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**EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL**

Twenty-fourth Meeting
Montreal, 25-27 March 1998

REQUESTS FOR BILATERAL COOPERATION

The Fund Secretariat received the following requests from the governments of

- Refrigerant management plan implementation project for St. Kitts and Nevis (Canada)
- Conversion to non-CFC facilities of 4 companies producing cars and wagons equipped with MAC-umbrella in Iran (France)
- Implementation of the Refrigeration Management Plan in Cote d'Ivoire (France)
- Recuperation and recycling of R-12, integrated with the introduction of hydrocarbon technology in the service sector in Namibia (Germany)
- Refrigeration: Mobile air conditioning (MAC) and refrigerated transport (RT) in Central America: El Salvador, Honduras, Nicaragua, Panama (United States)

REQUEST FROM THE GOVERNMENT OF CANADA

1. The Government of Canada has submitted a request for a bilateral cooperation project to implement St. Kitts and Nevis' refrigerant management plan.
2. Canada has requested that this project should be offset against its 1998 contributions to the Multilateral Fund. The amount requested (US \$124,300) does not exceed 20 per cent of Canada's pledged contributions to the Fund for 1998.

Refrigerant management plan implementation project for St. Kitts and Nevis (US \$124,300)

Project description

3. The Government of St. Kitts and Nevis is submitting for consideration by the Executive Committee at its 24th Meeting a request for implementation of a refrigerant management plan (RMP). The RMP was prepared by the Government with technical assistance from UNEP. The Government of Canada will implement all the activities contained in the RMP.
4. In 1995 total ODS consumption in the country was estimated at 5 tonnes (mainly CFC-12 and CFC-115) and was used in the refrigeration and air-conditioning sector. There are over 50 service technicians in the country who have received initial training at the Technical and Vocational Division of a local college. There is also a large informal sector, where the service technicians are self-taught and trained through "hands on" experience.
5. The Government's Action Plan proposes to develop and implement specific control measures including, inter alia, imposition of quotas and import licenses; a ban on new installations of ODS and on equipment and appliances containing ODS; import concessions and tax incentives to complement the rising prices of CFCs. Since 1995, all air conditioned vehicles imported into the country have been fitted with HFC-134a systems. Additionally between 1994 and 1996 about 600 refrigerators using HFC-134a were imported.
6. The RMP identified three basic training programmes: (i) training the refrigeration service technicians, using the 'train the trainer' approach. Training will be provided to staff at the Clearance Fitzroy Bryant College and the Charlestown Secondary School's Technical Centre; (ii) training customs officers to implement new import policies and to identify and monitor imports ODS and ODS containing equipment, and (iii) training in policy and economic instruments to support the ODS phase out programme.
7. The RMP also includes a sub-project for the establishment of a recovery and recycling network comprising six recovery units (four for commercial and industrial equipment and two for servicing MAC units) and related equipment at a cost of US \$25,000. This activity also provides for a one-day workshop for service technicians on practical demonstration on recovery and recycling equipment.

8. Implementation of these projects will lead to recovery and recycling of 2 tonnes of CFC each year. This amount does not take into account the amount of refrigerant that might be saved owing to the teaching of good service and maintenance practices at the training seminars.

9. The Ozone Unit (Department of Environment of the Ministry of Tourism, Culture and Environment) will be responsible for implementing the refrigerant management plan and will co-ordinate with other ministries, suppliers and industry associations for its implementation. The St. Kitts and Nevis Technical College and the Charlestown Secondary School's Technical Centre will be responsible for the implementation of the training programmes.

Comments

10. The St. Kitts and Nevis RMP follows the approved guidelines for preparation of RMP.

11. The Secretariat and UNEP discussed in detail the major components of the RMP, in particular, the timing of implementation of policies, regulatory measures and incentives which are listed in the action plan proposed in the RMP; the modalities for the implementation of the training programmes for servicing technicians in good management practices and customs officials; the monitoring and evaluation roles of the Ozone Unit and the responsibilities of government agencies and industrial associations during implementation of the RMP.

12. The Secretariat and UNEP also discussed the cost of the equipment associated with the recovery and recycling programme which were more expensive than similar projects approved by the Committee at its 23rd Meeting. The costs of some of the equipment items were adjusted accordingly.

RECOMMENDATION

1. The Fund Secretariat recommends approval of the bilateral proposal from the Government of Canada in the amount of US \$124,300 and the Treasurer should credit this amount against Canada's 1998 contributions.

2. To request that the Government of Canada should not proceed with the disbursement of funds approved for recovery and recycling programme until the accompanying measures necessary for successful implementation were already or would be in place before implementation began as per previous approvals of such projects by the Executive Committee.

REQUEST FROM THE GOVERNMENT OF FRANCE

(a) Conversion to non-CFC facilities of 4 companies producing cars and wagons equipped with MAC-umbrella in Iran (US \$132,000)

Project description

13. This project is to convert to non-CFC the facilities of 4 Iranian companies producing cars, buses and wagons equipped with MACs: Iran Khodro, Saipa Khodro, Pars Khodro and Pars Wagon. The alternative proposed is R 134a. With the framework of this project, companies will be provided with a new automatic R 134a charging machine and the necessary technical assistance and training for the trials and the start up. The implementation of this project allows the country to phase out the use of ODS in all the sub-sector, and consequently will reduce the future need of CFC for the maintenance in the workshops. After the implementation of the project, the Iranian Government will take the adequate measures in order to prohibit imports of MACs using and/or containing ODS. The project will replace 23.6 ODP tonnes of CFC-12 and will be completed in 1 year. The project has a cost-effectiveness of US \$5.6/kg. based on a reduced need of CFCs for maintenance and recharging. The project was developed with project preparation funds provided by the Multilateral Fund.

Comments

14. The project was submitted to the Twenty-third Meeting with a cost-effectiveness of US \$21.97/kg. due to the higher operating costs of HFC-134a, but withdrawn pending consideration of the eligibility of incremental operating costs. Subsequently, the Government of Iran agreed to withdraw operating costs from the request.

15. The Government of France has requested that the funds for this projects should be credited against France's 1997 contributions to the Multilateral Fund as the request was first submitted in 1997. This amount in addition to the other bilateral activities approved for France in 1997, does not exceed 20 per cent of France's contributions to the Multilateral Fund in 1997.

(b) Refrigerant management plan implementation project for Cote D'Ivoire (US \$227,250)

16. The Government of France has submitted a request for a bilateral cooperation project to implement the Cote D'Ivoire refrigerant management plan. France has requested that this project should be offset against its 1998 contributions to the Multilateral Fund. The amount requested (US \$227,650) does not exceed 20 per cent of France's pledged contributions to the Fund for 1998.

Project description

17. In 1991, total ODS consumption in the refrigeration sector in the country was estimated at 125 tonnes (as reported in the country programme). However, based on data gathered through a survey

conducted during the preparation of the project, the 1997 ODS consumption in the refrigeration servicing sub-sector (including MAC) was estimated at 242 tonnes, mainly CFC-11 and CFC-12, with the following distribution: domestic refrigeration (62.5 tonnes), commercial and industrial refrigeration units (68 tonnes), chillers (12 tonnes), MACs (30.5 tonnes) and other amounts imported for production and stocks (75 tonnes).

18. There are 400 small service workshops mainly for domestic refrigeration and MAC units, and 30 larger companies specialized in the commercial and industrial refrigeration sub-sectors. Installation and maintenance of refrigeration equipment is performed by both registered companies and the informal sector, with similar levels of skills.

19. At present there is no specific legislation covering the refrigeration and air conditioning sectors. However, through a written directive of 2 July 1997 by the Environment Director of the Ministry for Housing, Living Standards and the Environment, the Ozone Office was instructed to set up a Refrigerant Management Plan. The project, therefore, will give full consideration to regulatory provisions in order to prohibit imports of CFCs possibly from the year 2002; adopt regulatory measures concerning "disposable" cylinders which are responsible for 10 per cent of systematic leakage; and encourage the conversion of large refrigeration systems to non ODS refrigerant and control CFC leakage by measures to recover ODS and improve the leak-tightness of installations; and subdivide the customs nomenclature to introduce specific headings for ODSs. These measures will be adopted under the Environment Code through application legislation submitted to the Council of Ministers.

20. The project also indicates the need for the establishment of financial instruments related to the taxation regime, including increased taxes for CFCs and reduced taxes for HCFCs and HFCs; encourage importers and distributors to buy regenerated rather than new refrigerants; and to encourage conversion of existing systems and installation of new systems based on non-ODSs.

21. The RMP identified three basic training programmes: (i) training the refrigeration service technicians, using the 'train the trainer' approach. (ii) training customs officers to enable those responsible for the surveillance, testing and monitoring of ODS imports to clearly identify them; and (iii) training in data management systems for Customs and Statistics departments to assist them in developing and maintaining an appropriate system to collect and monitor ODS consumption data.

22. The RMP also includes: (i) a sub-project for the establishment of a recovery and recycling network comprising 20 recovery units, one recycling centre and related equipment at a cost of US \$146,000, and (ii) a sub-project for demonstration of two retrofit of two refrigeration installations in the agro-industry (US \$28,000).

23. Implementation of these projects will result in the training of 60 people involved in ODS imports, 30 persons in conversion and in measures for limiting ODS emissions and 120 technicians in refrigerant recovery methods; implementation of a system for monitoring imports and a database to permit evaluation of the effectiveness of the measures taken under the RMP and

the country programme; reduction in the quantities of ODS imported into the country and released into the atmosphere (0.4 tonnes of R 502, 18 tonnes of CFC-12 and 6.8 tonnes year of CFC-11).

24. The Ozone Unit will be responsible for implementing the refrigerant management plan and will co-operate with ODS suppliers, the Hotel and Tourism Association, the Chamber of Industry and Commerce, the Ministry of Industry and Trade, Ministry of Finance (which includes Customs) for its implementation.

Ability to meet the freeze

25. The project states that the country will achieve the 1999 freeze 'by decreasing the needs of imports thanks to the following actions: reduction in emission of 0.4 tonnes/year of R 502, 18 tonnes/year of CFC-12 and 6.8 tonnes/year of CFC-11, amounting up to 24.8 tonnes ODP, when the programme of recovery and recycling ODS in the industrial and commercial refrigeration and air conditioning sectors will be implemented; reduction in emission of 0.4 tonnes of CFC-11 and/or CFC-12 when the two pilot conversions will be done and 1.1 tonnes of CFC-11 and/or CFC-12 will be recovered for the recovery and recycling network; extension of the pilot conversion operation to the whole sector: reduction of at least 10 tonnes of CFC-11 and/or CFC-12 and at least 28 tonnes of CFC-11 and/or CFC 12 will be recovered for the network of recovery and recycling,; reduction in emission of 56 tonnes of CFC 12 when the training and the recovery and recycling network will be implemented in domestic refrigeration sector".

Comments

26. The Cote D'Ivoire RMP follows the approved guidelines for preparation of RMP.

27. The Secretariat and the Government of France discussed in detail the major components of the RMP, in particular, the timing of implementation of policies, regulatory measures and incentives which are listed in the action plan proposed in the RMP; the modalities for the implementation of the training programmes for service technicians and customs officials; the monitoring and evaluation roles of the Ozone Unit.

28. The Secretariat and the Government of France also discussed the cost of the equipment associated with the recovery and recycling programme and the demonstration project on refrigeration systems for reducing ODS emissions.

RECOMMENDATIONS

1. The Fund Secretariat recommends approval of the bilateral proposal for the Conversion to non-CFC facilities of 4 companies producing cars and wagons equipped with MAC-umbrella in Iran from the Government of France in the amount of US \$132,000 and the Treasurer should credit this amount against France's 1997 contributions.

2. It also recommends approval of the bilateral request for the Implementation of the Refrigerant Management Plan in Cote d'Ivoire in the amount of US \$227,650 and the Treasurer should credit this amount against France's 1998 contributions.

3. To request that the Government of France should not proceed with the disbursement of funds approved for the recovery and recycling programme until the accompanying measures necessary for successful implementation were already or would be in place before implementation began as per Executive Committee decisions.

REQUESTS FROM THE GOVERNMENT OF GERMANY

29. The Government of Germany has submitted a request for the consideration of the Executive Committee for a recovery and recycling project in Namibia.

NAMIBIA (request: US \$34,400)

Recuperation and recycling of R-12, integrated with the introduction of hydrocarbon technology in the service sector in Namibia (US \$34,400)

Project description

30. The Ozonation programme of the Ministry of Trade and Industry of Namibia proposes to implement a demonstration and training programme for refrigeration technicians and entrepreneurs in the service sector of domestic and small commercial refrigeration units in Namibia. This project would train 40 entrepreneurs on recovery and recycling and the safe use of alternative drop-in substitute hydrocarbon refrigerants. As a possible follow-up, the activities will lead to a more extensive training and an investment programme in co-operation with UNIDO and UNEP.

31. Germany will implement the project with the assistance of UNEP IE for which US \$7,400 is included in project costs. Technical assistance will also be provided by Ecozone of the Netherlands for which US \$4,800 is included in project costs.

Comments

32. At its 20th Meeting (September 1996), the Executive Committee approved a bilateral project for Namibia from the Government of Finland entitled 'Implementation of a training programme for recovery and recycling of refrigerants' in the amount of US \$103,440 that is expected to result in the phase-out of 5.4 tonnes of CFCs. The project was proposed for approval with the understanding that after implementing this activity, it was expected that Namibia will not need any further direct support from the Multilateral Fund in phasing out ODS in the refrigeration sector.

33. The Governments of Finland, Namibia and Germany have indicated their support for this project as the Finnish project does not address the replacement or handling of hydrocarbon refrigerants and there are not overlaps between Finland's and Germany's projects.

34. This project was first submitted in 1997. The Government of Germany has requested that the approval of this project should be offset against its 1997 contributions to the Fund. The amount requested does not exceed 20 per cent of Germany's 1997 contributions to the Fund in addition to the other bilateral activities already approved for Germany in 1997.

RECOMMENDATIONS

1. The Fund Secretariat recommends that the Sub-Committee on Project Review consider this project for approval in the amount requested (US \$34,400) to be offset against Germany's 1997 contributions to the Fund.

REQUESTS FROM THE GOVERNMENT OF UNITED STATES

35. The Government of the United States has submitted a request for the consideration of the Executive Committee for a bilateral cooperation project for Refrigeration.

Refrigeration: Mobile air conditioning (MAC) and refrigerated transport (RT) in Central America: El Salvador, Honduras, Nicaragua, Panama (US \$569,000)

Project description

36. This project includes: a training workshop in MAC/RT recovery/recycling and other emissions-reductions practices; furnishing recovery/recycling machines and related equipment (such as leak detectors, quick-seal hoses, adapters, and refrigerant containers, as required) to participating repair shops; training on HFC 134a equipment and service procedures; establishing availability of parts and service (recovery/recycling equipment and related replacement parts--such as filters--are not now commonly sold); and working with each country's ozone protection unit in the course of implementing the demonstration project to explore the possibility of further reduction measures that could be taken in the MAC/RT sector.

Comments

37. This proposal builds upon the experience gained through the implementation of 15 MAC demonstration projects approved by the Executive Committee as part of the United States' bilateral cooperation activities.

38. This request relies upon resources US \$10,000 to US \$15,000 from UNDP's Phase II Global MAC project. UNDP has verified to the United States that there are sufficient funds remaining in the Phase II Global MAC project to cover these costs.

39. The United States has requested that this request should be offset against its 1998 contributions to the Multilateral Fund. The amount requested (US \$569,000) does not exceed 20 per cent of United States' pledged contributions to the Fund for 1998.

40. As noted in decision 20/31 and the Secretariat's comments on the United States request at the Twenty-third Meeting (UNEP/OzL.Pro/ExCom/23/18), the United States had project underruns amounting to US \$324,613 which were offset against the US \$452,000 approved at the Twenty-third Meeting. This means that the balance (US \$127,387) represents the total amount that should be credited against the United States contributions for 1997. This was not reported in the Report of the Twenty-third Meeting. As a good housekeeping measure, this should be noted in the documentation of the report of the Twenty-fourth Meeting.

RECOMMENDATIONS

1. The Fund Secretariat recommends approval of the bilateral proposal from the Government of the United States of America in the amount of US \$569,000 and the Treasurer should credit this amount against the United States' 1998 contributions.
2. It is also recommended that the Executive Committee note in the Report of the Meeting that underruns reported by the United States and noted in decision 20/31 were offset against approvals at the Twenty-third Meeting and the total bilateral contributions of the United States in 1997 were US \$127,387.