Evaluation of Environment Canada's Bilateral Cooperation Program under the Multilateral Fund of the Montreal Protocol

March 2007





Report Clearance Steps

Planning phase completed
Report sent for management response
Management response received
Report completed
Report completed
Report approved by Departmental Audit and Evaluation
January 2006
December 2006
January 2007
Anuary 2007
March 2007

Committee (DAEC)

Acronyms used in the report

AAFC Agriculture and Agri-Food Canada

C\$ Canadian Dollars CFCs Chlorofluorocarbons

CIDA Canadian International Development Agency

DFAIT Department of Foreign Affairs and International Trade

EC Environment Canada ExCom Executive Committee

FY Fiscal Year

IAB International Affairs Branch

MP Montreal Protocol

MIA Multilateral Implementing Agency

MFMP Multilateral Fund of the Montreal Protocol

NOU National Ozone Unit

ODS Ozone Depleting Substance
OGD Other Government Department
PAR Project Assessment Report
PCR Project Completion Report
R&R Recovery and Recycling

RMAF Results-based Management and Accountability Framework

RMP Refrigerant Management Plan

TPMP Terminal Phase-out Management Plan

UN United Nations

UNDP United Nations Development Programme
UNEP United Nations Environment Programme

UNIDO United Nations Industrial Development Organization

US\$ United States Dollars

Prepared by the Evaluation Division, Audit and Evaluation Branch

Acknowledgements

The Audit and Evaluation Branch, Evaluation Division Project Team including Anne-Marie Bédard and Stakeholder Research Associates led by Janet King under the direction of Shelley Borys, Director, would like to thank representatives from the National Ozone Units in Bolivia, Chile, Cuba, Jamaica, India, and Kenya, and the governments of Australia, Germany, France, Japan, Sweden, the United States of America and Canada, multilateral agencies including the United Nations Environmental Program and the United Nations Development Program and the Multilateral Fund Secretariat for their comments and insights. The Team also gratefully acknowledge members of the Evaluation Committee who guided the evaluation through all of its phases. Members were Philippe Chemouny, Scott Wilson, Joana Talfre and Pierre Pinault.

Environment Canada iii

Table of Contents

EXECUTIVE SUMMARY	
1.0 INTRODUCTION	
1.1.1 Purpose and Targets of the Montreal Protocol	
1.1.2 Multilateral Fund under the Montreal Protocol	
1.1.3 Government of Canada's Contribution to the Multilateral Fund	
1.1.4 EC's Bilateral Program under the Montreal Protocol	
1.2 Purpose of the Evaluation	12
1.3 Evaluation Issues	
1.4 Scope	
1.4.1 Sampling Strategy	13
1.5 Methodologies	
1.5.1 File and Document Review	
1.5.2 Interviews	17
2.0 FINDINGS	
2.1 Effectiveness of EC's Bilateral Program	
2.1.1 Achievement of Immediate Impacts	
2.1.2 Achievement of Intermediate Impacts	
2.1.3 Achievement of Ultimate Impacts	
2.2.1 Efficiency of Program Design	22
2.2.2 Quality and Usefulness of Performance Information	32
2.2.3 Administrative Costs of the Bilateral Program	
2.3 Relevance of EC's Bilateral Program	
2.3.1 Coherence of EC's Program with MFMP Priorities and Interests of Article	5
Countries	40
2.3.2 Value added of EC's Bilateral Program to the Multilateral Fund	
2.3.3 Coherence of the Bilateral Program with EC's Current Policy Environment	
2.3.4 Value added of EC's Bilateral Program to the Department	
2.3.5 Options within the Bilateral Mechanism	
2.4 Lessons Learneu	40
3.0 CONCLUSIONS	46
4.0 RECOMMENDATIONS	18
TEOOMINENDATIONO	
5.0 MANAGEMENT RESPONSE	50
Annex 1 Article 5 Parties	E,
Annex 2 Evaluation Framework	
Annex 3 Key Documents Reviewed	59

EXECUTIVE SUMMARY

The conduct of an evaluation of Environment Canada's Bilateral Cooperation Program was approved by the Departmental Audit and Evaluation Committee and is part of the 2005/06 to 2007/08 Audit and Evaluation Plan. An evaluation of EC's Bilateral Program fulfils a commitment made to Treasury Board Secretariat (TBS) and provides EC decision-makers with evidence-based information needed to strengthen the performance and accountability of the Program. A financial audit of the Program is currently underway.

The evaluation addresses three issues including lessons learned and factors which contributed to the achievement of results:

- 1. **Effectiveness -** the achievement of the results of EC's Bilateral Program, the overall performance and success of the Program;
- 2. **Efficiency -** the extent to which resources and activities are supplied, managed and organized in an efficient manner; and
- 3. **Relevance -** the continued relevance of the Program, including the alignment of the Program with EC's current policy environment, and the benefits of continuing with the bilateral mechanism.

The evaluation focuses on the performance of EC's Bilateral Program under the Multilateral Fund of the Montreal Protocol from Fiscal Years (FY) 1998/99 to 2004/05. Since EC has placed a particular emphasis on the refrigeration servicing sector, the primary focus of the evaluation is on this sector. Information was collected from over 200 pieces of information including guidelines, plans, project and financial reports, evaluations, assessments and correspondence, obtained through a file and document review, and from interviews with 33 people representing the Government of Canada, Article 5 countries, multilateral agencies, bilateral donors and the Multilateral Fund Secretariat.

Background

A Multilateral Fund under the Montreal Protocol (MFMP) was set up in 1990 to assist Article 5 countries in meeting their obligations under the Protocol by providing financial and technical support to offset the economic impact of changing technologies. The Fund is financed by mandatory contributions from developed country parties, is managed by an Executive Committee (ExCom) representing both developed and developing countries and is delivered either through a multilateral or a bilateral funding mechanism. On behalf of the Government of Canada, the Canadian International Development Agency (CIDA) is responsible for paying 80% of Canada's contribution directly to the MFMP and Environment Canada (EC) is responsible for paying the remaining 20%. Over the calendar years 1993 to 2004, ExCom has approved bilateral projects submitted by Environment Canada at a value of \$7.5 Million (US\$). Between calendar years 1993 and 2004, EC has conducted 63 projects in 22 of 137 developing countries who have adopted the Montreal Protocol.

Findings

Evaluation Issue: Effectiveness

Compliance with Environmental Obligations out under the Montreal Protocol

EC has met the key objective of the Bilateral Program which is to provide effective assistance to help developing countries meet their environmental obligations under the Montreal Protocol (MP). All the countries sampled in the refrigeration sector complied with and actually exceeded the MP 2005 target by an average of 33%. Based on evidence gathered from file and document reviews and interviews, and given that EC was the major donor supporting the recipient countries, it is reasonable to attribute that EC's Bilateral Program has played a major role in assisting the recipient countries to meet their environmental obligations set out under the Montreal Protocol.

EC supported the recipient countries in meeting their targets mostly through a combination of technology transfer, training and awareness raising and legislative and policy development activities. Equipment was successfully transferred, commissioned and adapted to local needs. Training on good practices was provided to technicians, and training on to how to identify ODS was provided to custom officers. In fact, EC's training workshops trained 35% more participants than targeted and all of the participants of the projects sampled rated the training as either good or excellent. Availability and access to equipment were important factors contributing to the success of the training for technicians. In the case of training for customs officers, value was added by the presence of EC enforcement officers.

Some of the key impacts of training and awareness activities have been sustained by recipient countries over time, e.g., good refrigeration practices have been integrated into curricula of recognized training institutes, and training has become mandatory and financed by some Article 5 countries. Other ancillary results include increased motivation of technicians to protect the ozone layer through improved practices; professionalization of the refrigeration industry; increased capacity of refrigeration associations to organize training; and, more broadly speaking, transferability of the knowledge and skills acquired to meet other environmental targets under the Protocol, and the development of a recipient country's capacity for good governance practices. Information exists to demonstrate the use of the technology and application of the knowledge and skills by trainees but the level of detail is not uniform across projects.

EC has provided effective assistance to assist recipient countries in developing legislation and policies to phase out the use of ODS. In the projects sampled, ODS control policy and legislation has been adopted. Although data on the enforcement of policies and legislation is not formally tracked, the fact that recipient countries sampled have exceeded the 2005 targets set out under the Montreal Protocol, suggests that the legislation is being enforced.

Provision of Canadian Technology and Expertise

Again based on information gathered through file and document reviews and interviews, EC has met the second objective of the Program, which is to share and promote Canadian

expertise in the field of ozone layer protection, including Canadian technology and public and private sector experience. In 75% of the projects sampled, Canadian public sector expertise, goods and services were provided. Factors contributing to use of Canadian expertise include: Canada's experience in technician training, recovery, recycling and halon management, the capacity of Canadian experts to speak in English and French; and Canada's regulatory experience in meeting targets under the Montreal Protocol. Barriers to increased involvement of Canadians includes: other donors have similar regulatory and training experience, and the conduct of projects in Latin American countries means that Canadian experts need to be fluent in Spanish.

Support for Canada's Foreign Policy Objectives

Canada's foreign policy objectives, as articulated in 1995 and 2005, emphasize the global nature of environmental issues and the importance of helping developing countries to protect the environment. 1 Canada's foreign policy objectives to date also acknowledge the importance of using Canadian know-how and environmentally-sound technology to build the capacity of developing countries to actively participate in the implementation of international environmental commitments. Based on information collected through the file review and interviews, EC's Bilateral Program has supported Canada's broad foreign policy objectives by establishing partnerships and networks and gaining a first-hand understanding of a country's requirements with respect to environmental issues. Interviewees believe that this collaboration reinforces Canada's international image in being active in global environmental issues. The use of Canadian expertise and technology has assisted recipient countries in meeting their obligations under the Montreal Protocol and has also supported Canada's overall foreign trade agenda. Further, by developing the capacity of recipient countries to build legal and regulatory frameworks for the use of ozone depleting substances, the Bilateral Program builds the conditions necessary for sound governance processes; processes which can be transferred to other environmental and global issues.

Evaluation Issue: Efficiency

Based on evidence collected, the parameters of the Multilateral Fund ensure that the design of projects, allocation of resources and accountability for the use of funds is efficient. In terms of departmental interests, the selection of projects is consistent with criteria for bilateral engagement developed by the former departmental International Review Committee in 1998. EC's overall geographic concentration of international programming is in the Americas, India and China, and the capacity of EC staff and resources to support the implementation of projects.

The project level information collected by EC's Bilateral Program meets the current planning, monitoring and reporting requirements of the Multilateral Fund under the Montreal Program. The logic or expectations as to how EC's Bilateral Program is to achieve its intended impacts

Environment Canada iii

¹ Government of Canada, *Canada and the World*, 1995; <u>Ibid</u>, *Canada's International Policy Statement*, 2005. The Government is currently reviewing its foreign policy objectives.

makes sense. Performance information collected under the RMAF is used by the Bilateral Program to monitor performance and progress of the Program, and to report on the environmental results of the Program in departmental planning and performance reports. Since none of the projects have raised concerns, information to senior managers on the projects is provided on an ad hoc basis only. While this is understandable given the maturity of the program, senior managers are not necessarily aware of the success stories and the array of results achieved under the Program which may be applicable to other international environmental agreements. Indeed, the Bilateral Program operates in the absence of an overarching international framework would guide, link and leverage the environmental results with other strategic objectives of the Department and the Government of Canada.

The financial contribution is obligatory but the amount of funds used under the 20% allotment of a bilateral allotment is a policy decision of the donor country. In the end, the amount of funds which are disbursed under the bilateral mechanism depends on the demand for projects by eligible developing countries, EC's decision on whether or not to undertake a project, the approval of the project by the ExCom, the amount of funds approved and the capacity of the Bilateral Program staff to take on additional projects. EC and MFMP Secretariat interviewees note that the amount approved by ExCom is frequently less than the amount requested. Over calendar years 2000 – 2005, on average Canada has used 68% of its bilateral allotment and is in the middle of the group of the largest users of the bilateral mechanism.

From Fiscal Years 2001/02 to 2004/05, over half of the administrative costs of the Program have been recovered as support fees under the MFMP, leaving the annual incremental cost of the Bilateral Program to the Department to be approximately \$44,000 (C\$) annually.

Evaluation Issue - Relevance

Information collected from interviewees clearly shows that the results of EC's Bilateral Program add value to the work of the Executive Committee. Environment Canada's interventions at ExCom meetings are recognized by bilateral donors, multilateral agencies and Recipient countries alike. The Program allows Canada to be a significant and cooperative player through advancing the environmental interests of Canada, directing funding to support recipient countries to help them comply with the targets of the Montreal Protocol, deepening EC's understanding of the environmental issues faced by developing countries, and improving EC's participation in international environmental fora. A Bilateral Program enables Canada to promote and share its expertise and to be an informed participant and player at ExCom meetings. Although the incremental costs incurred by the Program could be used for other departmental priorities, the evaluation concludes that benefits far exceed the modest incremental cost of the Program. Clearly, EC's use of the bilateral mechanism continues to be relevant. Within the bilateral mechanism there is always an option to outsource the management of projects to multilateral implementing agencies. The experience of EC employees suggests, however, that such outsourcing may not always be practical or efficient, although it remains an option for certain projects when a particular agency can bring additional expertise and capacity.

Lessons Learned

Lessons learned from EC's Bilateral Program under the Montreal Protocol could be applicable to other international environmental agreements. Key lessons learned are as follows:

- A bilateral mechanism can be an effective way of implementing a multilateral environmental agreement;
- A comprehensive, holistic and lifecycle approach supports the proper sequencing and achievement of international environmental objectives;
- The participation of stakeholders and political support of recipient countries brings local ownership and commitment needed to meet the commitments of international environmental agreements;
- Projects that combine technology transfer and capacity development, can be significantly more effective than simply capacity development activities alone;
- Institutionalization of change (e.g., introduction of legislation, quota systems) provides the context for, or reinforces, behavioural change (e.g., improved practices to manage refrigerants; decreased use of ODS); and
- Successful management of an environmental project in a developing country is influenced by the ability to form partnerships with stakeholders and the dedication, collaboration and competencies of staff both within the donor and the recipient country.

Conclusions

EC's Bilateral Program has successfully achieved its key environmental policy objective to assist recipient countries in complying with targets set out under the Montreal Protocol. The Program was successful in sharing and promoting Canadian public and private sector expertise and technology, in protecting Canadian interests from transboundary sources of pollution and by reinforcing Canada's active in global environment issues. The rationale and expected impacts of the Program make sense and support the parameters of the Multilateral Fund and the broad strategic objectives and outcomes of the Department's *Results Management Structure* and of the Bilateral Program's Results-based Management Framework. The use of a bilateral mechanism continues to be relevant in protecting the environmental and health interests of Canadians and supporting, developing countries and the global community. It should be noted, however, while the Program has been successful and well managed, the Program operates in the absence of a departmental international environmental framework.

Recommendations

Steps could be taken to further strengthen the value of EC's Bilateral Program both for the Department and the global community.

1. Strengthen the Performance Measurement of EC's Bilateral Program at the Project Level

a) Adjust the expected impacts of the Bilateral Program

Based on the activities supported by the Bilateral Program's projects over the past 5 years, and the ones expected to be funded in the future, EC needs to update the Results-based Management and Accountability Framework to reflect current conditions. In particular, the Program could consider focusing the logic model on the environmental results sought at a project level, and aggregating information on the use of Canadian expertise and technology, and on support for Canadian foreign policy objectives at the program level.

b) Increase the analysis of reach and stakeholder involvement

While EC's projects have involved some professional associations and training institutes to date, the involvement of these groups in the monitoring and reporting phases of the projects could be increased. Increased involvement would serve to enhance their capacity to sustain good practices and to reach out to other beneficiaries such as government departments, service workshops, hospitals, the hotel industry, import businesses, food refrigeration businesses and to untrained operating technicians in the informal sector. In order to do this, it may be useful to clarify in the Terms and Conditions of the Program that EC is allowed to enter into contribution agreements, not only with recipient governments but also with local professional associations, public and private training institutes and other organizations found to be useful in the implementation of projects. This recommendation is based on the recognition that as per ExCom rules, the projects would still need to be vetted by the developing country's official representative, the National Ozone Unit.

c) Conduct targeted studies on the impact of EC's activities

While the evaluation found that there is a considerable amount of information to confirm the impacts of the Bilateral Program, it is evident that there are some (e.g., targets of training transfer their skills to colleagues) for which it is challenging to collect information. In order to collect more performance information, while avoiding additional substantial reporting burden on the part of the recipient governments or increasing the expenditures of EC, the Program could undertake specific studies and surveys in targeted areas. These studies could be targeted on projects with higher expenditures in areas perhaps where there is some concern about compliance or performance.

2. Communicate the key results of EC's Bilateral Program

a) Ensure that senior management is kept regularly abreast of the key results of projects.

Currently, apart from the annual reporting under CEPA and the DPR, which are very brief, senior management is kept informed of the outcomes of projects only on an ad hoc basis. Senior management should be aware of the progress of at least some of the major projects undertaken, particularly as most of the projects present success stories which could be used by the Department to promote its role. For instance, a brief annual report to senior management, based on aggregated information (e.g. by country, sector, key environmental results achieved, use of Canadian expertise and support for Canadian foreign objectives) could be used to feed into decision-making processes.

b) Improve linkages of EC's Bilateral Program with other departmental objectives and international agreements and strategies.

While the Bilateral Program clearly contributes to the departmental strategic outcome of "Canadians and their environment are protected from the effects of pollution and waste", it could be further integrated with other international objectives and agreements. It is recommended that, in the development of an eventual departmental international environmental strategy or framework, the Bilateral Program be well integrated and contribute its experience on international project management and lessons learned.

Management Response

Recommendation 1 a)

The Department agrees with the recommendation. In preparing a new Treasury Board (TB) Submission for the contribution program, the Results Based Management Accountability Framework (RMAF) and its logic model were already updated to reflect current and predicted future conditions. The new logic model clearly differentiates between the core activities which will continue to be conducted under bilateral projects (such as technology transfer and training) and secondary activities which will likely be conducted less frequently in the future (such as technology demonstration and public awareness initiatives).

As recommended by the evaluation, all activities identified in the new logic model are clearly linked to the environmental results sought at the project level. The inter-linkages between the different activities and levels of impacts have also been made more evident. Furthermore, instead of including specific project activities related to (1) the use of Canadian expertise and technology and (2) support for Canadian foreign policy objectives, the new RMAF indicates that information pertaining to these objectives will simply be aggregated at a higher level. It should be noted, however, that the modifications to the RMAF and logic model will be dependent on TB approval.

Environment Canada vii

Functional responsibility for recommendation:

Assistant Deputy Minister (ADM), International Affairs Branch (IAB)

Contact person:

Manager, Montreal Protocol Program

Timeline:

• Approval from TB for new Terms and Conditions, RMAF and logic model is expected by end of March 2007.

Recommendation 1b)

The Department agrees with the recommendation, although there are some challenges involved that could limit the extent to which developing country professional associations and training institutes are involved in the monitoring and reporting phases of projects. Firstly, as pointed out in the recommendation, the developing country National Ozone Unit (NOU) is the official country representative for projects according to Multilateral Fund Executive Committee rules and practices. The NOUs are often located or colocated within environment ministries or agencies that may feel they are better placed to ensure the monitoring and reporting of the project, as they are ultimately responsible for it. Secondly, some of the least developed countries simply do not have strong professional associations or training institutes that have sufficient capacity to ensure comprehensive follow-up of project activities. With these limitations in mind, however, additional efforts will be made to secure the participation of such organizations in monitoring and reporting, when possible.

In line with this recommendation, the new TB Submission for the program is proposing adding to the list of possible recipients for contributions, "universities, training institutes, research institutes and recognized professional associations in developing countries that have adopted the Montreal Protocol and are eligible for assistance under the terms and conditions of the Protocol". The Department agrees that, if it were possible to enter into contribution agreements directly with these organizations, it would facilitate not only the involvement of such organizations in monitoring and reporting, but also, in some cases, in the implementation of some project activities.

Functional responsibility for recommendation:

ADM, IAB

Contact person:

Manager, Montreal Protocol Program

Timeline:

 Approval from TB for new Terms and Conditions, including modifying the list of eligible recipients for the contributions, is expected by end of March 2007. From that time on, the Department will consider the possibility of increasing the aforementioned stakeholders' participation for each new project approved, in consultation with the recipient country's National Ozone Unit.

Environment Canada viii

Recommendation 1c)

The Department agrees with the recommendation. There are some expected project impacts with respect to which it has proven difficult to obtain comprehensive, reliable information. It would be worth investing in some targeted studies and surveys, under a few key projects, in order to improve the level of information in such cases. This has already been done occasionally, but could be implemented on a more systematic basis. For example, one or two projects could be selected each year for such a targeted study/survey. The program will consider the different options to undertake this, as well as the costs involved, and include an activity and budget for a study/survey in at least one recipient country when preparing the program's annual administration budget for 2007/2008, and in subsequent years. These annual administration budgets outline the level of support costs to be recovered from projects for administrative purposes each fiscal year, and the specific activities planned to be conducted within these budgets.

Functional responsibility for recommendation:

ADM, IAB

Contact person:

Manager, Montreal Protocol Program

Timeline:

• At least one study on the impacts of projects will be completed by end of fiscal year 2007/2008.

Recommendation 2 a)

The Department agrees with the recommendation. A brief annual report will be prepared at the end of each fiscal year to outline the principal results of all ongoing projects and projects completed during the year. This report would include information on the total value of each project, its objective, key results, including when applicable data on ozone-depleting substances (ODS) phased out, and any interesting lessons learned or other project highlights. As recommended, the report will also aggregate information on the use of Canadian expertise in projects and the extent to which the project is consistent or supports Canadian foreign policy objectives.

Functional responsibility for recommendation:

ADM, IAB

Contact person:

Manager, Montreal Protocol Program

Timeline:

 One brief annual report will be prepared by end of April 2007 for fiscal year 2006/2007. A more comprehensive annual report will be prepared by end of fiscal year 2007/2008.

Recommendation 2b)

The Department agrees with the recommendation. As indicated in the recommendation, within the new project outcome structure of the Department, the Bilateral Program is clearly integrated within EC's wider programs supporting the phase-out of ODS specifically, and the improvement of air quality generally. In addition, the Bilateral Program contributes to other departmental Outcome Projects (OP), including the protection and promotion of Canada's environmental interests internationally, and the advancement of Canadian technology solutions.

Given the international nature of the Bilateral Program, it could indeed be further integrated within department-wide international objectives. The annual report to senior management, referred to in the response to recommendation 2a above could contribute to such higher-level integration. In addition, it is expected that the relocation of the program in 2006-2007 within the International Affairs Branch, and specifically within the Bilateral Affairs Division, has helped to foster and will continue to foster such integration. When updating the OPs in 2007-2008, the contribution and relationship of the Bilateral Program to the OP, "Canada's environmental interests are protected and promoted internationally", will be clearly highlighted within that OP and its Outcome Project Sub-Components (OPSC), particularly the OPSCs related to Bilateral Affairs and the Americas.

As recommended, in the development of a departmental framework or strategy, the Bilateral Program will be well integrated and contribute its valuable experience related to international project management to the strategy/framework. The possibility of making linkages with the Department's Science and Technology Strategy will also be explored.

Functional responsibility for recommendation:

ADM, IAB

Contact person:

Manager, Montreal Protocol Program

Timeline:

• As indicated, better integration of the program within wider departmental objectives is already underway and will continue on an ongoing basis. As the timeline for the preparation of an eventual international environmental strategy/framework is not firm, it is not yet possible to place a timeline on how the program would be integrated within such as strategy/framework.

1.0 INTRODUCTION

The conduct of an evaluation of Environment Canada's Bilateral Cooperation Program was approved by the Departmental Audit and Evaluation Committee and is part of the 2005/06 to 2007/08 Audit and Evaluation Plan.² An evaluation of EC's Bilateral Program serves to fulfill a commitment made to Treasury Board Secretariat (TBS) and provides EC decision-makers with evidence-based information needed to strengthen the performance and accountability of the Program. The lessons learned from this evaluation could also be applicable to other international programs.

The evaluation was guided by an Evaluation Committee representing employees of the International Affairs Branch and the Environmental Stewardship Branch. Evaluation Committee members were nominated by their respective senior managers.

1.1 Background

1.1.1 Purpose and Targets of the Montreal Protocol

In 1987, 24 countries, including Canada, adopted the *Montreal Protocol on Substances that Deplete the Ozone Layer*. In response to growing international concern over the depletion of ozone in the atmosphere, by 2005 the Protocol and subsequent amendments was ratified by over 190 countries. Ozone is a colourless gas which is found in the region of the atmosphere known as the stratosphere. "The ozone layer is beneficial to life on earth as it absorbs the harmful ultra violet radiation from the sun. In recent years, a large 'hole' in the ozone layer has opened over the Antarctic each spring, and a similar but smaller depletion has been observed over the Arctic." Scientific research shows that a major cause of ozone depletion is the release of certain industrial chemicals. The most common ozone-depleting substances (ODS) are chlorofluorocarbons (CFCs), used in refrigeration, air conditioning, foam products, solvents and aerosols. Other ODS are halons, used in fire extinguishing systems; carbon tetrachloride, used in solvents and various industrial processes; and methyl bromide, used in fumigation practices.⁴

The Protocol establishes targets and a timetable for developed and developing countries (known under the Protocol as Article 5 countries) to control and gradually phase out the production and consumption of all substances that deplete ozone in the stratosphere (consumption is defined as: production + imports – exports). Article 5 countries are given more time than developed countries to meet the targets of the Montreal Protocol. Parties classified as operating under Article 5 of the MP are listed in Annex 1.

² For the purposes of ease in this report, EC's Program will be referred to as "EC's Bilateral Program under the Montreal Protocol".

³ *Understanding the Ozone Layer*, Meteorological Service of Canada , http://www.msc-smc.ec.gc.ca/cd/brochures/understandozonelayer_e.cfm

⁴ Environment Canada's Montreal Protocol Bilateral Program 10 Years of Successful International Cooperation to Phase-out Ozone Depleting Substances, Environment Canada, 2003, p. 2.

⁵ Article 5 countries are also referred to as recipient countries in the evaluation report.

1.1.2 Multilateral Fund under the Montreal Protocol

A Multilateral Fund under the Montreal Protocol (MFMP) was set up in 1991 and finalized in 1992. The Fund assists Article 5 countries in meeting their obligations under the Protocol by providing financial and technical support to offset the economic impact of changing technologies. The Fund is financed by mandatory contributions from developed country parties and is replenished every three years by these parties. Individual contributions by developed countries are based on the United Nations' scale of assessment and are paid directly to the MFMP.

The MFMP is managed by an Executive Committee (ExCom) made up of fourteen representatives from developed and developing countries. ExCom is responsible for setting guidelines and criteria for projects, reviewing and approving projects, planning and allocating MFMP resources, evaluating the progress made in implementing projects, and if necessary, cancelling projects if there are persistent delays or other problems. ExCom requires the preparation of three-year business plans, proposals, and project completion reports (PCR) and year-end financial reports. Decisions of the Committee are prepared following every meeting, typically held on a trimester basis. A secretariat located in Montreal supports the work of ExCom. The Secretariat conducts an initial screening of plans and reports, conducts evaluations of groups of projects under a sector such as refrigeration and makes recommendations to the ExCom.

Programming is delivered through two funding mechanisms: one a multilateral mechanism, the other a bilateral mechanism. With the multilateral funding mechanism, funding is pooled and programming is implemented by multilateral agencies. With the bilateral mechanism, funding and programming is delivered by the government of the contributing party. Contributing parties have the option to use up to 20% of their assessed annual contribution to undertake bilateral projects, provided that they follow the same rules of the MFMP which apply to the multilateral agencies. Countries using the bilateral mechanism are able to recover up to 13% of the cost of the project as support fees for projects below \$500,000 (US\$), and 11% of the total project budget for projects at or above that amount. Multilateral agencies are able to recover up to 7-13% of the cost of the project, but they also receive core funding from the MFMP.

The value of the Multilateral Fund over the calendar years from 1993 - 2005 is \$1.8 Billion (US\$). As shown in Figure 1, \$1.7 Billion (US\$) or 95% of the funds were approved under the multilateral mechanism, while the remaining \$.1 Billion (US\$) or 5% of the funds approved under the MFMP used the bilateral mechanism.

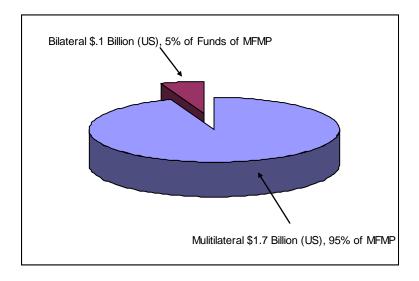
⁶ See page 64 of *Multilateral Fund for the Implementation of the Montreal Protocol Policies, Procedures, Guidelines and Criteria* (as of April 2005), Multilateral Fund Secretariat.

⁷ Germany is the only country to legislate that the implementing agency, Proklima is to use the full 20% bilateral allotment.

⁸ Multilateral agencies receive 9% in recognition that they also receive core funding support under the MFMP.

⁹ Consolidated Progress Report as at 31 December 2004, Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol Forty-Sixth Meeting, United Nations Environment Programme, Montreal, 4-8 July, 2005

Figure 1 Funds Approved for the Bilateral and Multilateral Funds for Calendar Years 1993 – 2004



Source: MFMP Reports

Since 2000, Canada, Germany, Japan, the United States, Italy, France, Sweden, Spain, Switzerland and Australia have used the bilateral mechanism for more than one year. On the next page, Table 1 shows the amount of bilateral funding which has been approved by ExCom. Countries with the highest amount of approved funds for bilateral projects are listed first.

Table 1 Approved Funding of Selected Bilateral Donors over Calendar Years 2000 - 2005 (US\$)

	Year						
Country	2000	2001	2002	2003	2004	2005	Total (US\$)
Germany	3,171,858	2,695,673	4,091,989	4,640,720	4,956,586	1,724,123	21,280,949
Japan	835,833	252,555	512,337	38,278	4,661,902	6,377,807	12,678,712
USA	0	78,500	0	0	5,375,000	5,375,000	10,828,500
Italy	0	3,374,489	1,950,000	0	0	4,470,000	9,794,489
France	259,179	585,221	1,170,200	1,117,348	1,725,761	1,863,460	6,721,169
Canada	788,827	1,007,006	525,450	412,959	682,825	400,473	3,817,540
Sweden	0	305,000	180,666	566,264	302,915	343,468	1,698,313
Spain	0	0	0		795,841	791,441	1,587,282
Switzerland	80,000	71,230	0	0	688,928	290,015	1,130,173
Australia	245,700	0	311,880	0	0	0	557,580
Total (US\$)	\$5,381,397	\$8,482,674	\$8,780,628	\$6,904,676	\$19,189,758	\$21,737,487	\$8,790,888

Source: MFMP Reports

Of these countries, donors such as Germany, Japan and France have used 55% of the funding on investment projects which typically includes the retrofit or replacement of machinery using alternative substances. Canada, Sweden, Spain and Switzerland, on the other hand, tend to focus on the provision of small equipment, tools, training and policy and technical advice.

Among other reasons, countries choose to use the bilateral funding mechanism to:

- Have greater control over how funding under the MFMP is directed;
- Transfer their country's experience gained from regulating the phase out of ODS;
- Promote the sale of their country's goods and services;
- Support their country's foreign policy objectives; and
- Bring their country into contact with the realities of Article 5 countries and with the United Nations community.

The availability of the recoverable support fee can also be an incentive for countries to participate.

As demonstrated in Table 2 on the next page, the extent to which countries have received approval from ExCom for bilateral programming varies over the years.

Table 2 Percentage Use of Bilateral Mechanism of Select Countries by Calendar Year

	Year (Calendar)					
Country	2000 (Percent %)	2001 (Percent %)	2002 (Percent %)	2003 (Percent %)	2004 (Percent %)	2005 (Percent %)
Germany	0	0	60 ¹⁰	20	20	20
Italy	20	17	21	20	20	6
Japan	2	1	2	0.1	16	18
Canada	17	9	25	16	6	8
France	2	5	11	0	18	21
Australia	10	5	7	2	0	0
Sweden	0	17	22	17	15	17
Switzerland	4	4	0	0	28	12

Source: MFMP Reports.

1.1.3 Government of Canada's Contribution to the Multilateral Fund

Under an agreement on behalf of the Government of Canada, the Canadian International Development Agency (CIDA) is responsible for paying 80% of Canada's contribution directly to the MFMP and Environment Canada (EC) is responsible for paying the remaining 20%. Table 3 sets out the Government of Canada's annual contribution to the Multilateral Fund of the Montreal Protocol over Fiscal Years 2000 - 2002 to 2003 - 2005.

Table 3 Canada's Annual Contribution to the MFMP over Fiscal Years 2000/01 to 2004/05

(in Millions)		Years -2002	Fiscal Years 2003-2005	
	\$ US	\$ CAN	\$US	\$ CAN
Canada's annual contribution (CIDA and EC)	4.6	6.7	5.0	7.8
CIDA's share of Canada's annual contribution (80%)	3.7	5.3	4.0	6.2
EC's share of Canada's annual contribution (20%)	0.9	1.4	1.0	1.6

Source: Appendix II of the Report of the 14th Meeting of the Parties to the Montreal Protocol; EC's Financial Information System

¹⁰ Percentage Amount was spread over 3 years

1.1.4 EC's Bilateral Program under the Montreal Protocol

Objectives of the Bilateral Program

Although the terminology has changed, the policy objectives of Canada's Bilateral Program have remained basically the same during the 1993 to 2005 period. The evaluation uses the policy objectives set out in the 2002 Results-based Management and Accountability Framework (RMAF) to assess the performance of EC's Bilateral Program.¹¹ The three policy objectives are:

- To provide effective assistance to developing countries to help them meet their obligations under the Montreal Protocol to phase out ODS.
- 2) To share and promote Canadian expertise in the field of ozone layer protection, including Canadian technology and public and private sector experience.
- 3) To support Canadian broad foreign policy objectives, in particular by fostering cooperative relations with key developing countries and reinforcing Canada's international image on global environmental issues.

The 2002 RMAF explains that given the purpose of the Multilateral Fund, EC's first policy of attaining environmental results is of paramount importance. "These latter two objectives should not, however, be achieved at the expense of the first objective of providing effective assistance to developing countries to help them meet their Montreal Protocol obligations." ¹² If they were, then EC would likely not be able to successfully operate the Bilateral Program, as ExCom approval of projects would become more difficult to obtain.

Eligible Recipients

Eligible recipients of funds under EC's bilateral projects include:

- Developing countries that have adopted the Montreal Protocol and are eligible for assistance under the terms and conditions of the Protocol; and
- Third party delivery agents, such as Canadian or international organizations that have a demonstrated capacity to implement projects in developing countries. 13

Financial Resources

Information in the Department's financial information system indicates that EC disbursed over \$3 million on bilateral projects over Fiscal Years (FY) 2001/2002 to 2004/2005. On average,

¹¹ "Environment Canada's Montreal Protocol Bilateral Guidelines", July 2005, pages 95 to 96.

^{12 &}lt;u>Ibid</u>, page 89.

¹³ <u>Ibid</u>, page 79.

EC disbursed \$741.1K (C\$) per year of EC's mandatory contribution to the MFMP on bilateral projects, and sent \$632.6K (C\$) of the funds per year to the MFMP.¹⁴

Regions, Countries and Sectors Targeted

Since 1993, EC has had projects in 22 of the 137 Article 5 countries. Table 4 indicates that the major concentration of EC's Program is in the Latin American and Caribbean Region.

Table 4 Geographic Concentration of EC's Bilateral Program over Calendar Years 1993 - 2004

Country	Region	Value of Projects (Million US\$) ¹⁵
Antigua, Bolivia, Brazil, Belize, Chile, Columbia,	Latin American and	5.7
Cuba, Guyana, Jamaica, Mexico, St. Kitts, St.	Caribbean	
Lucia, Uruguay, Venezuela		
People's Republic of China, India	Asia and South Pacific	.7
Benin, Kenya, Burkina Faso	Africa	.5
Georgia, Moldova	Europe	.1
Applies to all countries.	Global (applies to all regions)	.1
Support costs		.4
Total		\$7.5

Source: UNEP, Progress Report of Bilateral Cooperation as at 31 December 2004

From 1993 to date, the majority of the funds under EC's Bilateral Program have been concentrated on the refrigeration sector, followed by the halon and fumigant sectors. This concentration is demonstrated in Table 5.

Table 5 Sectoral Concentration of EC's Bilateral Program over Calendar Years 1993- 2004

Sector	Funding Amount (Million US\$)
Refrigeration	4.2
Halons	1.5
Fumigants	.9
Solvents	.1
More than One Sector	.4
Support costs	.4
Total	\$7.5

Source: UNEP, Progress Report of Bilateral Cooperation as at 31 December 2004

Overall Program Goals of the Program

The Results-based Management and Accountability Framework (RMAF) for EC's Bilateral Program sets out how the resources and activities are expected to assist recipient countries in complying with the targets set out in the Montreal Protocol. A description of this logic is presented on the next page.

¹⁴ Environment Canada's Financial Information System.

¹⁵ ExCom's approved funding amount.

Activities/Outputs

Using human and financial resources (inputs), Environment Canada conducts the following activities and produces outputs to support Article 5 countries in phasing out the consumption of ODS. A project can combine up to three of these activities ¹⁶.

- Technology transfer A key activity under the EC Bilateral Program is the transfer
 of technology which consists of the provision of 1) recovery and recycling machines
 for CFCs; 2) halon reclamation equipment and 3) equipment and tools to train
 refrigeration technicians and customs officers.
- Demonstration of technologies to reduce the consumption of ODS –
 Technology demonstration activities were a way of exploring innovative solutions to the transfer of technologies which were known to work. According to EC interviewees, from 2000, the MFMP increasingly moved away from the use of technology demonstration projects Therefore, technology demonstration has not been a significant part of the EC's Bilateral Program.
- Training and awareness-raising activities Training activities and awareness activities focus on 1) training technicians in good practices and recovery and recycling, to reduce emissions of CFCs, and 2) training of customs officers on the implementation of ODS import quotas and the identification of ODS and ODS-based products. All trainees were given hands-on training on how to use the equipment. Thus technology transfer could also be considered to be part of training activities. Once the training sessions were completed the NOU allocated the training equipment provided to training institutions, in consultation with EC, and in line with the project proposals and agreements.
- Assistance with the development of policy and legislation to enforce the ban on production and use of ODS The development of policy and legislation was considered by the majority of interviewees to be an important aspect of the Montreal Protocol. This activity was included in some, but not all bilateral projects. In some cases, a country may already have had legislation in place before the project was developed, or a country did not require or seek assistance in this area, or a country was provided assistance by another MFMP delivery agency.

Reach

Under the 2002 RMAF, "reach" refers to the individual or groups to be targeted in EC's activities. EC's Program is intended to principally target two audiences: 1) ODS-consuming enterprises, individuals (e.g., technicians), and associations; and 2) government officials (e.g., regulatory, customs and environmental officials) of Article 5 countries. It should be mentioned that some projects also have an element of public awareness activities which are conducted to

¹⁶ Guidelines, 2002, page 97.

sensitize the general public in recipient countries on the effects of ozone depletion and the goals of the Montreal Protocol (e.g., Bolivia).

Expected Impacts

"Expected impacts" as described in the RMAF, are the consequences of one or several of the activities identified above. Impacts are presented at three levels; immediate, intermediate and ultimate.

Immediate impacts include:

- ODS reduction technology is commissioned and adapted to local needs;
- Training provided is adequate to meet the needs of target audiences:
- Effective legislation / policy on the control of ODS is developed; and
- Canadian goods, services and expertise are being used.

Intermediate impacts include:

- The ODS reduction technology is being used by the recipient country on a regular basis:
- The ODS reduction technology has proven successful in field trials;
- The level of knowledge and skills of the targeted audience has improved;
- The knowledge and skills taught are being applied by the targeted audience;
- The targeted audience is transferring their knowledge and skills to colleagues;
- The recipient government has adopted ODS control policy / legislation developed;
- The recipient government is enforcing the ODS control policy / legislation adopted;
 and
- Canadian goods, services and expertise are being used by the targeted audience.

Ultimate Impacts

As demonstrated in Table 6, the ultimate impacts embody the three policy objectives of EC's Bilateral Program.

Table 6 Relationship between Expected Ultimate Impacts and Policy Objectives

Ultimate Impacts	Policy Objectives ¹⁷
Reduction of ODS has occurred	To provide effective assistance to developing countries to help them meet their obligations under the Montreal Protocol to phase out ODS.
Use of Canadian goods and services, expertise led to ODS reduction	To share and promote Canadian expertise in the field of ozone layer protection, including Canadian technology and public and private sector experience.
Support for Canadian foreign policy objectives	To support Canadian broad foreign policy objectives, in particular by fostering cooperative relations with key developing countries and reinforcing Canada's international image on global environmental issues.

The logic or chain of results linking the activities of the Program to the target audiences to the expected impacts of EC's Bilateral Program is illustrated in Figure 2, on the following page.

¹⁷ Guidelines, p. 95- 96.

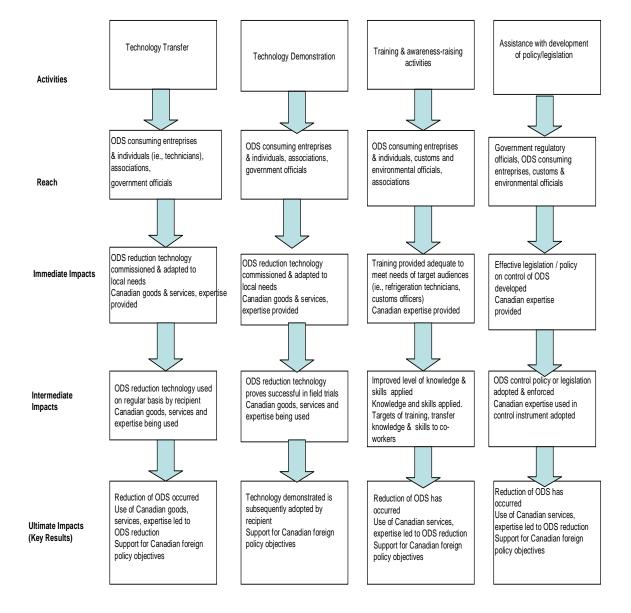


Figure 2 Logic Model of EC's Bilateral Program

Source: Guidelines, page 102

Management of the Bilateral Program

Bilateral project proposals are submitted to, and must be approved by, the recipient country and the MFMP ExCom consisting of 14 Montreal Protocol Parties. EC consults with the Canadian International Development Agency (CIDA) and other government departments, mainly the Department of Foreign Affairs and International Trade (DFAIT), and, depending on the project,

Agriculture and Agri-Food Canada and Industry Canada (AAFC), by circulating an annual business plan at the beginning of the year, indicating the projects planned for the year, their objectives and approximate costs. These other government departments (OGD) are also informed of project proposals when EC sends out its document on issues to be discussed prior to each meeting of the Executive Committee. EC may also consult with particular experts within the Government of Canada for advice on the development and implementation of projects.

From 1993/94 until the Departmental Reorganization in 2005/06, the responsibility for the management of EC's Bilateral Program rested with the Environmental Technology Advancement Directorate, Environmental Protection Branch with financial advice being given by the Branch's Financial Management Advisor. Until 2000, EC had one full-time person dedicated to the design, implementation and monitoring of EC's Bilateral Program. From 2000, that person was also assigned the responsibility of representing Canada on the MFMP Executive Committee, and an additional casual position was added to the Bilateral Program. By 2001, the Program had one manager, responsible for both the Bilateral Program and Executive Committee duties, and one project officer responsible principally for bilateral projects. As of 2006, EC has about 1.5 people dedicated to bilateral projects.

In 2006, under the new organizational structure, EC's Bilateral Program became part of the International Affairs Branch. The Bilateral Program is accountable to the Environmental Protection Board in terms of EC's results management structure (April 2006) and supports the Department's:

- Policy Outcome Canadians and their environment are protected from the effects of pollution and waste;
- Strategic Outcome Risks posed by pollutants or other harmful or dangerous substances in the environment are reduced (3A)
- Outcome Project Group Air quality is improved (3A1);
- Outcome Project Reduction of emissions from transboundary Sources (3A1e):
- Outcome Project Component Reduced global production and consumption of ODS;, and
- Outcome Project Sub-Component Working to assist developing countries protect the ozone layer.

EC's Bilateral Program also contributes to a Policy Outcome of the Strategic Integration Board which is to promote and protect Canadian international interests (5B2).

1.2 Purpose of the Evaluation

The conduct of an evaluation of EC's Bilateral Program was approved by the Departmental Audit and Evaluation Committee in June 2005. An evaluation of EC's thirteen-year Bilateral Program serves to:

 Fulfill a commitment made in the 2002 - 2007 Results-based Management and Accountability Framework (RMAF) for the Bilateral Program which is to conduct an evaluation of the Program every five years;

Provide decision-makers with evidence-based information needed to strengthen the
performance of the Program and to examine opportunities for the Bilateral Program to
make linkages with other environmental programs and foreign policies.

An audit of the Program is currently being conducted as well. The objectives of the audit are to ensure compliance with the terms and conditions of the class contributions as well as the provisions of the contribution agreements; and the policies and procedures of Treasury Board Secretariat and of EC (transfer payments, public procurement) as well as the *Financial Administration Act* over the FY 2001 / 02 – 2004 / 2005 period. The evaluation and audit used almost the same sample of projects to provide a comprehensive picture of the performance and management of EC's Bilateral Program.¹⁸

1.3 Evaluation Issues

The evaluation addresses three issues, including lessons learned and best management practices:

- 1. **Effectiveness -** The achievement of the results of EC's Bilateral Program, the overall performance and success of the Program.
- 2. **Efficiency -** The extent to which resources and activities are supplied, managed and organized in an efficient manner.
- 3. **Relevance -** The continued relevance of the Program, including the alignment of the Program with EC's current policy environment, and the benefits of continuing with the bilateral mechanism.

1.4 Scope

The evaluation focuses on the performance of EC's Bilateral Program from FY 1998/99 to 2004/05. Since EC has placed a particular emphasis on the refrigeration servicing sector, the primary focus of the evaluation is on this sector with attention being devoted to a much lesser extent to the halon and fumigants sectors. ¹⁹ The evaluation does not assess the performance of the Executive Committee, the Multilateral Fund Secretariat, other bilateral donors, multilateral agencies or Article 5 countries.

1.4.1 Sampling Strategy

The strategy used to select projects by which evidence could be collected to address the evaluation issues was guided by the following principles:

¹⁸ The draft audit report is expected to be completed in December 2006.

¹⁹ Record of Decision of the Evaluation Committee, March 1, 2006.

- Projects selected were approved in or after 1998. This timeline was chosen since ExCom's requirements for documentation improved the quality of information;
- Projects were to be part of an overall sectoral plan of a recipient country (that is to say one off projects were excluded from the sample);
- Projects were to have been completed or nearly completed to enable the evaluation to learn from what worked and what didn't work and why;
- Delivered by Canada directly, by or with other implementing agencies including the United Nations Environment Programme (UNEP), and other bilateral donors such as Australia;
- Represented sectors and countries where Canada has invested the most money.

Thus the sample of projects selected was done purposively. The sampling strategy rendered a sample of 20 projects in 8 countries. The projects represent \$1.9M (US\$) or 25 % of the funding of projects undertaken over the FY 1993/94 to 2004/05 period and 42% of the total funds approved over FY 1998/99 -2004/05. All of the projects formed components of overall sectoral strategies (refrigeration, halon or methyl bromide). The majority of projects (17/20) disbursed 70 – 100% of funds approved. Seventeen of 20 projects address the refrigeration servicing sector, the sector where EC has directed the most funds under the Program. The majority of projects were delivered by Environment Canada, with the remaining projects being delivered by UNEP and in collaboration with Australia. Seventeen of 20 projects fall in the Latin American region reflecting the overall geographic concentration of EC's Bilateral Program

The reader should note that two of the projects involved the preparation of refrigeration management plans (RMPs) which outlined sub-projects which were submitted to the MFMP to request funding for actual projects. Given the nature of these projects, they were considered under the evaluation for information purposes, but not in the context of evaluating them against the objectives of the RMAF.

Details on the number of projects sampled, the sector, type of activity and reach, country status, approved funding and amount disbursed by the end of 2004 are presented in Table 7.

Table 7 Projects Sampled under the Evaluation of EC's Bilateral Program

Number Sector of Projects Sampled		Type of Activity & Reach	Country	Approved Funding (including support fees) (\$US)	Percent Disbursed (%) as per end 2004
		Projects/Activities not included in RMAF			
1	Refrigeration	Preparation of Refrigeration Management Plan	Chile	33,900	100%
1	Refrigeration	Preparation of RMP*	Cuba	22,600	100%
1	Refrigeration	Monitoring activities*	Bolivia	64,410	80%
		Training and awareness	<u> </u>		
1	Refrigeration	Technicians	Benin	162,720	100%
1	Refrigeration	Technicians	Bolivia	62,150	96%
1	Refrigeration	Tech + standards	Chile	293,800	67%
1	Refrigeration	Technicians	Cuba	90,400	100%
1	Refrigeration	Technicians RMP	Jamaica	50,850	100%
1	Refrigeration	Technicians (Terminal Phase-out Management Plan)	Jamaica	271,200	58%
1	Refrigeration	Customs officers	Benin	67,777	100%
1	Refrigeration	Customs officers	Bolivia	54,240	67%
1	Refrigeration	Customs officers	Cuba	62,150	100%
1	Refrigeration	Customs officers	Jamaica	54,240	100%
1 Halo\		Halon users and stakeholders (i.e. fire protection companies, departments etc.)	Caribbean	196,410	89%
		Policy and Legislation			
1	Refrigeration	Code of Practice	Benin	11,300	100%
1	Refrigeration	Implementation of the RMP: assistance in preparation of regulations and technical norms	Bolivia	13,000	100%
1	Refrigeration	Implementation & enforcement of Regulations	Cuba	20,000	100%
		Technology Transfer			
1	Refrigeration	Recovery and Recycling	Cuba	55,000	100%
*	Refrigeration	Recovery and Recycling (Terminal Phase- out Management Plan)	Jamaica	*	*
1	Halon	Halon reclamation equipment	India	245,700	100%
		Demonstration			
1	Fumigants	Methyl bromide replacement demonstration project	Kenya	100,000	73%
Total / 20		1 1/1-17		\$1,931,847	

Source: MFMP Reports

It should be noted that under several of the projects categorized as "Training and Awareness", some equipment was provided for training purposes. Therefore, several of these projects can be considered to be Technology Transfer activities according to the Program's RMAF. Several of these projects are actually sub-projects forming one major project. For instance, in Cuba the Refrigeration Management Plan is one major project, consisting of four different sub-projects:

- 1) Training of technicians in good refrigeration practices;
- 2) Training program for customs officers;
- 3) Implementation and enforcement of regulations on ODS; and
- 4) Implementation of the RMP: recovery and recycling of CFC-12 in the mobile air conditioning sub-sector.

1.5 Methodologies

An Evaluation Framework was developed to guide the work of the evaluation. The Evaluation Framework is located in Annex 2 and includes a series of questions, performance indicators and methodologies used to address the evaluation issues identified in section 1.3 of this report. Modifications required and approved by the Evaluation Committee during the course of the evaluation are noted in Annex 2.

File and document reviews, as well as interviews were the methodologies used to collect information for this evaluation.

1.5.1 File and Document Review

The evaluation collected and analysed 200 documents obtained from file and document reviews.

EC Files

Most of the information that is used as evidence for this evaluation was found in the file review. Information includes:

- Contribution agreements and amendments, Memorandums of Understanding with Recipient countries and implementing agencies;
- Business plans and project proposals for the MFMP:
- Progress and project completion reports prepared by EC and implementing agencies;
- Workshop reports, consultant studies, EC on-site mission reports;
- Budget and expenditures spreadsheets prepared by EC Program staff and by the Department's financial information system;
- Annual financial reports to the MFMP;
- Assessment of project results reports (APR) prepared by EC staff on how the Program is doing against its RMAF objectives; and
- Correspondence (EC, MFMP Secretariat; Executive Committee).

Documents

Documents used as sources of information for the evaluation include:

- MFMP guidelines;
- EC Program Guidelines;
- Sector plans by recipient country;
- Executive Committee Policy decisions;
- Financial information from the Multilateral Fund database and EC's financial information systems; and
- MFMP Secretariat evaluations.

Key sources of information are listed in Annex 3.

1.5.2 Interviews

Thirty-three people were interviewed. As indicated in Table 8, these people represent four departments of the Government of Canada, six Article 5 countries, one technical expert, two multilateral agencies, six other bilateral donors and the Multilateral Fund Secretariat.

Table 8 Number of Interviewees by Organization

Multilateral Implementing Agencies Government of Canada (12 interviewees total) (3 interviewees total) • EC - Staff (6), Senior Managers (2) **United Nations Environmental** CIDA (1) Programme (2) DFAIT (1) United Nations Development Programme AAFC (1) (1) Industry Canada (1) **NOU Representatives** (6 interviewees total) Bilateral Donors (8 interviewees total) Bolivia (1) Japan (2) Chile (1) Germany (1) Cuba (1) France (1) Sweden (1) Jamaica (1) Australia (2) India (1) Kenya (1) USA (1) **Technical expert** (1 interviewee total) MFMP Secretariat (3 interviewees total) University of West Indies

Interviewees were asked questions presented in column 1 of the Evaluation Framework (Annex 2).

Limitations of the Evaluation

There are two limitations to the methodological approach taken in the evaluation.

- 1. The evaluation relies on secondary data collected from file and document reviews and interviews. Given the cost, and geographical distance between the locations of projects, on-site visits were considered infeasible.
- 2. With the training and policy and legislative advice activities, it is difficult to draw a direct causal link between the impact of these activities and the reduction of ODS. Instead, the evaluation draws upon information gathered through surveys and reports, and attempts to make a reasonable determination of whether these activities contributed to the compliance of countries sampled with the MP targets.

2.0 FINDINGS

The findings of the evaluation are presented by evaluation issue. For each issue, the performance indicators and sources of information used to address each evaluation issue are first identified. For the first issue, the effectiveness of EC's Bilateral Program, the sub-titles reflect the expected impacts of the Program as conceptualized in the 2002 Results-based Management and Accountability Framework (refer to Figure 2, on page 11).

2.1 Effectiveness of EC's Bilateral Program

Performance Indicators and Sources of Information

This issue addresses the achievement of the expected impacts of EC's Bilateral Program and the overall performance and success of the Program. The achievement of results is assessed by comparing the expected with the actual impacts of each project. The overall performance rating of EC's Bilateral Program is the assessment of the EC's Evaluation Division. The presentation of findings on the achievement of impacts starts off with the expected impact, the key finding and then detailed findings. Evidence is collected from file and document reviews, and interviews with Recipient countries, Multilateral Fund Secretariat representatives, other bilateral donors, EC and other federal department representatives.

2.1.1 Achievement of Immediate Impacts

Expected Impacts

According to EC's RMAF, the Department's activities are expected to result in one or more of the following immediate impacts²⁰:

- → ODS reduction technology is commissioned and adapted to local needs;
- → Training provided is adequate to meet the needs of target audiences;
- → Effective legislation / policy on the control of ODS is developed; and
- → Canadian technology and expertise are being provided.

Key Finding

The expected immediate impacts of the projects sampled have been achieved and results have exceeded expectations. Documentation on the extent of the immediate impact exists for most elements of the projects. Several projects demonstrate that many of the immediate impacts have continued beyond the duration of the project.

Detailed Findings

ODS Reduction Technology is Commissioned and Adapted to Local Needs

Fourteen of the projects sampled included an element of technology transfer, either as a principal objective of the project or in the context of a training program. According to progress, project completion, project assessment and mission reports, equipment was successfully transferred and commissioned in all 14 projects. Equipment included: recovery and recycling machinery and tools for the refrigeration servicing sector, a halon reclamation facility capable of purifying halon gas up to industry specifications (India), and halon recovery pumps for the halon sector. While it was expected that technology would be "adapted to local needs", according to an EC interviewee, the recovery and recycling of CFCs does not substantially differ from one country to the next with one exception. In the case of the halon reclamation facility set up India, however, the suppliers of the technology spent some time on-site to ensure that the equipment was not only commissioned but adjusted to suit the particular circumstances in the country, since the hot climate of the country would affect the operation of the equipment.

In the case of the demonstration project in Kenya in the fumigants sector, project reports show that after considering the results of experimental trials with Canadian-manufactured diatomaceous earth formulation as an alternative to the ODS, it was decided that this specific alternative was not economical for use in Kenya, and the project had to be reformulated. This re-formulation demonstrates that Canada was able to adapt the project on the basis of local needs.

²⁰ For the purposes of this evaluation, the term "impact" is equated to the term "result". Under EC's 2002 RMAF, the term "immediate impact" refers to the results expected to occur directly after the activity is conducted.

²¹ Under the six other projects, equipment transfer was not a part of the activities conducted.

In cases where equipment and tools were provided for training purposes only, following the training workshops, NOU officers donated the equipment, in consultation with EC, training institutes or universities for use in other training sessions, e.g., CFC Recovery and Recycling (R&R) equipment and tools were donated to educational institutions in Chile and to 5 cities in Cuba on the expectation that the institutes would continue with the training or use of the equipment. Similarly, following training workshops for customs officers, ODS equipment was given to the customs department of the government of Cuba.

In the case of the halon project in India, the halon reclamation facility and associated equipment (gas chromatographs, etc.) was provided to the Indian government's Fire, Environment and Explosive Safety (FEES) centre, with the expectation of ongoing use and operation. FEES staff members were provided with a two week training session by the Canadian supplier of this equipment.

Training Meets Needs of Target Audiences

As mentioned, EC's training and awareness activities in the refrigeration sector target two different audiences. The first audience consists of technicians in the formal refrigeration servicing sector, who received training in good refrigeration practices, including recovery and recycling, with the goal of reducing CFC emissions from refrigeration systems. These participants were employed mostly in the formal servicing sector but also included staff from technical institutes and universities in different regions of the countries. The second audience consists of customs officers and other government stakeholders who were provided training on the objectives of the Montreal Protocol, the country's ODS import controls legislation, the identification of ODS and ODS-based products and equipment, and methods of recognizing illegal ODS trade.

Participants were typically selected by the National Ozone Unit (NOU) who consulted with stakeholders. Based on the project proposals and the project completion reports prepared by EC, it is possible to determine, in most projects, both the actual number of participants versus the expected number of participants and the total population of technicians and custom officers and stakeholders.

Environment Canada's strategy was to train as many people as possible by first developing the capacity of a small group of technicians and customs officers to become trainers. In most project plans and reports, information indicates that on average 35% more participants were trained than expected. The increase ranges from 2% to 224% as demonstrated in Table 9.

The only negative deviation noted was in the training project in Bolivia where the country determined that there were not as many customs officers at sensitive border points as originally thought and so fewer customs officers were trained than planned in the project proposal.

Table 9 Expected Versus Actual Number of Participants in Training Workshops

		Number of Participants					
Country	Subject of training	Reach	Expected	Actual	Increase By Percent (%)		
	Good Refrigeration Practices						
Benin		Trainers	20	28	40%		
		Technicians	80	156	95%		
Bolivia		Trainers	?	24	?		
		Technicians	245	256	10%		
Chile		Trainers	60	60	0%		
		Technicians	2000	1,554* (as of Jan. 2006 – training still	(ongoing)		
Cuba		Trainers	16	24	50%		
		Technicians	2000	2650	33%		
Jamaica		Trainers	20	25	25%		
		Technicians	120	130	7%		
	Identification of ODS, import quotas for ODS						
Benin	quotao ioi obo	Trainers	20	20	0%		
					20%		
Bolivia		Trainers Customs Officers	171 (including	32 83	-33% (inc. trainers)		
Cuba		Trainers	20	25	25%		
		Customs Officers	200	667	224%		
Jamaica		Trainers Customs Officers	20 120	23 118	15% 2%		
	Benin Bolivia Chile Cuba Jamaica Benin Bolivia Cuba	Good Refrigeration Practices Benin Bolivia Chile Cuba Identification of ODS, import quotas for ODS Benin Bolivia Cuba	Benin Trainers Chile Trainers Technicians Cuba Trainers Technicians Identification of ODS, import quotas for ODS Benin Trainers Customs Officers Cuba Trainers Technicians Trainers Technicians Trainers Technicians Trainers Technicians Trainers Technicians	Country Subject of training Reach Expected Benin Trainers 20 Technicians 80 Bolivia Trainers ? Technicians 245 Chile Trainers 60 Technicians 2000 Cuba Trainers 16 Technicians 2000 Jamaica Trainers 20 Technicians 120 Identification of ODS, import quotas for ODS Trainers 20 Benin Trainers 20 Customs Officers 60 Bolivia Trainers ? Customs Officers 171 (including trainers) Cuba Trainers 20 Jamaica Trainers 20 Jamaica Trainers 20	Country Subject of training Reach Expected Actual Benin Trainers 20 28 Technicians 80 156 Bolivia Trainers ? 24 Technicians 245 256 Chile Trainers 60 60 Technicians 2000 1,554* (as of Jan. 2006 – training still ongoing) 2006 – training still ongoing) Cuba Trainers 16 24 Technicians 2000 2650 Jamaica Trainers 20 25 Technicians 120 130 Benin Trainers 20 20 Customs Officers 60 72 Bolivia Trainers ? 32 Customs Officers 171 (including trainers) 83 Cuba Trainers 20 25 Customs Officers 200 667 Jamaica Trainers 20 23		

Source of Information: Project proposals, Project Completion Reports.

^{*} A star indicates projects where information on the expected or actual number of participants was not provided in the project completion reports or training reports. Where no information is presented, this type of training was not conducted in the recipient country sampled.

At the end of training workshops, participants were asked to rate the quality of the workshop and the trainer using a set of questions. All participants of the projects sampled rated the training as satisfactory / good to highly satisfactory / excellent.²²

Interviews with NOU officers and multilateral agency representatives indicate that the access and availability of equipment and the ability to apply the hands-on approach were important factors contributing to the success of the training. In the case of customs training, the value added by the presence of an EC enforcement officer was noted in project completion reports and interviews.

As indicated, project completion reports and interviews with NOUs show that in some cases, EC's training has led to results lasting longer than the term of the project. Examples of sustainable results include:

- Good refrigeration practices have been integrated into curricula of recognised training institutes/universities in all countries sampled (Benin, Bolivia, Cuba, Jamaica, Chile);
- Participants passing an exam on good refrigeration practices are certified in all 5 countries sampled;
- Refrigeration good practices training is now mandatory in two of the five countries (Cuba, Jamaica), and training of customs officers on ODS is mandatory in Cuba; and
- Training was co-financed or is financed by Cuba, Bolivia and Jamaica, three of the five countries sampled in the refrigeration sector.

Information collected from the project completion reports and interviews shows that the training has contributed to the achievement of other results including:

- Technicians are motivated to protect the ozone layer through improved refrigeration practices;
- Professionalization of the industry; many of the technicians did not have prior training in the refrigeration servicing sector
- Increased capacity of refrigeration associations to organize training;
- Transferability of the knowledge and skills acquired to meet other targets under the Protocol; and
- Increased capacity of recipient governments for good governance practices.

This rating is based on their personal assessments of the workshop and is not based on a formal needs analysis.

Effective Legislation and Policy on the Control of ODS is Developed

Three of the countries with projects sampled in the refrigeration sector (Bolivia, Jamaica, and Cuba) had activities related to assistance with the development of policies and legislation. In three of countries (Jamaica, Chile and Benin), activities included the development of a Code of Good Practice for refrigeration. Information collected from the document review and interviews shows that EC's technical assistance has helped Article 5 countries to develop ODS legislation, regulations and polices, as well codes for the refrigeration sector. Achievements reported include:

- Regulations and norms for reduction, substitution and elimination of ODS (Bolivia);
- Recovery and recycling regulations and other initiatives such as the application of economic incentives to reduce imports of CFC (Cuba);
- Introduction codes of good practice for handing ODS refrigerants (Benin, Jamaica); and
- Standards for refrigerants and the management of refrigeration service (Chile).

Other achievements linked to legislative and policy mechanisms but not included in the RMAF include the development of an electronic data base to monitor ODS (CFC) imports (Cuba) and a data system to track the availability and use of halons (the Caribbean region).

Provision of Canadian Technology and Expertise

Key Finding

Canadian public sector expertise and technology have been provided to a significant degree in each project. Factors contributing to the use of Canadian expertise include: Canada's regulatory experience in meeting the phase-out targets under the Montreal Protocol, experience in technician training, recovery, recycling and halon management, and Canada's two official languages, which means that experts are capable of speaking in English and French. Barriers to increased involvement of Canadians includes: other donors have similar regulatory and training experience, and the conduct of projects in Latin American countries means that Canadian experts need to be fluent in Spanish.

Detailed Findings

An appreciation of the extent of the provision of Canadian technology and expertise can be found by looking across the projects. Table 10 shows that 75% of projects sampled used EC experts, Canadian consultants and/ or Canadian suppliers.

 Table 10
 Source of Expertise and Supplies in the Refrigeration Servicing Sector

Number of Projects Sampled	Type of Activity and Reach	Country	EC Experts	Canadian Experts	Non- Canadian Experts	Canadian Supplier of Goods	Non- Canadian Supplier of Goods
1	Monitoring activities	Bolivia			Х		
	Training and awareness						
1	Technicians	Benin				х	
1	Technicians	Bolivia		х	х	х	х
1	Tech + standards	Chile		Х	х	х	
1	Technicians	Cuba			х	х	
1	Technicians RMP	Jamaica		х			х
1	Technician (TPMP)	Jamaica			х	х	
1	Customs officers	Benin	х		х		
1	Customs officers	Bolivia			х		х
1	Customs officers	Cuba	х		х	х	
1	Customs officers	Jamaica			Х		
1	Halon users	Caribbean		х			х
	Policy and Legislation Development						
1	Code of Practice	Benin		х	х		
1	Policy and Legislation Development	Bolivia			х		
1	Implementation & enforcement of Regulations	Cuba	х		Х		
	Technology Transfer						
1	Recovery and Recycling	Cuba			х	х	
1	Halon reclamation	India		x	X	X	
1	TPMP –Recovery and recycling	Jamaica			х	х	
	Demonstration						
1	Fumigant	Kenya		Х	Х		

Source of Information: Project Completion Reports

Interviews with EC personnel indicate that the factors which contribute to the use of Canadian expertise include:

- Canadian government officials have the regulatory experience of meeting the targets;
- Canada has significant experience in the areas of technicians training, recovery and recycling, halon management; and
- Canadian experts can operate in English and French.

Interviews with EC, MFMP Secretariat and other donors' staff indicate that barriers to engaging more Canadian companies and suppliers include:

- Other donor countries may have the same regulatory experience;
- Other donor countries have the same training experience. Interviews with MFMP Secretariat and other bilateral donors indicate that donors share a pool of international experts; and
- The conduct of projects in Latin American countries means that the Canadian experts must be able to work effectively in Spanish.

It should be noted that there is no requirement to use Canadian expertise and technology in the projects, as this would be perceived as tied-aid. Rather, the Bilateral Program first attempts to promote local expertise in the recipient country when available, and relies on non-local expertise and technology when these are not available in the country. If necessary for the successful implementation of a project, the Bilateral Program may also rely on experts or suppliers from other industrialized countries.

2.1.2 Achievement of Intermediate Impacts

Expected Impacts

Expected intermediate impacts sought were:

- → The ODS reduction technology is being used by the Article 5 country on a regular basis;
- → The ODS reduction technology proves successful in field trials;
- → The level of knowledge and skills of targets has improved;
- → Targets of training are applying the knowledge and skills taught;
- → Targets of training transfer knowledge and skills to colleagues;
- → The recipient government has adopted the ODS control policy / legislation developed:
- → The recipient government is enforcing the ODS control policy / legislation adopted; and
- → Canadian goods, services and expertise are being used by the recipient.

Key Finding

The expected intermediate impacts have been achieved. While information is available to confirm the achievement of most of the impacts, the level of detail of this information is not uniform across projects.

Detailed Findings

ODS Reduction Technology is Used on a Regular Basis by Recipients

Information collected from the file and document review indicates that CFC recovery and recycling machines are being used, although information on the extent of the use varies by project. Recipients in Chile indicate that they "use tools, equipment provided or purchased." Except for one recovery and recycling machine (difficult to use), equipment in Cuba is being used on a regular basis and the country has submitted reports to EC on quantities of CFCs being recovered and recycled with the equipment. Jamaica has also submitted comprehensive reports on the use of the equipment and surveys sent to organizations in Jamaica show that CFCs are being recovered and reused and that industry can recycle their own but recovery from domestic appliances is low, in comparison with recovery and re-use in the commercial and mobile air conditioning sub-sectors."

While EC staff is generally satisfied that they have sufficient reports from countries to confirm the appropriate use of CFC recovery and recycling machines, staff also indicate that it has been challenging to ensure that technicians report on a regular basis on quantities of CFCs recovered, recycled and re-used. Despite repeated efforts by the Department and NOU staff, the information provided by technicians is often sporadic. In some cases, EC or the country had to contract a local consultant to visit each technician's servicing workshop in order to receive a response on the information being requested. According to interviewees, this weakness in reporting is not specific to EC projects, and is common to other recovery and recycling projects. The MFMP is apparently addressing the problem by requesting all countries to report annually to ExCom on the number of R&R machines in operation, and the quantities of CFCs recovered, recycled and reused.

An exception where ODS technology provided appears under-used is the India halon reclamation facility. A mission by EC in October 2005 found that India did not undertake completion of certain tasks to ensure the full and sustainable use of the equipment provided. Since then, an action plan to help rectify the situation has been agreed upon with India.

Level of Knowledge and Skills of Targets of Training has Improved

Reports and interviews with NOU and MIA officers, mission reports of EC staff, and in some cases reports of studies conducted by consultants (Jamaica) indicate that improvements in the level of knowledge and skills of participants are a key result of EC's Bilateral Program.

²³ Chile, Project Assessment Report, page 13.

²⁴ Cuba, Project Assessment Report, page 18.

²⁵"Trilateral Visit to Cuba for Agreement on Terminal Phase Out Plan", March 17, 2003, p 61.

Further confirmation that skills have improved comes from the reports received on the use of R&R equipment provided under the projects and the quantities of CFCs reported to have been recovered and recycled. Aside from the reports and interviews, an improvement in the level of knowledge and skills of refrigeration technicians is demonstrated by the fact that under most of the projects, technicians have to pass an examination in order to obtain some kind of official or unofficial certification. The vast majority of technicians who attended the training provided were able to pass the examination and were certified.

"The training enabled a re-evaluation of the participants' attitude towards recovery of CFCs, HCFC and HFCs." NOU interviewees highlight the importance of awareness and understanding the environmental significance of the use of ODS. EC employees add that this training has led to other ancillary results including the increased capacity of technicians in developing countries, strengthened the capacity of refrigeration associations and developed skills which could be easily transferred to other activities to reduce the consumption of ODS and to other areas of industry.

Targets of Training are Applying Knowledge and Skills Taught

The fact that there is evidence that technicians are recovering and recycling CFCs indicates that they are applying at least some of the skills taught in the good practices courses. Project completion reports of Bolivia and Cuba note that the knowledge and practices are applied as long as the necessary tools and equipment are available. The More detailed reports of studies conducted in Jamaica indicate that both customs officers and technicians were applying the knowledge and skills taught. However, changes to educational standards for customs officers in Jamaica meant that many of the trained officers were removed from their positions and the customs training had to be redone with new recruits.

Targets of Training Transfer Knowledge and Skills to Co-workers

Four of ten project reports give examples where knowledge and skills has been transferred to colleagues. A program assessment report in Bolivia indicates that knowledge and skills gained by technicians was transferred to others in servicing workshops and through apprenticeships involving technicians²⁸. A Chilean report shows that one participant trained 14 technicians from his company²⁹. The Project Completion Report in Jamaica shows a less successful example; customs officers failed to pass on information to co-workers in larger ports in Jamaica³⁰. On the other hand, a report on the impact of the training of technicians in Jamaica

Environment Canada 27

2

²⁶"Project Completion Report, Implementation of the RMP: Training of Trainers in Refrigeration and Certification of Technicians", Heating, Refrigeration and Air Conditioning Institute of Canada, April 10, 2004.

²⁷ "Draft Report: Training Program on Train the Trainers on Good Refrigeration Practices and Use of Alternatives Organized by the Government of Bolivia (COGO"), and Environment Canada, September 2003.

²⁸"Draft Report: Training Program on Train the Trainers on Good Refrigeration Practices and Use of Alternatives Organized by the Government of Bolivia (COGO), and Environment Canada", September 2003.

²⁹ Phase 1 March 24 – 28 workshop.

Project Completion Report, Jamaica.

indicates that trained technicians are transferring some of their knowledge and skills to colleagues working in the same companies or servicing workshops³¹.

The transfer of knowledge is not mentioned in documentation or interviews conducted with personnel in India, Benin and Cuba. This could indicate that information on this particular impact is not collected on a uniform basis. At the same time EC interviewees point out that there are limits to the Bilateral Program's capacities to collect information on the extent to which technicians and customs officers are transferring their skills to colleagues. "As it is not possible to follow these individuals throughout their work to verify what they actually do, the Program must rely largely on interviews and anecdotal evidence."

ODS Control Policy or Legislation is Adopted and Enforced

Program documentation and interviews demonstrate that ODS import control legislation and codes of good practice have been adopted in all projects reviewed where there has been funded activities. For example, ODS import control legislation was enacted by Bolivia in 2004 and regulations are being enforced by Cuba. Even when the development of ODS legislation was not funded through a project, it was often a condition of project approval by the Executive Committee. As a result, India, for instance, developed legislation essentially banning the import of halon, following the establishment of the halon reclamation centre. Although it is not possible for EC to track the enforcement of policies and import control legislation in another country, the fact that countries included in the evaluation sample have exceeded the Montreal Protocol's 2005 50% reduction targets for these substances, suggest that the legislation is being enforced.

2.1.3 Achievement of Ultimate Impacts

Expected Impacts

Ultimate impacts sought were:

- → Reduction of ODS has occurred:
- → Use of Canadian goods and services, expertise leading to ODS reduction; and
- → Support for Canadian foreign policy objectives.

Key Finding

Environment Canada has assisted recipient countries in complying with the environmental targets set out by the Montreal Protocol. All of the countries sampled (except for Kenya which was not included in this analysis) have made substantial reductions of ODS from their

³¹ A "servicing workshop" is a place of work.

baselines. While recognizing the role of other influencing factors, it is reasonable to expect that EC's projects in the refrigeration servicing sector assisted the five countries in their accomplishments. While EC's Program has enabled Canadian consultants and companies to provide services, technology and equipment to recipient countries and supported Canada's broad foreign policy objectives, the compliance of recipient countries with the environmental obligations set out under the Montreal Protocol is the key impact sought under the Program.

Detailed Findings

Reduction of ODS has Occurred

All of the countries sampled have made substantial reductions of ODS from their baselines. Bolivia, Chile, Cuba and Jamaica have more than exceeded the 2005 50% CFC reduction target. Table 11 shows the consumption of CFCs sampled.

Countries Baseline 50% Year of Latest Latest **Percentage** Reduction of Consumption Consumption over Target Baseline of 50% Reduction Benin 29.70 2004 11.6 19 59.4 37.83 Bolivia 75.67 2005 26.73 35 Chile 828.73 414.36 221.52 2005 27 Cuba 625.13 312.56 2005 25 208.56 93.23 46.61 2005 5.4 58 Jamaica

Table 11 Consumption of CFCs by Article 5 Countries Sampled

Source: Appendix I, CFC Analysis, ExCom Document 49/6, June 2006

An evaluation conducted by the Multilateral Fund Secretariat points out that the inability of recipient countries to meet the targets set out by the Protocol is influenced by an inter-play between factors. ³² These factors include:

- Prices for CFCs and substitutes;
- Legislation, market incentives and enforcement measures;
- Implementation of sub-projects like training; and
- The role of the NOU, political support and cooperation with the private sector.

It is, therefore, reasonable to expect that EC's projects played a role in assisting the Article 5 countries to meet their target, particularly since EC's projects represented the major source of Multilateral Fund assistance received to phase out CFC in the refrigeration servicing sector (e.g., Benin, Cuba, Jamaica and Bolivia).

 $^{^{32}}$ Extended Desk Study on RMP Evaluation UNEP/OzL.Pro/ExCom/39/14.

Some additional evidence that projects have helped countries reduce their CFC consumption comes from CFC recovery and recycling reports. The quantities of CFCs which were reported as having been re-used, with the use of the equipment and training provided, help countries reduce their needs for importing new CFCs and thus facilitate their compliance under the Montreal Protocol. However, EC interviewees note that while these quantities are significant, they only account for a modest portion of overall CFC reductions experienced by the countries.

Aside from the direct effects of project activities in contributing to ODS reductions, EC interviewees strongly believe that the approval of the projects themselves are key incentives to governments to ensure action was taken to reduce ODS. Most RMPs (e.g., in Chile, Bolivia and Benin) and halon banking projects (e.g., in India) were approved by ExCom on the condition that the country concerned committed to meeting its ODS reduction targets and put in place appropriate regulatory measures to support these reductions. Therefore, due to the policy context set by the Multilateral Fund, the value of these projects in ensuring that countries comply with their obligations should not be under-estimated.

Use of Canadian Technology and Expertise led to ODS reduction

Since it has been shown that EC's projects do contribute to ODS reductions, and that most of these projects involve a substantial proportion of Canadian technology and/or expertise, it is reasonable to conclude that the use of Canadian goods, services and expertise contributed to the reduction of the use of ODS by recipient countries.

Support for Canadian Foreign Policy Objectives

Canada's foreign policy objectives 1995 and 2005 emphasize the global nature of environmental issues and the importance of addressing global and regional economic issues (1995) and advancing Canadian values of environmental sustainability as well as Canadian interests regarding security, prosperity and governance (2005). Canada's foreign policy objectives to date also acknowledge the importance of using Canadian know-how and environmentally sound technology to build the capacity of developing countries needed to actively participate in the implementation of international environmental commitments.

The Bilateral Program helps Canada achieve its foreign policy objectives in a number of ways. It contributes to the global phase-out of ODS and thus to the protection of the ozone layer. Interviews with EC staff, MIA and other bilateral donors indicate that EC's Bilateral Program has fostered cooperative relations with developing countries, multilateral agencies and bilateral donors. Interviewees note that one of the key results achieved through a bilateral program is the establishment of partnerships and networks and the first-hand understanding of a country's requirements with respect to environmental issues. Interviewees believe that this collaboration reinforces Canada's international image in being active in global environmental issues.

As demonstrated throughout section 2.1, the use of Canadian expertise and technology has assisted recipient countries in meeting their obligations under the Montreal Protocol as well as

Environment Canada 30

_

³³ Government of Canada, *Canada and the World*, 1995; <u>Ibid</u>, *the International Policy Statement*, 2005. The Government is currently reviewing its foreign policy objectives.

supporting Canada's overall foreign trade agenda. Further, by developing the capacity of recipient countries to build legal and regulatory frameworks for the use of ozone depleting substances, the Bilateral Program has built sound governance processes which could be transferred to environmental and other global issues. Finally, EC interviewees consider that the Program has been used to target countries and regions which over the years have been seen as key economic and/or environmental partners for Canada, principally the Americas region, India and China.

Achievement of Expected Impacts against EC's Policy Objectives

Policy objectives sought were:

- 1. To provide effective assistance to developing countries to help them meet their obligations under the Montreal Protocol to phase out ODS;
- 2. To share and promote Canadian expertise in the field of ozone layer protection, including Canadian technology and public and private sector experience; and
- To support Canadian broad foreign policy objectives, in particular by fostering cooperative relations with key developing countries and reinforcing Canada's international image on global environmental issues.

The Evaluation Division considers EC's Bilateral Program to be successful in meeting its expected impacts and Policy Objectives, based on the information available.

√ Policy Objective 1

In considering the evidence presented, the Evaluation Division concludes that is reasonable to attribute that EC played an effective role in assisting the recipient countries sampled in meeting the environmental obligations set out under the Montreal Protocol.

√ Policy Objective 2

Evidence shows that the Bilateral Program has satisfactorily used Canadian expertise, goods and services.

$\sqrt{}$ Policy Objective 3

Evidence shows that Canada has been fully successful in fulfilling this policy objective. Based on document reviews and interviews with other bilateral donors, developing countries and multilateral agency representatives, it seems that the Bilateral Program has contributed and been in line with general foreign policy objectives including trade objectives.

2.2 Efficiency of Program Design and Use of Resources

Performance Indicators and Sources of Information

This issue seeks to determine the extent to which the design of EC's Bilateral Program makes sense in terms of achieving the desired impacts. This section of the report starts off with examining the criteria and characteristics governing the selection of projects and then turns to examining the intrinsic logic of the Program; that is to say if the linkage between the activities and intended impacts makes sense. The evaluation also looks at the quality and usefulness of information for decision-making both at the ExCom and Departmental levels. The administrative efficiency of the Program is determined by identifying over the 2002 - 2005 period the cost of managing the Program and the incremental cost of the Program to the Department. Information gathered to address the efficiency of design and the cost of the Program is derived from MFMP reports and EC's Financial Information system, file reviews, document reviews, and interviews with the Multilateral Fund Secretariat and EC personnel.

2.2.1 Efficiency of Program Design

Key Finding

The parameters of the Multilateral Fund ensure that the design of projects, allocation of resources and accountability for the use of funds is efficient. EC's selection of projects is consistent with the requirements of the MFMP, aligns with the Department's overall geographic concentration of international programming in the Americas, China and India and criteria for bilateral engagement developed by the former International Review Committee in 1998³⁴, and reflects the availability of human resources to support the implementation of projects. While the rationale or logic of how EC's Program is going to achieve the expected impacts makes sense, the linkage across activities and expected results could be strengthened to show the interrelationships between the activities and expected results.

Detailed Findings

MFMP Policy Parameters

In order for projects to be approved under the Multilateral Fund, they must first meet the criteria and requirements of ExCom. The policy parameters of the Executive Committee, as interviewees from the Multilateral Fund Secretariat note, are based on the collective experience of what works and what does not work. Projects are developed by sector and the design of the projects is governed by decisions of the Executive Committee and by guidelines. For example, the concept of a RMP was adopted by ExCom at their 22nd meeting in June 1997 and

³⁴ "Criteria for EC's International Bilateral Engagement", December 17, 1998, Environment Canada, No other criteria for bilateral engagement have been known to be developed since 1998.

guidelines were approved at the 23rd meeting in November 1997. Executive Committee requires that the Plan must include: 1) training technicians in good practices in refrigeration, 2) training of customs officers in controlling imports of ODS, 3) recovery and recycling including hands-on training on the respective practices. Recovery and Recycling projects were to be implemented only after incentives or regulatory measures were in place to ensure sustainability (Decision 22/24). "RMPs aim at establishing the proper sequencing of projects and policy measures and to proceed in a coordinated way taking into account the linkages between the various activities." ³⁵

According to an evaluation conducted by the MFMP Secretariat, this holistic (as compared to one off) approach contrasts with earlier Recovery & Recycling training projects which were approved without all conditions, such as import restrictions for CFCs, being in place. Once a RMP is completed, partner countries and implementing agencies are to prepare a Terminal Phase-out Management Plan (TPMP) which is the last amount of funding to be paid to the Article 5 country in support of phase out of ODS refrigerants. Interviewees from Article 5 Countries, MIA and EC are unanimous in saying that the parameters governing the RMPs/TPMPs make sense in supporting countries to reduce consumption of ODS.

According to EC interviewees, ExCom's requirement that projects are to be developed in consultation with and supported by Article 5 countries ensures political support and commitment of the recipient country to the project. According to interviewees, the MFMP Secretariat brings an added measure of efficiency; all proposals are reviewed individually and compared to other bilateral and multilateral projects to ensure that the proposals do not duplicate other projects underway or proposed.

EC's Policy Parameters

As mentioned, EC's rationale and criteria for selecting projects reflects the policy parameters of ExCom. EC interviewees note that from the perspective of eliminating ODS, given an equivalent amount of funds, no one Article 5 country is more important to work with than another (e.g., phasing out one tonne of CFCs in China will have the same effect on the stratosphere as phasing out one tonne of CFCs in Uruguay). However, the Bilateral Program has attempted to align itself with evolving Departmental geographic priorities and criteria for bilateral engagement. The file and document review indicates that the geographic priorities for the Bilateral Program principally include the Americas, China and India, and to a lesser extent, Africa, although EC interviewees note that the Bilateral Program remains open to considering projects from other regions. This geographic focus is seen by EC interviewees as being consistent with what has been considered to be the geographic priorities for EC's international activities in developing countries historically. It is also seen as consistent with pre-existing criteria established by the International Review Committee for bilateral engagements in Environment Canada.³⁷

³⁵ Extended Desk Study on RMP Evaluation UNEP/OzL.Pro/ExCom/39/14, p. 3

³⁶ Decision 38/65 of ExCom.

³⁷ Environment Canada, "Criteria for EC's International Bilateral Engagement", December 17, 1998. According to an EC representative the International Review Committee existed until the Department was re-organized in 2004.

Within the regions/countries mentioned above, EC's rationale for deciding which specific countries and projects it would like to work with involves consideration of the following factors:

- EC/Canada can bring a particular added value to the project;
- Expertise and capacity for the project is available in Canada;
- Economic relations with the country:
- Interest, support and capacity of the country; and
- Adequacy of the Program resources (currently 1.5 FTE) to manage the projects.³⁸

A review of projects sponsored from 1993 to 2005 indicates that over 80% of funds were deployed to Latin American countries. Data from Statistics Canada shows that over the 1999 to 2003 period, five of the countries sampled ranked among the top 25 of 156 developing countries importing Canadian products. EC's Bilateral Program primarily focuses on building capacity of countries who consume but do not produce ODS in the refrigeration servicing and halon sectors. This approach makes sense given that the relatively small monetary value of EC's Bilateral Program would not allow EC to be a significant player in projects to convert ODS manufacturing facilities; these projects are usually handled by the World Bank, United Nations Development Programme (UNDP) and United Nations Industrial Development Organization (UNIDO).

EC's Bilateral Program consults with the interdepartmental committee on the annual business plan and when project proposals are to be submitted to ExCom.

The Plausibility of the Expected Results

The expected results indicate the rationale and logic of how the Program is supposed to work and what EC intends to accomplish with the funds allocated. The theory behind the Program is that the transfer and use of technologies, provision and application of training and awareness activities and policy and legislative advice to recipient countries, more specifically individuals (e.g., technicians), ODS-consuming enterprises, associations and government individuals and institutions, will support recipient countries in complying with targets under the Montreal Protocol. Overall, the linkage between activities and the expected impacts makes sense. At the same time, the Evaluation Division would like to offer specific comments on the phrasing and linkage of the current expected impacts.

- The immediate impacts could be considered to be outputs. For example, the adequacy of training for the needs of target audiences, along with the workshops could be considered to be outputs.⁴¹
- The immediate impacts could be broken into two parts to reflect the chain of results. For example, the immediate impacts for training and awareness-raising activities could

³⁸ "Environment Canada's Montreal Protocol Bilateral Cooperation Program Guidelines July 2005; Geographic Priorities of EC's Montreal Protocol Bilateral Program" September 28, 2005.

http://strategis.ic.gc.ca/sc_mrkti/tdst/engdoc/tr_homep.html, Statistics Canada

⁴⁰ Chile is the exception to the countries sampled.

⁴¹ Outputs are defined as direct products or services stemming from the activities of the Bilateral Program.

be improved level of knowledge. The intermediate impact could be knowledge and skills are applied and transferred to others.

- Having four tracks gives the impression that the activities and impacts operate
 independently. This does not reflect the dynamic interrelationships between activities
 (e.g., equipment was provided for training and left for ongoing use; awareness could
 be part of the provision of policy advice).
- The wording of policy objective 2 sounds more like an input or an activity ("to share and promote Canadian technology and expertise in the field of ozone layer protection...") than an intended impact.
- No activities or links are provided to show how Canadian foreign objectives (policy objective 3) are to be supported. EC's Bilateral Program could consult with DFAIT and CIDA on the interdepartmental committee to see how they measure and report on the achievement of Canadian foreign policy objectives.

Information on policy objectives 2 and 3 is needed at more of a program level than at a specific project level.

2.2.2 Quality and Usefulness of Performance Information

Key Finding

The project level information collected by EC's Bilateral Program meets the current planning, monitoring and reporting requirements of the MFMP and of EC. Information can be aggregated and rolled up at the program level in response to ad hoc senior managerial requests for information, for annual reporting under the *Canadian Environmental Protection Act* and for annual departmental planning and reporting requirements to Parliament.

Detailed Findings

As stated in section 1.4.1 of the report, over 200 documents related to the planning, implementation, and completion phases of projects as well as the management and administration of projects were reviewed. The following information was prepared to meet the requirements of ExCom:

- Business Plans for a three-year period;
- Project proposals, project completion reports for each completed project (including concise information on results and expenditures);
- Progress reports by recipient countries on all activities funded through each payment provided under each project are available and give descriptions of what has been accomplished with payment received; and

Annual financial reports to the MFMP.

MFMP Secretariat staff, during interviews confirmed that the quality of information provided by EC on projects (including business plans, project proposals, progress reports, project completion reports and financial reports) is high, and is used in the overall management process of the MFMP, including in Secretariat evaluations. As a MFMP representative explained, EC's proposals contain a good quality of information, accurate data and Canada is receptive to the comments of the Secretariat. While EC's proposals may require some modification, they have never been turned down or cancelled during implementation.

In terms of the information produced and kept on file by the Program for the sake of accountability within EC and the Canadian government, the information on file appears to be complete and thorough. This information includes:

- Program Guidelines detailing the objectives, procedures and administrative practices of the Bilateral Program;
- Contribution agreements and amendments for the projects sampled were found on file;
- Information on all contracts entered into either by EC, or its procurement agent, the Canadian Commercial Corporation:
- Information on Canadian companies and consultants that have provided goods and services under each project
- Regularly updated budget spreadsheets outlining the expenditures for each project;
- Information on the level of administrative costs recovered from projects is kept on file;
- A range of workshop reports, consultant studies, EC on-site mission reports (often
 including pictures of training and equipment provided) are kept on file to further confirm
 the implementation of activities and the achievement of RMAF related impacts; and
- Regularly updated assessment of project results for major projects keep track of how the Program is doing against its RMAF objectives.

In terms of EC's accountability framework under the Environmental Protection Board, the Program contributes to the Department's:

- Policy outcome Canadians and their environment are protected from the effects of pollution and waste;
- Strategic outcome Risks posed by pollutants or other harmful or dangerous substances in the environment are reduced (3A);
- Outcome Project Group Air Quality is improved (3A1);
- Outcome Project Reduction of Emissions from Transboundary Sources (3A1e);
- OPC Reduced Global production and consumption of ODS;, and

 Outcome Project Sub-Component - Working to Assist Developing Countries Protect the Ozone Layer.

Performance information collected under the RMAF is used by the Bilateral Program to monitor performance and progress of the Program, to report on the environmental results of the Program in departmental planning and performance reports. Since none of the projects have raised concerns, information to senior managers on the projects is provided on an ad hoc basis. While this is understandable given the maturity of the program, senior managers are not necessarily aware of the success stories and the array of results achieved under the Program. Indeed, the Program operates in the absence of an international environmental framework which would link the rationale for engagement and the geographic focus of programming to environmental, foreign policy benefits and other ancillary results of the Bilateral Program with other international agreements and programs managed by Environment Canada. While EC interviewees suggested that the development of an international strategy or framework has been discussed, it has not been undertaken to date.

2.2.3 Administrative Costs of the Bilateral Program

Key Finding

Over Fiscal Years 2001/02 - 2004/05, the total amount of funds which could be used annually by the bilateral mechanism was \$1,373.7K(C\$). Over this period EC used 11% or \$741.1K(C\$) of its approved allotment using the bilateral mechanism and returned \$632.6K(C\$) of the funds to the Multilateral Fund. Sixty percent of the administrative costs have been recovered as support fees under the MFMP. The incremental administrative cost of the Bilateral Program for the Department is approximately \$44K or 5% of the total funds expended by the Bilateral Program over FY 2001/02 to 2004/05. This percentage is comparable to the incremental administrative cost incurred by at least one other bilateral donor. 42

Detailed Findings

Canada's Use of the Bilateral Mechanism

Data from the Department's financial information system indicates that over the 2001/2002 to 2004/2005 period, EC disbursed over \$3 million on bilateral projects. On average during these four fiscal years, \$741.1K (C\$) per year,of EC's mandatory contribution to the MFMP was used for bilateral projects, and \$632.6K (C\$) per year of the funds was sent to the MFMP. In terms of funds approved for bilateral projects under the MFMP during the years 2000 to 2005, 14% of a maximum of 20% of Canada's bilateral allocation was approved by ExCom.

·

⁴² Information on the incremental costs of other bilateral donors is limited. One bilateral donor reported that to date they have not conducted such an analysis, while another donor reports that they have never recovered administrative costs from the fund and that the relative small scale program is financed internally.
⁴³ Environment Canada's Financial Information System.

EC interviewees explain that the amount of funding used under the bilateral mechanism reflects principally the fact that the Program has targetted a level of work manageable to do with the 1.5 FTEs available for the Bilateral Program. Should the workload increase, the use of professional consultants would be required. The amount of funds approved under the MFMP varies from year to year, but does not reflect the amount of work actually undertaken from year to year, which has remained constant over the past 5 years. This is because the MFMP may approve a large amount of funds in one year for a project which, for the most part, may be implemented over the next four years.

The financial contribution is obligatory but the amount of funds used under the 20% bilateral allotment is a policy decision of the donor country. As mentioned in section 1.1.1 of the report, the use of bilateral funds by donor countries varies from year to year. In the end, the amount of funds which are disbursed under the bilateral mechanism depends on the demand for projects by eligible developing countries, EC's decision on whether or not to undertake a project, the approval of the project by the ExCom, the amount of funds approved and the capacity of the Bilateral Program staff to take on additional projects. EC and MFMP Secretariat interviewees note that the amount approved by ExCom is frequently less than the amount requested.

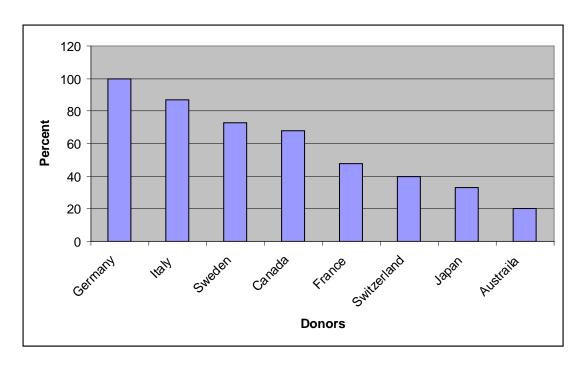
The average percentage of bilateral assistance of select bilateral donors approved by ExCom over calendar years 2000 to 2005 is depicted in Figure 2.⁴⁴ Note, on the average, Canada uses 68% of its bilateral allotment and is in the middle of the group of the largest users of the bilateral mechanism.

Figure 2 Use of Bilateral Mechanism by Selected Countries Over Calendar Years 2000 - 2005 (by Percent)

Environment Canada 38

_

⁴⁴ Select bilateral donors refer to those donors who have used the bilateral mechanism for more than two consecutive years over the 200 to 2005 calendar year period.



Source: MFMP Database

Administrative Costs of the Program

Information from the Programs budget and expenditure records shows that the average annual administrative costs of the Program are approximately \$104.2K (C\$) over the 2001/02 – 2004/05 FY period. Typical administrative costs include:

- Salaries:
- Travel costs (e.g. to projects, to MFMP network meetings)⁴⁵;
- Translation;
- Office supplies;
- Professional fees; and
- Administration fees (Canadian Commercial Corporaton).

Incremental Administrative Cost of the Program for EC

Approxiamately, 60% of the administrative costs are recoverable from the MFMP. This means that the annual incremental administrative cost of the Program to the Department is about \$44,000 or 5% of the total amount of funds disbursed on bilateral projects over the Fiscal Years

⁴⁵ Travel costs of the Bilateral Program do not include, for example, the cost of attending ExCom meetings and Meetings of the Parties, since Environment Canada would have to attend these meetings and incur these costs even in the absence of a bilateral program.

2002/03 to 2004/5. Table 13 provides more detail on how much of the funds were recovered as support fees from the MFMP.

Table 13 Recovery of Support Costs over Fiscal Years 2002/03 to 04/05 (Canadian \$)

	FY 02/03	FY 03/04	FY 04/05	Average
Total MPP Admin Expenses (w/o CCC fee)	\$110,222	\$113,004	\$108,506	\$110,577
Total amount recovered	\$76,764	\$47,879	\$74,975	\$66,539
% recovered	70%	42%	69%	60%
Incremental admin costs	\$33,458	\$65,125	\$33,531	\$44,038

Source: EC Bilateral Program files

The incremental administrative costs incurred by EC are comparable to the incremental costs of other donors. For example, information provided by the Swedish government shows that the incremental administrative costs of their bilateral program over the 1999 - 2006 calendar year period was about 9% of total project expenditures. As explained by an EC interviewee, higher incremental administrative costs do not necessarily mean lesser efficiency. A bilateral agency may have higher costs because they may be willing to provide contributions over and above the costs that can be recovered from projects, such as reimbursing the travel and time of government experts to participate in overseas training programs. Thus the incremental administrative costs incured by a bilateral donor also depends on the priorities, objectives and financial flexibility of the government.

2.3 Relevance of EC's Bilateral Program

Performance Indicators and Sources of Information

This evaluation issue addresses the relevance of EC's Bilateral Program by looking at the coherence of the objectives and results achieved under EC's Program with the interests and priorities of Article 5 countries, the value added of EC's Program to the MFMP and the value added of the Program to Environment Canada. The evaluation also considers the continued relevance of continuing with the bilateral mechanism including advantages and disadvantages and options to the bilateral mechanism. Sources of information include performance reports, desk studies, EC documents and interviews with Article 5 country representatives, MFMP Secretariat, EC employees and other federal government representatives, and other bilateral donors and multilateral agency representatives.

2.3.1 Coherence of EC's Program with MFMP Priorities and Interests of Article 5 Countries

Key Finding

The policies and procedures of the Multilateral Fund ensure that projects, including Environment Canada's, are relevant to the needs and interests of Article 5 countries. Article 5 countries must endorse a project before it can be submitted to ExCom for approval. A project cannot proceed without the approval of Executive Committee. The fact that recipient countries have continued to work with Canada through multiple phases of projects indicates that EC's program has been aligned with the interests of recipient countries. Interviews with NOU representatives indicate that access to equipment, improved knowledge and skills about ODS and good refrigeration practices, and regulatory mechanisms, quotas and incentives have helped Article 5 countries to meet the 2005 targets.

2.3.2 Value added of EC's Bilateral Program to the Multilateral Fund

Key Finding

EC's Bilateral Program adds value to the policies and direction taken by ExCom. Canada's interventions at ExCom meetings are recognized by bilateral donors, multilateral agencies and Recipient countries alike.

Detailed Findings

Bilateral donors interviewed unanimously agree that bilateral programs provide the experience, contacts and technical information needed to make informed decisions at ExCom. Interviews with bilateral donors, multilateral agency and MFMP Secretariat personnel, view Canada's interventions at ExCom meetings to be of high quality. Consider the following comments made by bilateral donors and the Multilateral Fund Secretariat.

- "Canada is considered to be an opinion leader.";
- "Canada's Bilateral Program informs policy discussions at ExCom"; and
- "EC facilitates decision-making at Executive Committee by taking a brokerage role in negotiating interests between Article 5 countries and other bilateral and multilateral agencies."

Interviews with EC staff indicate that the ability of Canada to take on a brokerage role is in part due to the fact that it has extensive knowledge of how projects are undertaken in countries and can, therefore, provide sound objective advice. Interviewees outside EC indicate that EC's interventions are of high quality because of the continuity of Program personnel and since the Multilateral Fund is run on the basis of precedents. EC's ongoing and active role has meant that EC has a good corporate memory of what happened at previous meetings and why. Interviews with bilateral donors, multilateral agencies and other federal representatives outside of EC's Bilateral Program office emphasize that EC's contribution to the work of the MFMP comes from the staff's ability to speak three languages (English, French and Spanish), their understanding of the international development context and their capabilities, dedication and commitment to their work.

Theoretically, the projects undertaken by the Bilateral Program could be implemented by other multilateral agencies, most likely UNEP or other bilateral donors (given the kind of projects the Bilateral Program focuses on). However, it is evident that each agency/country/department brings its own experience, expertise and values to project implementation. As long as the number of participating agencies within the Fund is manageable, interviewees indicate that having more than fewer agencies involved brings a greater diversity of approaches to address the challenge of phasing out ODS and, therefore, contributes to the collective knowledge and wisdom of the institution of the Multilateral Fund. More specifically, the added value brought by Canada includes:

- EC is able to contribute to the design and implementation of projects expertise not readily available within the UN agencies, such as expertise on regulations and programs to phase out ODS, the enforcement of legislation and EC's long-standing experience with the objectives, obligations, decisions and rules of the Montreal Protocol and the Multilateral Fund itself.
- The experience and knowledge acquired through projects allow Canada to play a more
 constructive and effective role in the work of the Executive Committee, such as in the
 development of project guidelines, the consideration of funding for project proposals,
 the conduct of monitoring and evaluation. The importance of that role in contributing
 positively to the work of the MFMP has been confirmed in interviews with other ExCom
 members, bilateral donors, multilateral implementing agencies and the Fund
 Secretariat.
- The choice of developing countries in terms of implementing agencies for projects is increased when donors such as Canada participate in projects. This has a positive effect as the increased choice allows developing countries not to be subject to the overwhelming control of one agency. The more agencies there are, the more a developing country has the choice to select a method of project management that is best suited to its needs. This in turn can have a positive influence in helping developing countries meet their obligations under the Montreal Protocol.

2.3.3 Coherence of the Bilateral Program with EC's Current Policy Environment

Key Finding

The Bilateral Program supports the strategic policy objectives of the Department's 2006/2007 Results Management Structure, notably the protection of Canadians and their environment from the effects of pollution and waste but also the effective management of relations with other international governments and partners. While contributing to the achievement of the departments outcomes at a strategic level, the Program operates in the absence of an overarching departmental strategy for international environmental agreements. While EC's Results Management Structure is new and evolving, EC personnel acknowledge the need and the intention to develop an overarching strategy. Such a strategy could guide decision making on Canada's role on global environmental issues. An international strategy could apply across

EC's Results Management Structure and could complement and link international agreements with the strategic direction set out in the Science and Technology plan currently under development.

Detailed Findings

The Bilateral Program is aligned with *EC's 2006/2007 Results Management Structure* and notably with the outcomes of the Environmental Protection Board. These outcomes are structured as follows:

- Strategic Policy Outcome Canadians and their environment are protected from the effects of pollution and waste (3);
- Immediate Outcome Risks posed by pollutants or other harmful or dangerous substances in the environment are reduced (3A);
- Outcome Project Group Air Quality is improved (3A1);
- Outcome Project Reduction of Emissions from Transboundary Sources (3A1e);
- Outcome Project Component Reduced Global production and consumption of ODS;
 and
- Outcome Project Sub-Component Working to Assist Developing Countries Protect the Ozone Layer.

Reporting to the Environmental Protection Board makes sense because it links the environmental results achieved at an international level with those achieved at the domestic level and keeps the link with the policy part of Montreal Protocol that negotiates Canada's replenishments to the Fund.

Organizationally, the Program is part of the International Affairs Branch, which through the Strategic Integration Board, manages EC's representation on the international stage. Here, the Bilateral Program supports this Board's:

- Strategic outcome Relations with other governments and partners are effectively managed in support of environmental priorities (5B);
- Outcome Project Group International Relations (5B2): and
- Outcome Project Managing our representation on the international stage (5B2c).

As the Bilateral Program is part of the International Affairs Branch, the Program shares information through monthly meetings and through having to report to the Strategic Integration Board on participation in international events.

Indeed, the Bilateral Program supports the policy objectives and outcomes set out in the Department's 2006/2007 Results Management Structure. At the same time, however, the Bilateral Program operates independently of other international environmental agreements. While EC's results management structure is new and evolving, EC personnel both acknowledge the need and the intention to develop an overarching strategy to guide decision making on Canada's role on the global environmental stage. An international strategy would apply across the results management structure and would complement the broad strategic direction of the Science and Technology plan currently under development.

2.3.4 Value added of EC's Bilateral Program to the Department

Key Finding

If the Department does not spend the 20% allocation, the funds are returned to the MFMP and used under the multilateral mechanism. The only decision to be made is whether or not the incremental cost of the Program outweighs the advantages of the Program for EC, and thus could be better used elsewhere to support departmental priorities. The evidence gathered under this evaluation indicates that as of 2006 the advantages of EC's Bilateral Program outweigh the incremental cost of the Program to the Department.

Detailed Findings

The issue of whether it is beneficial for the Department to continue providing a significant portion of its contribution to the MFMP through bilateral projects as opposed to providing all of its contribution directly to the MFMP for redistribution among the multilateral agencies (e.g., the bilateral mechanism) needs to take into account both the advantages and disadvantages of the bilateral approach. As noted below, the advantages of using a bilateral mechanism far outweigh the disadvantages.

Key Advantages

- Provides an opportunity for Canada to advance its environmental interests at the international level;
- Provides an opportunity for Canada to promote and share its expertise, from both the public and private sectors internationally. In particular, it provides opportunities for Canadian companies and consultants to participate in projects. The Bilateral Program, by providing these opportunities to Canadians ensures that a portion of Canada's contribution to the Fund benefits directly the Canadian economy. Furthermore, the Program has sometimes provided a stepping stone for companies and consultants who then find contracts with UN agencies undertaking work under the MFMP. For instance, following successful training by the Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI) in a few bilateral projects, HRAI was contracted for over a dozen UNEP training projects;
- Such economic benefits can be identified to justify to the Canadian public expenditures on international issues:
- Allows EC/Canada to better represents its interests at meetings of the Executive Committee of the Multilateral Fund and the Meeting of the Parties, as a result of the knowledge and experience gained in implementing projects in developing countries and the relationships and networks built in the process;

- Allows EC to claim more direct responsibility for the success of the MFMP and in the
 gradual global phase-out of ODS and consequent protection of the ozone layer. EC can
 point to concrete measures it has helped put in place to bring about real reductions in
 ODS not just domestically but globally; and
- Allows EC to be more directly exposed to the environmental concerns of developing countries, which can then inform the development of international policies and programs. The experience and expertise gained could be applied to other international work, once the level of issues under the MFMP diminishes.

Key Disadvantages

• Incremental administrative expenses of the Bilateral Program (estimated at \$44,000/year). These could be used towards other EC priorities.

2.3.5 Options within the Bilateral Mechanism

Key Finding

EC could consider outsourcing its projects to other agencies, and does this on occasion when justified. In some cases, this can reduce the control over the management of the funds and increase administrative difficulties. In other cases, other agencies can bring additional expertise and capacity to monitor project activities on the ground. Over the years, Canadian government rules for managing contributions have become more demanding, making it more difficult to use third parties such as United Nations (UN) agencies that have their own very specific rules and procedures for managing and accounting for funds. Therefore, while cooperation with such agencies brings certain advantages, it can also result in some additional bureaucracy and administrative difficulties. As a result, the Bilateral Program does consider outsourcing of specific projects, when there are clear benefits and justification for doing so, but not on a routine basis. In addition, the Bilateral Program retains the option of relying on professional consultants to assist in the implementation and monitoring of projects, when internal EC capacity is not sufficient.

2.4 Lessons Learned

The Montreal Protocol is considered to be "...a remarkable environmental success which serves as a model for emerging environmental treaties.⁴⁷ The evidence gathered from this evaluation demonstrates key lessons learned and best practices which may be of interest and use to EC's programming under other international agreements and financial mechanisms.

⁴⁶ In calendar years 2004 and 2005, the United States has provided at least part of its 20% allocation directly to the World Bank. The purpose of this approach is to accelerate efforts to phase out CFCs in China. While this approach has not been repeated since, it could be an option worth considering.

⁴⁷ Environment Canada's Montreal Protocol Bilateral Program 10 Years of Successful International Cooperation to Phase out Zone Depleting Substances, Environment Canada, 2003, p. 2.

Documents and interviewees emphasize that the success of the Multilateral Fund and of EC's Bilateral Program is due to a range and interplay of factors:

- A bilateral mechanism can be an effective way of implementing a multilateral environmental agreement;
- A comprehensive, holistic and lifecycle approach supports the proper sequencing and achievement of international environmental objectives;
- The participation of stakeholders and political support of recipient countries brings local ownership and commitment needed to meet the commitments of international environmental agreements;
- Projects that combine technology transfer and capacity development can be significantly more effective than simply capacity development activities alone;
- Institutionalization of the change (e.g., introduction of legislation, quota systems) provides the context or reinforces or for behavioural change (e.g. improved practices to manage refrigerants; decreased use of ODS); and
- Successful management of an environmental project in a developing country is influenced by the ability to form partnerships with stakeholders and the dedication, collaboration and competencies of staff both within the donor and the recipient country.

3.0 CONCLUSIONS

The Evaluation Division concludes that EC's Bilateral Program was successful in achieving its ultimate expected impacts by assisting recipient countries to comply with environmental targets set out under the Montreal Protocol. Equipment was successfully transferred, commissioned and adapted to local needs. On the average 35% more participants were trained than expected and participants rated the training either as good or excellent. Some impacts of training have been sustained by the recipient country after the project was completed, e.g., good refrigeration practices have been integrated into curricula of recognized training institutes, and training has become mandatory and financed by some Article 5 countries.

Information exists to demonstrate the use of the technology and application of training by trainees but the level of detail is not uniform across projects. In the projects sampled, ODS control policy and legislation has been adopted. Although it is not possible for EC to track the enforcement of policies and import control legislation in another country, the fact that recipient countries sampled have exceeded the 2005 targets set out under the Montreal Protocol suggests that the legislation is being enforced.

Canadian public and private sector expertise and technology have been provided in 75% of the projects sampled. Factors contributing to use of Canadian expertise include: Canada's

experience in technician training, recovery, recycling and halon management; many Canadians are capable of speaking in two official languages; and Canadian government officials have regulatory experience in meeting targets. Barriers to increased involvement of Canadians includes: other donors have similar regulatory and training experience, and the conduct of projects in Latin American countries means that Canadian experts need to be fluent in Spanish.

EC's Bilateral Program has supported Canada's broad foreign policy objectives set out in Canada and the World (1995) and the International Policy Statement (2005). EC's Bilateral Program supports Canada's broad policy objectives by playing an active role in building the capacity of developing countries to phase out ozone-depleting substances through the transfer of Canadian expertise and goods. Canada's Program has resulted in the establishment of partnerships and networks and deepened the understanding of what recipient countries need to be able to address global environmental issues and to implement international agreements.

EC's design of the Program and use of resources has been efficient. The parameters of the Multilateral Fund ensure that the design of projects, allocation of resources and accountability for the use of funds is efficient. In terms of departmental interests, the selection of projects reflects the Department's historical focus on developing countries of the Americas, as well as India and China, and the ability of EC staff and resources to support the implementation of projects. The Logic Model which sets out how EC's Program is going to achieve the expected impacts makes sense but could be strengthened to support performance measurement requirements. From Fiscal Years 2001/02 to 2004/05, over half of the administrative costs of the Program have been recovered as support fees under the MFMP and the annual incremental cost of the Program to the Department is approximately 5% of the total funds disbursed on bilateral projects over this period.

Evidence gathered shows that EC's Bilateral Program brings value to recipient countries and the Multilateral Fund and supports broad environmental and international objectives of the Department and of the Department of Foreign Affairs and Trade. While EC's Program has achieved its objectives and is well managed, it operates in the absence of an international framework for the management of other international environmental agreements.

Canada's continued use of the bilateral mechanisms is a policy option; the use of the bilateral mechanism brings both advantages and disadvantages. In terms of advantages, a bilateral program allows Canada to advance its objectives within the Montreal Protocol framework with other international environmental fora. The only disadvantage to EC's Bilateral Program is the incremental cost (\$44K(C\$) annually) that could be used for other departmental priorities. Overall, the value of EC's Bilateral Program far outweighs the incremental cost to EC of administering the program. Within the bilateral mechanism there is always an option to outsource, but experience suggests that outsourcing to other agencies may not always be practical or efficient, though it remains an option for certain projects when a particular agency can bring additional expertise and capacity

Lessons learned from EC's Bilateral Program under the Multilateral Fund of the Montreal Protocol could be applicable to other international environmental agreements. Key among these lessons learned is the finding that a bilateral mechanism can be an effective way of implementing a multilateral environmental agreement.

4.0 RECOMMENDATIONS

Steps could be taken to further strengthen the value added by EC's Bilateral Program, both for the Department and the global community.

1. Strengthen the Performance Measurement of EC's Bilateral Program at the Project Level

a) Adjust the expected results of EC's Bilateral Program

Based on the activities supported by the Bilateral Program's projects over the past five years, and the ones expected to be funded in the future, EC needs to update the RMAF to reflect current conditions. At the same time, the Program could consider focusing the logic model on the environmental results sought at a project level, and aggregating information on the use of Canadian expertise and technology, and on support for Canadian foreign policy objectives at a program level.

b) Increase the analysis of reach and stakeholder involvement

While EC's projects have worked with some professional associations and training institutes to date, the involvement of these groups in the monitoring and reporting phases of the projects could be increased. Increased involvement would serve to enhance their capacity to sustain good practices and to reach out to other beneficiaries such as government departments, service workshops, hospitals, the hotel industry, import businesses, food refrigeration businesses and to untrained operating technicians in the informal sector. In order to do this, it may be useful to clarify in the Terms and Conditions of the Program that EC is allowed to enter into contribution agreements, not only with recipient governments but also with local professional associations, public and private training institutes and other organizations found to be useful in the implementation of projects. This recommendation is based on the recognition that as per ExCom rules, the projects would still need to be vetted by the developing country's official representative, the National Ozone Unit.

c) Conduct targeted studies on the impact of EC's activities

While the evaluation found that there is a considerable amount of information to confirm the impacts of the Bilateral Program, it is evident that there are some (e.g., targets of training transfer their skills to colleagues) for which it is challenging to collect information. In order to collect more performance information, while avoiding additional substantial reporting burden on the part of the recipient governments or increasing the expenditures of EC, the Program could undertake specific studies and surveys in targeted areas. These studies could be targeted on projects with higher expenditures in areas perhaps where there is some concern about compliance or performance.

2. Communicate the key impacts of EC's Bilateral Program

a) Ensure that senior management is kept regularly abreast of the key impacts of projects.

Currently, apart from the annual reporting under CEPA and the DPR, which are very brief, senior management is kept informed of the outcomes of projects only on an ad hoc basis. Senior management should be aware of the progress of at least some of the major projects undertaken, particularly as most of the projects present success stories which could be used by the Department to promote its role. For instance, a brief annual report to senior management, based on aggregated information (e.g., by country, sector, key environmental results achieved, use of Canadian expertise and support for Canadian foreign objectives) could be used to feed into decision-making processes.

b) Improve linkages of EC's Bilateral Program with other departmental objectives and international agreements and strategies.

While the Bilateral Program clearly contributes to the departmental strategic outcome of "Canadians and their environment are protected from the effects of pollution and waste", it could be further integrated with other international objectives and agreements. It is recommended that, in the development of an eventual departmental international environmental strategy or framework, the Bilateral Program be well integrated and contribute its experience on international project management and lessons learnt.

5.0 MANAGEMENT RESPONSE

Recommendation 1 a)

The Department agrees with the recommendation. In preparing a new Treasury Board (TB) Submission for the contribution program, the Results Based Management Accountability Framework (RMAF) and its logic model were already updated to reflect current and predicted future conditions. The new logic model clearly differentiates between the core activities which will continue to be conducted under bilateral projects (such as technology transfer and training) and secondary activities which will likely be conducted less frequently in the future (such as technology demonstration and public awareness initiatives).

As recommended by the evaluation, all activities identified in the new logic model are clearly linked to the environmental results sought at the project level. The inter-linkages between the different activities and levels of impacts have also been made more evident. Furthermore, instead of including specific project activities related to (1) the use of Canadian expertise and technology and (2) support for Canadian foreign policy objectives, the new RMAF indicates that information pertaining to these objectives will simply be aggregated at a higher level. It should be noted, however, that the modifications to the RMAF and logic model will be dependent on TB approval.

Functional responsibility for recommendation:

Assistant Deputy Minister (ADM), International Affairs Branch (IAB)

Contact person:

Manager, Montreal Protocol Program

Timeline:

 Approval from TB for new Terms and Conditions, RMAF and logic model is expected by end of March 2007.

Recommendation 1b)

The Department agrees with the recommendation, although there are some challenges involved that could limit the extent to which developing country professional associations and training institutes are involved in the monitoring and reporting phases of projects. Firstly, as pointed out in the recommendation, the developing country National Ozone Unit (NOU) is the official country representative for projects according to Multilateral Fund Executive Committee rules and practices. The NOUs are often located or colocated within environment ministries or agencies that may feel they are better placed to ensure the monitoring and reporting of the project, as they are ultimately responsible for it. Secondly, some of the least developed countries simply do not have strong professional associations or training institutes that have sufficient capacity to ensure comprehensive follow-up of project activities. With these limitations in mind, however,

additional efforts will be made to secure the participation of such organizations in monitoring and reporting, when possible.

In line with this recommendation, the new TB Submission for the program is proposing adding to the list of possible recipients for contributions, "universities, training institutes, research institutes and recognized professional associations in developing countries that have adopted the Montreal Protocol and are eligible for assistance under the terms and conditions of the Protocol". The Department agrees that, if it were possible to enter into contribution agreements directly with these organizations, it would facilitate not only the involvement of such organizations in monitoring and reporting, but also, in some cases, in the implementation of some project activities.

Functional responsibility for recommendation:

ADM, IAB

Contact person:

Manager, Montreal Protocol Program

Timeline:

• Approval from TB for new Terms and Conditions, including modifying the list of eligible recipients for the contributions, is expected by end of March 2007. From that time on, the Department will consider the possibility of increasing the aforementioned stakeholders' participation for each new project approved, in consultation with the recipient country's National Ozone Unit.

Recommendation 1c)

The Department agrees with the recommendation. There are some expected project impacts with respect to which it has proven difficult to obtain comprehensive, reliable information. It would be worth investing in some targeted studies and surveys, under a few key projects, in order to improve the level of information in such cases. This has already been done occasionally, but could be implemented on a more systematic basis. For example, one or two projects could be selected each year for such a targeted study/survey. The program will consider the different options to undertake this, as well as the costs involved, and include an activity and budget for a study/survey in at least one recipient country when preparing the program's annual administration budget for 2007/2008, and in subsequent years. These annual administration budgets outline the level of support costs to be recovered from projects for administrative purposes each fiscal year, and the specific activities planned to be conducted within these budgets.

Functional responsibility for recommendation:

ADM, IAB

Contact person:

Manager, Montreal Protocol Program

Timeline:

• At least one study on the impacts of projects will be completed by end of fiscal year 2007/2008.

Recommendation 2 a)

The Department agrees with the recommendation. A brief annual report will be prepared at the end of each fiscal year to outline the principal results of all ongoing projects and projects completed during the year. This report would include information on the total value of each project, its objective, key results, including when applicable data on ozone-depleting substances (ODS) phased out, and any interesting lessons learned or other project highlights. As recommended, the report will also aggregate information on the use of Canadian expertise in projects and the extent to which the project is consistent or supports Canadian foreign policy objectives.

Functional responsibility for recommendation:

ADM, IAB

Contact person:

Manager, Montreal Protocol Program

Timeline:

 One brief annual report will be prepared by end of April 2007 for fiscal year 2006/2007. A more comprehensive annual report will be prepared by end of fiscal year 2007/2008.

Recommendation 2b)

The Department agrees with the recommendation. As indicated in the recommendation, within the new project outcome structure of the Department, the Bilateral Program is clearly integrated within EC's wider programs supporting the phase-out of ODS specifically, and the improvement of air quality generally. In addition, the Bilateral Program contributes to other departmental Outcome Projects (OP), including the protection and promotion of Canada's environmental interests internationally, and the advancement of Canadian technology solutions.

Given the international nature of the Bilateral Program, it could indeed be further integrated within department-wide international objectives. The annual report to senior management, referred to in the response to recommendation 2a above could contribute to such higher-level integration. In addition, it is expected that the relocation of the program in 2006-2007 within the International Affairs Branch, and specifically within the Bilateral Affairs Division, has helped to foster and will continue to foster such integration. When updating the OPs in 2007-2008, the contribution and relationship of the Bilateral Program to the OP, "Canada's environmental interests are protected and promoted internationally", will be clearly highlighted within that OP and its Outcome Project Sub-

Components (OPSC), particularly the OPSCs related to Bilateral Affairs and the Americas.

As recommended, in the development of a departmental framework or strategy, the Bilateral Program will be well integrated and contribute its valuable experience related to international project management to the strategy/framework. The possibility of making linkages with the Department's Science and Technology Strategy will also be explored.

Functional responsibility for recommendation:

ADM, IAB

Contact person:

Manager, Montreal Protocol Program

Timeline:

• As indicated, better integration of the program within wider departmental objectives is already underway and will continue on an ongoing basis. As the timeline for the preparation of an eventual international environmental strategy/framework is not firm, it is not yet possible to place a timeline on how the program would be integrated within such as strategy/framework.

Annex 1 Article 5 Parties

Albania	Costa Rica	Jamaica	Mozambique	Singapore
Algeria	Côte d'Ivoire	Jordan	Myanmar	Solomon Islands
Angola	Croatia	Kenya	Namibia	Somalia
Antigua &	Cuba	Kiribati	Nauru	South Africa
Barbuda	Cyprus	Korea, Democratic	Nepal	Sri Lanka
Argentina	Djibouti	People's Republic of	Nicaragua	Sudan
Armenia	Dominica	Korea, republic of	Niger	Suriname
Bahamas	Dominican	Kuwait	Nigeria	Swaziland
Bahrain	D 11:	Kyrgyzstan	Oman	Syrian Arab
Bangladesh	Republic	Lao People's	Pakistan	Republic
Barbados	Ecuador	Democratic Republic	Palau	Tanzania, United
Belize	Eygpt	Lebanon	Panama	Republic of
Benin	El Salvador	Lesotho	Papua New Guinea	Thailand
Bolivia	Ethiopia	Liberia	Paraguay	The Former Yugoslav Republic
Bosnia &	Federated States of	Libyan Arab	Peru	of Macedonia
Herzegovina	Micronesia	Jamahiriya	Philippines	Togo
Botswana	Fiji	Madagascar	Qatar	Tonga
Brazil	Gabon	Malawi	Romania	Trinidad & Tobago
Brunei Darussalam	Gambia	Malaysia	Rwanda	Tunisia
Burkina Faso	Gambia	Maldives	Saint Kitts & Nevis	Turkey
Burundi	Grana Grenada	Mali	Saint Lucia	Tuvalu
	0.101.0.0.0	Malta	Saint Vincent & the	Uganda
Cambodia	Guatemala	Marshall Islands	Grenadines	United Arab
Cameroon	Guinea	Mauritania	Samoa	Emirates
Central African Republic	Guyana	Mauritius	Saudi Arabia	Uruguay
Chad	Haiti	Mexico	Senegal	Vanuatu
Chile	Honduras	Moldova	Serbia &	Venezuela
China	India	Mongolia	Montenegro	Viet Nam
Colombia	Indonesia	Morocco	Seychelles	Yemen
Comoros	Iran, Islamic Republic of	WOOOO	Sierra Leone	Zambia
Congo	Tropublic of			Zimbabwe
Democratic Republic				

Annex 2 Evaluation Framework

Evaluation Questions	Indicators	Methodology/Sources of Information				
Effectiveness						
Achievement of Results & Overall Performance						
What has been achieved under EC's Bilateral Program?	Actual results vs. broad objectives	File / Document Review ⁴⁸ TB submissions (1993, 1995, 2000, 2002); RMAF 2002				
Are the results achieved in line with EC's Program objectives?	Actual results versus expected results	 Fund Secretariat evaluations and desk studies EC's Annual Progress Reports 				
	Project performance ratings	 EC's Annual Progress Reports Contribution agreements with recipient countries and resulting progress reports EC's Project Completion Reports EC's Business Plans 				
		Interviews ⁴⁹				
		EC'S Bilateral Program				
		 MFMP representatives OGD: CIDA, DFAIT, Industry Canada, Agriculture 				
		NOU representatives of sample of EC projects				
What has been the use/niche of	Capacity and use of Canadian	File / Document Review				
Canada's expertise?	expertise, goods services by sector	Project Proposals				
	and country	Secretariat commentsExCom comments				
		Interviews				
		EC'S Bilateral Program				
		OGD: CIDA, DFAIT, Industry				
		Canada, Agriculture				
		MFMP Secretariat				
		Bilateral Donors				
		NOU representatives of sample of EC projects				
What secondary or unexpected results	Results other than those expected	File / Document Review				
have occurred? Have these secondary or		Project assessment reports				
unexpected results been addressed?		Project completion reports				

⁴⁸ Due to changing priorities, the linkage of EC's Bilateral Program to the Competitive Environmental Sustainability Framework was not pursued only at the broad concept level (e.g. linkage to trade and other parties' interests) and not at the specific principle level.

not at the specific principle level.

49 Canadian suppliers were not interviewed because a number of suppliers were no longer in business. Also the proposed survey of NOU representatives was changed from a survey to interviews to increase the depth of information provided.

Evaluation Questions	Indicators	Methodology/Sources of Information
What factors influenced the achievement of results?	Inhibiting, contributing factors Challenges/ constraints, opportunities Internal to EC/external to EC	 Project Results Analysis EC'S Bilateral Program OGD: CIDA, DFAIT, Industry Canada, Agriculture MFMP representatives NOU representatives of sample of EC projects Project completion reports Performance ratings of projects Project assessment reports Progress Reports MFMP Secretariat Desk studies EC'S Bilateral Program OGD: CIDA, DFAIT, Industry Canada, Agriculture MFMP representatives NOU representatives of sample
Efficie	ency of Design and Use of Resources ⁵⁰	of EC projects
To what extent does the design of the Program and use of resources make sense in supporting the country to reduce production and consumption of ODS?	Consultative processes with country governments, and with other federal departments show that EC's bilateral projects reflect:	MFMP project eligibility criteria Bilateral Program eligibility criteria EC/MFMP financial reports Project proposal Project completion reports ExCom reports MFMP studies Interviews EC'S Bilateral Program CIDA Multilateral agencies

⁵⁰ A question comparing the efficiency and responsiveness of multilateral from bilateral mechanisms was dropped because the question was considered inappropriate since both mechanisms are compatible and bring different benefits.

Evaluation Questions	Indicators	Methodology/Sources of Information
Does management have the information	and reach of Program, and the immediate, intermediate, and ultimate impacts (as identified in the 2002 Logic Model) is plausible, and holistic. Cost of EC's bilateral projects (including support fees, travel etc.) for years: 2002 - 2005 % of funds disbursed under EC's bilateral projects, and % of unutilized funds returned to the Secretariat for years: 2002 - 2005. Cost of participating at ExCommeetings, and managing EC's Bilateral Program (salaries, professional fees, travel etc.) for years 2002 - 2005 Data/information set out in RMAF	File Document Review
needed to support decision-making and accountability requirements? Does the RMAF continue to be appropriate, and useful? What are barriers to successful implementation?	2002 collected and analyzed Information is used in decision- making, and communicating progress made under the Program RMAF aligned with information required by ExCom	Project assessment reports Other reports ExCom policies Interviews EC'S Bilateral Program
	Relevance of Bilateral Program	
To what extent were the results of EC's Bilateral Program coherent with: o departmental objectives and priorities o Other federal department interests, and priorities, Recipient countries interests and priorities o The overall objectives of the MP.	Results of EC's Bilateral projects vs. vs. departmental objectives and priorities (including EC's international policy, CESF) vs. other federal departments' interests and priorities (e.g. DFAIT's international policy statement, CIDA's technical cooperation programs) vs. the interests, priorities of recipient Article 5 countries; vs. the overall objectives and targets of the MP.	File & Document Review TB submissions Progress Reports Recipients' country programs Desk studies Minutes from Excel meetings Interviews EC OGD: Industry Canada, Agriculture, DFAIT, CIDA MFMP
What added value does EC's Bilateral Program bring to the work and objectives of the MFMP?	Influence, role of Bilateral Program in preparing EC to participate in decision-making process	Interviews ■ EC: EC's Bilateral Program, IAB

Evaluation Questions	Indicators	Methodology/Sources of Information
Given EC's current policy environment,	Alignment of Bilateral Program with	CIDA Other bilateral donors Japan, Sweden, US, Germany, France MFMP Secretariat UNEP Recipient country representatives Document Review
does a Bilateral Program continue to make sense?	CESF, IAB mandate, Board priorities	CESF, EC's new results and governance structure, OPP/OPG Interviews EC EC'S Bilateral Program International Affairs Branch
What are the options?	Benefits/drawbacks of bilateral option vs. a multilateral option	Literature Review Interviews EC(EPS & International Affairs) OGD Other bilateral donors Japan, Sweden, US, Germany, France MFMP Secretariat

Annex 3 Key Documents Reviewed

Background	
Multilateral Fund under the Montreal Protocol	
"Multilateral Fund for the Implementation of the Montreal Protocol Policies, Procedures and Guidelines" http://www.multilateralfund.org/files/Policy47.pdf	December 2005
"Status Prospects of Article 5 Countries in Achieving Compliance with the Control Measures of the Montreal Protocol", UNEP/OzL.Pro/ExCom/46/6	June 6, 2005
"Progress Report of Bilateral Cooperation as at December 31, 2004", UNEP/OzL.Pro/ExCom/46/11	June 1, 2005
"Bilateral Assistance Program under the Multilateral Fund for the Montreal Protocol: Summaries on Ongoing Projects"	Jan. 2005
"Final Evaluation Report on Halon Banking Projects for Countries with Low Volumes of Installed Capacities", UNEP/ozL.Pro/EcCom/4410	Nov. 2, 2004
"External Evaluation of the Financial Mechanism on the Montreal Protocol", UNEP	Sept. 2004
"Desk Study on the Evaluation of Methyl Bromide Projects: Case Study: Post Harvest, Storage and Structures", Dr. Jurgen Boye and Dr. Otto Muck Consultants	June 20, 2004
"Final Report on the Evaluation of the Implementation of RMPs", UNEP/OzL.Pro/ExCom/41/7	Nov. 21, 2003
"Report Good Practices in Refrigeration Training Program March – May 2003"	May, 2003
"Extended Desk Study on RMP Evaluation" UNEP/OzL.Pro/ExCom/39/14	Mar. 6, 2003
"Report on Evaluation of Training Projects", UNEP/OzL./ExCom/31/20	June 8, 2000
"Desk Study on Recovery and Recycling Projects", UNEP/OzL./ExCom/31/18	June 7, 2000
"Final Report on the 1999 Evaluation of Institutional Strengthening Projects and Draft Follow-Up Action Plan", UNEP	Feb. 23, 2000
"Study on the Financial Mechanism of the Montreal Protocol, UNEP	Mar. 29, 1995
Government of Canada	
"Overview of the Technology Plan and Emerging Issues (Chapter 3.2), Environment Canada	October, 2006
"Environment Canada's Science Plan" Draft	July 27, 2006
"Environment Canada Results Management Structure 2006/07", Environment Canada	April 20, 2006
"Geographic Priorities of EC's Montreal Protocol Bilateral Program", Environment Canada	Sept. 28, 2005
"Environment Canada's Montreal Protocol Bilateral Cooperation Program	July, 2005

Guidelines", Environment Canada	
"Outcome Project Plan: Reduced Trasnboundary Fows of Air", Environment	April 22, 2005
Canada	
"10 Years of Successful International Cooperation to Phase out Ozone	2003
Depleting Substances Environment Canada's Montreal Protocol Bilateral	
Program", Environment Canada	
Canada's International Policy Statement, Government of Canada,	2005
Canada's 2004-2006 Business Plan under the Multilateral Fund	Feb. 16, 2004
Criteria for EC's International Bilateral Engagement	Dec. 17, 1998
Canada and the World, Government of Canada,	1995

Sector: Refrigeration Benin	
Derilli	
UNEP Progress Reports 1 – 3	2002-2004
"Rapport Atelier de Formation des Formateurs Douaniers pour le contrôle des	Aug. 26 & 28,
substances appauvrissant la Couche D'Ozone Cotonou, Bénin"	2003
"Rapport Atelier de Formation des Formateurs sur les Bonnes Pratiques dans	Jan. 14 & 18,
le Secteur du Froid", Cotonou Bénin	2002
UNEP/OzL.Pro/ExCom/32/44 Annex VII, Page 2	Mar. 12, 2001
EC to MFMP Comments on Benin RMP	Oct. 26, 2000
Refrigerant Management Plan for Benin, UNEP and Canada	Oct., 2000
PAR, Benin, UNIDO	1999
"Benin Project Completion Report, EC Implementation of the RMP:	Not Dated
development of code of good practice for technicians"	
"Benin Project Completion Report, EC Implementation of the RMP: Training of	Not Dated
technicians in good Refrigeration practices"	
"Utilisation du Reliquat Restant A Percevoir Pour La Formation Des	Not Dated
Inspecteurs de L"Environment", Theophoile C. Worou	
Bolivia	
"Progress Report (training programme for customs officers and technical staff	Aug. 9, 2005
in municipalities)",	
"Progress Report"	Aug. 6, 2005
"Bolivia Assessment of Project Results", Environment Canada	July 2005
"Canadian Monitoring Mission: Bolivia Refrigerant Management Project"	May 2005
"Train the Trainers Workshop for Customs Officers"	May 6& 8 2004
"Mission Report: Cochamba & LaPaz, Bolivia", Environment Canada	May 2004
"Draft Report: Training Program on Train the Trainers on Good Refrigeration	Sept. 2003
Practices and Use of Alternatives Organized by Ozone Government	
Commission of Bolivia (COGO))", Ministry of Sustainable Development and	

Environment Conode	T 1
Environment Canada "Refrigerant Management Plan Republic of Bolivia Prepared by Eduardo	Sont 2001
Iporre Cabrera", UNEP	Sept. 2001
"Bolivia Progress Report"	Not Dated
"Bolivia Progress Report 3" (January – June 2005)	2005
Project Completion Report (Assistance in preparation of regulations and technical norms)	Not Dated
technical norms)	
Chile	
Offile	
"Progress Reports", UNEP	Aug. 2003,
Trogross reports , Siver	2004,2005
"2004 Training Course Report"	2004
"Mission Report", Santiago, Chile (May 6-7, 2004), Environment Canada	May, 2004
"Chile CFC Phase out in the Refrigeration and Air Conditioning Servicing	Dec., 2001
Sector: A Global Strategy"	D00., 2001
"Chile Assessment of Project Results"	Not Dated
oning / toodsoment of 1 Tojout Results	Hot Batoa
Cuba	
Cuba	
"Report: Trilateral Visit to Cuba for Agreement on Terminal Phase Out Plan"	Mar. 17, 2003
"Project: Refrigerant Management Plan in Cuba, Report from Oficina	Dec. 3, 2001
Technica de Ozono (OTOZ) to Environment Canada"	
"Refrigerant Management Plan for Cuba Draft Phase out of ODS in the	Sept. 8, 1999
Refrigeration and Air Conditioning Sector Submitted to the Multilateral Fund	•
for the implementation of the Montreal Protocol", Environment Canada	
"Cuba Project Assessment Report"	Not Dated
"Project Completion Report", Cub/ref/29/TAS/14	Not Dated
Projrvy Completion Report (Implementation of the RMP: Training Programme	Not Dated
for Customs Officers)"	
Project Completion Report, Cub/Ref/30/tas/15	Not Dated
Project Completion Report, Cub/Ref/Tra/12	Not Dated
Jamaica	
"Jamaica Progress Report Submitted to Environment Canada"	June, 2005
"Evaluation of RMPs and National ODS Phase Out Plans Focusing on	Dec. 9, 2005
Refrigeration Servicing"	
"Mission Report Kingston & Montegro Bay"	June 8 &10 2005
"Report for NEPA Refresher Course for Trainers in Good Practices in	March 2005
Refrigeration", Kingston, March 16 – 18, 2005	
"Technical Review of Phase I of Jamaica's Terminal Phase out Management	Apr. 10 2004
Plan", the Heating, Refrigeration and Air Conditioning Institute of Canada	
April 10 2004	
"Country Report on RMP Projects Evaluated in Jamaica", Stefano Musto	Nov. 2003
"Progress Report No. 1 "Jamaica, on the implementation of the terminal	June 3, 2003
phase out management plan" (TPMP)	May 2000
"Report on Good Practices in Refrigeration Training Programme", NEPA	May 2003

March-May, 2003	
"Mission to Jamaica March 11 – 15 2002", EC/UNDP	Mar. 11&15
	2002
"Jamaica Project Completion Report Implementation of the RMP: Customs	Feb. 2002
Officers Training programme"	
"Project Completion Report Implementation of the RMP: Training of Trainers	Feb. 2002
in Refrigeration and Certification of Technicians"	
"Project Completion Report: (Training of trainers in refrigeration and	Feb. 2002
Certification system for technicians"	
Jamaica CFC Phase out in the Refrigeration and Air Conditioning Sector	

Sector: Halon	
Caribbean Region	
Final Evaluation Report Regional Halon Bank Management Project for the English Speaking Caribbean (Bahamas, Barbados, Grenada, Guyana, Jamaica and Trinidad and Tobago M. Chelliah Consultant	Nov. 2004
Project Cover Sheet: Development of a Halon Bank Management Plan for the English Speaking Caribbean	Sept. 16, 1998
Halon Management in the Caribbean: A Guide for Halon Users English peaking Caribbean Halon Management Project: A project under the Montreal Protocol Multilateral Fund	Not Dated
Travel Report (Nov. 21 – 22), Environment Canada	Not Dated
India	
Country Evaluation Report of the Halon Phase-Out Programme in India	June, 2003
National Halon Management and Banking Program Plan	Nov. 2000
Note on Australia-Canada Bilateral Cooperation Project	Not Dated

Sector: Methyl Bromide	
Kenya	
Update on Project	Dec. 2003
Project Cover Sheet: Methyl Bromide Replacement	Not Dated