférer l'autonomie nécessaire pour que les techniciens qui manipulent ces substances soient en mesure de le faire sans danger.

- a) Les projets du secteur de l'entretien de l'équipement de réfrigération mettront l'accent sur la réduction des conséquences sur le climat, le potentiel de réchauffement de la planète et la consommation d'énergie. Les programmes de formation devront donc être élargis afin d'y inclure l'entretien préventif, la conception efficace et la qualité de l'installation, ainsi que le maintien ou l'amélioration de l'efficacité énergétique de l'utilisation de l'équipement afin de réduire les émissions directes et indirectes. Ils devront aussi

s'adresser à un public plus vaste (p. ex., ingénieurs civils, entrepreneurs en construction et utilisateurs).

- b) Les solutions de remplacement à faible potentiel de réchauffement de la planète n'existent pas dans tous les pays ou coûtent très cher. Ce fait et les mesures de réglementation adoptées par les gouvernements afin de réglementer les importations de HCFC-22 obligent les techniciens et les utilisateurs finaux à employer du propane non frigorigène ou à falsifier des gaz non identifiés afin de les adapter à l'équipement sans HCFC, sans égard des dangers. La formation devrait tenir compte de cette réalité.
- c) Plusieurs pays visés à l'article 5 continuent à éprouver de la difficulté à inclure dans les destinataires du programme de formation la part importante de techniciens qui ne sont ni enregistrés ni membres d'une association. Cette situation devient encore plus critique avec l'arrivée des frigorigènes inflammables comme substances de remplacement.
- d) Plusieurs pays visés à l'article 5 se heurtent à de nombreux obstacles à mettre sur pied ou à élancer leurs programmes d'accréditation à un niveau tel que seuls les techniciens accrédités pourront effectuer l'entretien et manipuler les frigorigènes.

7. Il semble donc qu'une évaluation mettant l'accent sur l'organisation de programmes de formation autonomes élargis afin d'accorder les nouvelles réalités pourrait être utile dans le contexte de la mise en œuvre des PGEH. Un examen plus approfondi des liens entre les programmes de formation, les programmes d'accréditation des techniciens et les normes et règlements en vigueur serait également utile dans le contexte actuel des PGEH. Cette évaluation arrive à point nommé compte tenu que 100 des 138 PGEH déjà approuvés visent le secteur de l'entretien et qu'une information précoce sur l'introduction de solutions de remplacement à faible potentiel de réchauffement de la planète pourrait atténuer les risques possibles associés à l'utilisation de frigorigènes inflammables.

8. Le mandat détaillé de l'évaluation est joint à l'annexe II au présent rapport.

Rapport final de l'évaluation des projets de reconversion des inhalateurs à doseur à base de CFC à des technologies sans CFC

9. Un rapport intermédiaire a été présenté à la 71^e réunion. Il s'agit de la version finale, qui comprend deux pays supplémentaires non visités en 2013.

Activités de suivi : Les trois activités de suivi ci-dessous sont proposées en 2014

Rapport global d'achèvement de projet pour les projets pluriannuels

10. Le rapport global d'achèvement de projet pour les projets pluriannuels fournira au Comité exécutif un aperçu des résultats et des enseignements tirés déclarés dans les rapports d'achèvement de projet.

Rapport global d'achèvement de projet

11. Le rapport fournira au Comité exécutif un aperçu des résultats et des enseignements tirés indiqués dans les rapports d'achèvement de projet de la période visée par le rapport.

Rapport sur la base de données des tableaux des accords pluriannuels

12. Conformément à la décision 70/23, le Comité exécutif sera informé de l'état de la mise à jour de l'information contenue dans la base de données des tableaux des accords pluriannuels à sa première réunion de 2014.

Calendrier de remise

13. Le tableau 1 ci-dessous propose un survol des études d'évaluation et des travaux de suivi proposés en 2014.

Tableau 1

**CALENDRIER DE REMISE
DES DOCUMENTS DE SUIVI ET ÉVALUATION
EN 2014**

1^{re} réunion de 2014 (72^e)	2^e réunion de 2014 (73^e)
Étude théorique sur l'évaluation des projets sur le bromure de méthyle en Amérique latine et dans les Caraïbes	Rapport final de l'évaluation des projets sur le bromure de méthyle en Amérique latine et dans les Caraïbes
Rapport final de l'évaluation des projets sur la reconversion des inhalateurs à doseur à base de CFC à une technologie sans CFC*	Étude théorique sur l'évaluation de la formation dans le secteur de l'entretien de l'équipement de réfrigération
Rapport global d'achèvement de projet pour les projets pluriannuels	Rapport global d'achèvement de projet
Rapport sur la base de données des tableaux des accords pluriannuels	

* Un rapport intermédiaire a été présenté à la 71^e réunion. Il s'agit de la version finale, qui comprend deux pays supplémentaires non visités en 2013.

Budget

14. Le tableau 2 présente le budget du programme de travail de suivi et évaluation pour l'année 2014. Le budget comprend les honoraires et les frais de voyage des consultants et de l'Administrateur principal, Suivi et évaluation, qui participera à certaines études de cas et assistera à des réunions régionales.

Tableau 2

**BUDGET PROPOSÉ
POUR LE PROGRAMME DE TRAVAIL DE SUIVI ET ÉVALUATION
DE 2014**

2014	
Description	Somme (\$US)
Évaluation des projets sur le bromure de méthyle en Amérique latine et dans les Caraïbes	
Étude théorique	
(1 consultant * 30 jours de travail * 500 \$US par jour)	15 000
10 études de cas	120 000
Rapport final (1 consultant * 20 jours de travail à 500 \$US par jour)	10 000
Étude théorique sur l'évaluation de la formation dans le secteur de l'entretien de l'équipement de réfrigération	
(3 consultants * 30 jours de travail à 500 \$US par jour)	45 000
Déplacement du personnel	50 000
Divers	6 000
Total 2014	246 000

Mesures attendues du Comité exécutif

15. Le Comité exécutif pourrait souhaiter approuver le programme de travail de suivi et évaluation de l'année 2014 proposé et le budget de 246 000 \$US correspondant, comme indiqué dans le tableau 2 du document UNEP/OzL.Pro/ExCom/71/16.

Annex I

Evaluation of Methyl Bromide Projects in Latin America

Background and justification

1. The Multilateral Fund (MLF) has been financing projects in the area of methyl bromide (MB) since 1994. Initially it funded non-investment projects, mainly technical assistance and demonstration projects which in time were followed by investment projects. As per the Montreal Protocol commitments, the complete phase-out of MB in all Article 5 (A5) countries should take place by 1 January 2015. The Report of the Technology and Economic Assessment Panel (TEAP) of May 2013 indicates that while this process is going on, Latin America and the Caribbean (LAC) continues to be the region showing the smallest relative reduction in MB consumption with respect to its baseline, although at present it is the region making the largest cuts per year. In 2011 the region had phased out 65 per cent of its regional baseline (up from 55 per cent in 2010). This appears to be a rather slow phasing out trend, if compared to Africa, which during the same year had phased out 92 per cent of its consumption (90 per cent in 2010) and to Asia and the Pacific, including Middle East that had phased out 86 per cent of its consumption (84 per cent in 2010).

2. Only nine of the 33 countries in the LAC region reported MB consumption for controlled uses in 2011. Of these, six countries (Argentina, Chile, Costa Rica, Guatemala, Honduras and Mexico) account for about 95% of the regional consumption, and about 90% of the total A5 consumption. These six countries are included in the category of "large users" (consumption larger than 100 mt).

3. Various reports to the Executive Committee document problems that occurred during the phase-out process in the region. For example, in Argentina, the levels of MB consumption reported between 2006 and 2012 deviated from those committed to by the Government¹ and the phase-out plan had to be re-scheduled. In Central America countries like Guatemala, Honduras and Costa Rica had implementation problems. In Guatemala and Honduras there was also some resistance to alternatives and lobbying from companies to exceptionally be allowed to import MB in 2013. Delays also happened in Jamaica and a progress report on Trinidad and Tobago states that "...there is no guarantee regarding the long-term sustainability of the MB phase-out so far achieved". This means that the issue of sustainability may be worth inquiring upon as well.

4. On the other hand, Latin America and the Caribbean is the region making the largest relative reductions in MB consumption in the past three years (i.e. making on average about 12 per cent larger cuts each year). In the past some large and medium consumers such as Brazil and the Dominican Republic have completed the phase-out process successfully. Furthermore, Parties that were in non-compliance with Montreal Protocol commitments such as Ecuador, Uruguay and Chile, are now back in compliance. It is therefore appropriate, at this specific moment with the deadline for phase-out looming, to inquire on how and whether the phase-out will be entirely achieved on time; how will the MB consumers manage and whether they will submit critical use nominations for consideration by the Parties. The lessons learned will draw on countries experience in solving difficulties and completing the phase-out process.

Objective and organization of the evaluation and sustainability

5. The objectives of the evaluation are:

- (a) Analyse particular issues related to MB consumption and phase-out in various Latin American and Caribbean countries;

¹ UNEP/OzL.Pro/ExCom/70/59 and UNEP/OzL.Pro/ExCom/69/40

- (b) Identify and analyse the reason for the remaining relatively large consumption of MB in the region as described above;
- (c) Recommend solutions and actions to comply with the phase out deadline; and
- (d) Assess the long-term sustainability of the alternative technologies that have been introduced, including technical assistance and training programme.

6. The evaluation will take place in two stages. During stage one (desk study) a consultant will analyze the existing documentation and interview representatives from the Secretariat and implementing agencies and will prepare a report with specific conclusions and recommendations on any further issues that need to be tackled during field visits.

7. Consequently, the desk study will be followed by field work at the country level. During this second stage, a team of consultants will undertake field visits to gather further information and issue country-based case study reports.

8. A final report will synthesize the findings of both the desk study and field visits and will make recommendations for immediate implementation.

Main questions to be addressed by the desk study

9. The desk study will:

- (a) Examine the information on technical alternatives adopted by the countries and assess issues related to feasibility and sustainability (possibly also characterizing successful phase-out cases);
- (b) Analyze the strengthening and harmonization of laws and regulations for the trade and use control as well as constraints (including regulatory constraints) and barriers in the implementation of alternatives to MB;
- (c) Analyze the effectiveness of institutional arrangements in facilitating project implementation as well as in the political context, including the functionality and feasibility of regional agreements and trade policies as well as the collaboration of regional UN offices, intergovernmental institutions, universities;
- (d) Assess the effectiveness of training, including awareness raising strategies and information transfer activities at local and regional levels;
- (e) Assess the involvement of key stakeholders in project implementation and in the adoption of alternatives.
- (f) Examine the reasons for the particular trend in the phasing out of MB including major problems countries encountered in implementing projects and any hurdles in the adoption of alternatives that still remain in key productive sectors;
- (g) Explain what are the necessary conditions to achieve a successful MB phase-out by 2015 and what needs to be done to fulfil these conditions;
- (h) Assess the effectiveness of existing monitoring and surveillance systems; and
- (i) Determine the potential request for submission of critical use nominations.

Scope and methodology of the desk study

10. The desk study will analyse project documents from a sample of 15 countries. The sample will include countries with on-going projects; countries that had successfully phased out the MB and countries that had problems in reaching compliance but succeeded in overcoming them. It will consider particular issues of low volume consuming (LVC) countries, which may face different problems, particularly in the Caribbean. It will focus on the remaining high consumption sectors such as strawberries, other berries (raspberries, blueberries) and melons. Other sectors, which in the past consumed MB but have successfully replaced including vegetables (tomatoes, peppers), tobacco, flowers and some post-harvest applications will also be taken into account.

11. A consultant will be recruited to review the existing information on MB projects in Latin America and the Caribbean available at the MLF. Among these are:

- (a) Individual project documents, i.e. the project proposals that were approved by the Executive Committee, progress and completion reports;
- (b) Agreements made between the Executive Committee and the governments concerned;
- (c) MLF Inventory of Approved Projects;
- (d) Progress reports, project completion reports (PCRs) and final reports for demonstration projects submitted by the implementing agencies to the MLF;
- (e) TEAP progress reports and the assessment reports of the Methyl Bromide Technical Options Committee (MBTOC); ODS production and consumption reported under Article 7 of the Montreal Protocol;
- (f) Additional information and clarifications gathered from discussions with members of the Secretariat, implementing agencies and country offices; and
- (g) Previous desk study and final evaluation reports.

Outputs

12. The consultant will prepare a desk study report addressing the issues mentioned above. The report will be no more than 35 pages, including annexes. The consultant will take into consideration comments received from members of the Secretariat, implementing and bilateral agencies. The document should clearly formulate recommendations for the second phase of the evaluation; point out work hypotheses and possible venues to explore during country visits; indicate what additional information would be necessary and include lessons learned related to project design, monitoring, quality of data and project implementation.

13. A draft terms of reference for the final evaluation based on the desk study findings, including a plan for field visits will be drawn up.

Timing

14. The estimated time for the consultant to complete the work is 35 days. The desk study will be presented to the first meeting of the Executive Committee in 2014. The final report will be completed for the second meeting in 2014.

List of countries for the desk study

15. The list contains the following countries: Argentina, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Honduras, Jamaica, Mexico, Peru, Trinidad and Tobago, and Uruguay.

Annex II

Evaluation of training in the refrigeration servicing sector

Background and justification

1. The refrigerant servicing sector is the largest consumer of ozone depleting substances (ODS) in most countries and training in good practices of refrigeration has been one of the key activities funded by the Multilateral Fund to reduce ODS emissions and consumption in this sector.

2. During the CFC phase-out period several evaluations² covered the subject of training, whether separately or as part of larger evaluations on multiyear programmes or on the refrigeration servicing sector. The evaluations have produced valuable information on different aspects of the training programmes including training strategies, planning, design and delivery, results, impact, sustainability, role of national ozone units (NOUs), vocational training institutes and professional organizations, and role of technicians' certification schemes. Many of these findings are used as reference for projects being implemented today.

3. At the 70th meeting the Secretariat presented a discussion paper which provides an overview on issues related to minimizing the adverse climate impact of HCFC phase-out in the refrigeration servicing sector³. The paper views the importance of training within a new perspective shaped by the challenges the refrigeration servicing sector currently faces.

4. Indeed, with the acceleration of the HCFC phase out and decision XIX/6⁴ of the Meeting of the Parties, Article 5 countries are facing new challenges to phase out ODS in the refrigeration servicing sector under their HCFC phase-out management plans (HPMPs). Some of the identified challenges were not present or did not have the same level of relevance at the time of CFC phase-out. Training needs to adapt to this new context. Several examples are described below.

- (a) In substituting most of the CFC-12 by non-flammable HCFCs and HFCs in the past, the training in good practices in refrigeration focused on reducing emissions and service equipment with the alternative refrigerants. At present, several of the low global warming potential (GWP) alternatives to HCFC-22 are flammable. Therefore, training programmes will need to be expanded to include considerations on safe handling of flammable refrigerants and installations using them, and the linkages with regulations and standards;
- (b) If minimizing impact on climate, global warming potential and energy use are to be taken into consideration in the refrigeration servicing sector, training programmes are to be also expanded to cover preventive maintenance, efficient design, and installation quality, maintaining or improving energy efficiency of operating equipment to minimize direct and indirect emissions. They should also reach a larger audience (e.g., civil engineers, construction contractors and end-users);
- (c) While in previous training programmes coverage and sustainability varied from country

² Include here all the evaluations on training

⁴ Decision XIX/6 encourages Parties to promote the selection of alternatives to HCFCs that minimize environmental impacts, in particular impacts on climate, as well as meeting other health, safety and economic considerations, and requests the Executive Committee, when developing and applying funding criteria for projects and programmes, to give priority to cost-effective projects and programmes which focus on, *inter alia*, substitutes and alternatives that minimize other impacts on the environment, including on the climate, taking into account global-warming potential, energy use and other relevant factors.

to country, and in many cases countries could only continue training as long as there were available funds; if flammable and in some cases toxic low-GWP alternatives are to be introduced at large scale, all refrigeration training programmes should guarantee enough coverage and self-sustainability to make sure that technicians handling these substances are prepared to do it in a safe way; and

- (d) Low GWP alternatives are not available in many countries and in others their prices are very high; in consequence there does not seem to be a short term solution for several refrigeration and air-conditioning applications. This fact and the control measures being established by the Governments to control the imports of HCFC-22 is forcing technicians and end-users in several countries to use non-refrigerant grade propane or counterfeit unidentified gases to retrofit HCFC-based equipment without any safety consideration;

5. It appears, therefore, that an evaluation focusing on how to organize self-sustained training programmes with a wide coverage to accommodate this new context would be useful for the HPMP implementation. Further exploration on the links between training programmes, the technicians' certification schemes and the required regulations and standards seems also useful for HPMPs at present. The evaluation seems timely considering that out of 138 already approved HPMPs 100 are addressing the servicing sector and that early information on safe introduction of low-GWP alternatives would mitigate any potential risk associated with the use of flammable refrigerants,

Objectives of the evaluation

6. The evaluation will examine the new context of the accelerated HCFC phase out in a sample of Article 5 (A5) countries; it will identify the needs for training to face the challenges mentioned. It will then analyze the current situation in training area as left from the CFC phase out and will indicate how training should re-organize to fulfill the needs of the new phase-out process.

It will focus on the following elements:

- (a) The organization, functioning and capacity of training institutes, and of vocational schools;
- (b) The process of professional strengthening in the refrigeration area, especially the creation and role of the professional associations and their impact on the implementation of training programmes;
- (c) How trainees are identified and selected; incentives and disincentives in training attendance;
- (d) Registration and certification of technicians; challenges in establishing a mandatory certification system;
- (e) The informal refrigeration and air-conditioning service sector and how it can be reached. How is the marketing of training done within the informal sector, and how technicians could be recruited for training;
- (f) Training curriculum related issues. The inclusion of topics on installation, operation, servicing, maintenance, disposal of equipment, safe handling of flammable and toxic refrigerants and other issues related to HCFC alternatives;
- (g) Monitoring tools (baseline data, monitoring indicators) to evaluate the impact of training;

- (h) Self-sustainability of training programmes, key factors and strategies, barriers and incentives that should be taken into account;
- (i) Whether funding was adequate; and
- (j) How to estimate the impact of training in the reduction of ODS emissions; a methodology may be devised based on the findings of the evaluation.

Methodology and Scope

7. The data for the evaluation will be collected in two phases: a) a desk review and b) field work in a sample of countries. The desk review will analyze and synthesize data available in various documents and will obtain new information from interviews and discussions with the Secretariat and implementing agencies, electronic surveys, telephone interviews as needed.

8. The desk study will identify the issues that will need additional information, and will suggest questions for the second phase of the evaluation and next phase from the sample of countries to be visited.

9. A team of consultants will, in cooperation with the Senior Monitoring and Evaluation Officer:

- (a) Review information on training in servicing on HCFC phase-out in the refrigeration and air-conditioning sector available in annual progress and project completion reports, previous evaluations and relevant Executive Committee projects in a sample of countries;
- (b) Conduct interviews with staff of the Secretariat, implementing agencies and organize an electronic survey targeting staff of NOU and other relevant stakeholders; and
- (c) Identify issues and formulate questions for the second phase of the evaluation, including the sample of countries to be visited.

10. A sample of countries will be established by the Senior Monitoring and Evaluation Officer, in consultation with the Secretariat and the bilateral and implementing agencies concerned. Countries will be selected according to the following criteria:

- Regional representation (all regions); and
- Both LVC and non-LVC preparation;

11. The draft report will be shared with implementing agencies and Secretariat staff for comments, before being presented to the Executive Committee.

Output of the evaluation

12. The first phase of the evaluation will yield a desk study that analyses the existing documentations and draws preliminary conclusions. The desk study will indicate the direction to be taken during the second phase of the evaluation and will identify additional issues to be addressed, the type of information needed and the sample of countries to be visited.
