

## MEDIUM-SIZED PROJECT BRIEF

### PROJECT SUMMARY

Project Identifiers	
1. Project Name: <i>Turkmenistan: Programme for Phasing out Ozone Depleting Substances..</i>	2. GEF Implementing Agency: <i>UNDP/UNEP</i>
3. Country or countries in which the project is being implemented: <i>Turkmenistan</i>	4. Country eligibility: <i>Ratified Vienna Convention, Montreal Protocol in Nov 98 and the London Amendment as of March 94. Has recipient country status with UNDP.</i>
5. GEF focal areas(s): <i>Ozone Depletion</i>	6. Operational program/short-term measure: <i>Phase-out of Ozone Depleting Substances (ODS)</i>
7. Project linkage to national priorities, action plans, and programs: <i>The Country Programme stipulates the national strategy that the country wishes to adopt, to assist with the implementation of the Montreal Protocol. The GEF grant requested is in line with that strategy.</i>	
8. GEF national operational focal point and date of country endorsement: <i>Mr. Pirjan Kurbanov, Minister (Attn: Mr. Batyr Ballyev, Co-ordinator National Ozone Unit)</i> <b>Ministry of the Use of Natural Resources &amp; Enviromental Protection 3 August 1998</b>	
Project Objectives and Activities	
9. Project rationale and objectives: <i>Objectives:</i> 1) Assistance to sectors representing the bulk of the ODS consumption; 2) Technical assistance at the institutional level. 3) Phase-out priority in the Refrigeration Sector <i>Goal and Rational:</i> 4) To assist Turkmenistan in the rapid phase-out of ODS consistent with international efforts in this direction;	Indicators: 1) <i>A marked decrease on ODS consumption;</i> 2) <i>Better servicing /maintenance practices adopted by refrigeration technicians.</i>
10. Project outcomes: 1) <i>:Meeting the national obligations under the Monteal Protocol;</i> 2) <i>Avoiding the economic and social disruption after imported ODS will no longer be available for industrial, commercial and consumer applications;</i> 3) <i>Strengthening of institutional capacities for monitoring and regulatory enforcement of ODS phase-out.</i>	Indicators: 1) <i>Reduced need to import ODS;</i> 2) <i>Less ODS wasted through leaks thanks to better practices in Refrigeration Maintenance;</i> 3) <i>Recycling of CFC's.</i>
11. Project activities to achieve outcomes (including cost in \$ for each activity): 1) <i>Refrigeration (139,772);</i> 2) <i>Training the Trainers in Refrigeration (105,655);</i> 3) <i>Assistance for Co-ordinating the Implementation of the Country Programme (176,593 including a Government in kind Contribution of US\$ 22,800);</i>	Indicators: 1) <i>Equipment to be used in about 31 centers in the country;</i> 2) <i>Trained technicians with better maintenance practices;</i> 3) <i>Legislative measures to control CFC imports.</i>

<p>12. <u>Estimated budget (in US \$ currency):</u>  PDF B (already approved): 116,166 (corresponds to 1/3 of the amount approved for Uzbekistan, Turkmenistan and Cyprus).  GEF: 399,220 (includes 41,389 of project support services)  Co-financing: 22,800 (Government – in kind)  =====</p> <p>TOTAL: 538,186</p>
<p>13. Information on project proposer: <i>Mr. Pirjan Kurbanov, Minister (Attn: Mr. Batyr Ballyev, Co-ordinator National Ozone Unit) Ministry of the Use of Natural Resources &amp; Environmental Protection 3 August 1998</i></p>
<p>14. Information on proposed executing agency (if different from above): <i>UNEP/UNDP (see Annex 1 for details).</i></p>
<p>15. Date of initial submission of project concept: <i>September 1998</i></p>
<p><b>Information on Institution Submitting Project Brief</b></p>
<p>16. Project Identification number: <i>Will be determined when approved.</i></p>
<p>17. Implementing Agency contact person: Frank Pinto, Chief (Attn: Jacques Van Engel)  MPU/SEED/UNDP New York; Rajendra Shende, Co-ordinator (Attn: Annette Kalnieva) OzoneAction Programme/UNEP-IE Paris</p>
<p>18. Project linkage to Implementing Agency program(s): <i>The project will be implemented by UNDP/UNEP in co-ordination with the Ministry of the Use of Natural Resources and Environmental Protection. The subprojects designed for UNEP will be implemented by UNEP-IE in Paris. UNDP's subprojects will be executed by UNDP's Montreal Protocol Unit in coordination with UNDP's GEF unit, and in conjunction with the UNOPS.</i></p>

List of abbreviations:

CE:	Cost Effectiveness
CEIT:	Countries with Economies in Transition
CIS:	Commonwealth of Independent States
CFC:	Chloro-fluoro-carbons
CTC:	Carbon-tetrachloride
GEF:	Global Environmental Facility
HCFC:	Hydro-chloro-fluorocarbons
HFC:	Hydro-fluorocarbons
IA:	Implementing Agency
MCF:	Methyl chloroform
MLF:	Multilateral Fund for the Implementation of the Montreal Protocol
MP:	Montreal Protocol
MT:	Metric tonnes
NA:	Not Applicable
NGO:	Non-Governmental Organization
ODP:	Ozone Depleting Potential
ODS:	Ozone Depleting Substances
PDF:	Project Development Facility
RAC:	Refrigeration and Air Conditioning
STAP:	Science and Technical Advisory Panel
UNDP:	United Nations Development Programme
UNEP:	United Nations Environmental Programme
UNOPS:	United Nations Office for Projects Services
WTO:	World Trade Organization

## **REPUBLIC OF TURKMENISTAN**

### **PROGRAMME FOR PHASING OUT OZONE DEPLETING SUBSTANCES**

#### **BACKGROUND AND CONTEXT (BASELINE COURSE OF ACTION)**

1. The recognition of the phenomenon of depletion of the stratospheric ozone layer, has led to a substantial international effort to phase out Ozone Depleting Substances (ODS). The emission of ODS into the earth's atmosphere causes damage to the stratospheric ozone layer which acts as a barrier to ultra-violet radiation from the Sun. Increased radiation has been traced as contributing to a higher incidence of skin cancer, eye diseases and immunological disorders while adversely affecting ecological food chains and bio-diversity. In the mid-1980s it was found that ozone depleting substances are responsible for the destruction of the ozone layer :

- Chloro-fluoro-carbons (CFCs): Used extensively in refrigeration and air-conditioning (as refrigerants), in foams (as blowing agents), in aerosols (as propellants), and also as solvents and cleaning agents.
- Halons: Used in fire-extinguishers and in fire fighting systems
- Methyl Bromide: Used as a fumigants

2. The basis of phasing out of the ozone depleting substances including CFCs, Halons, several halogenated solvents, agricultural fumigants such as Methyl Bromide and a class of transitional chemicals known as Hydrochlorofluorocarbons (HCFCs), is the Montreal Protocol (1987) ratified by all developed countries and most developing countries. Further recognition that ozone depletion is in fact occurring more rapidly than anticipated, has led to two amendments to the Montreal Protocol which added controlled substances and accelerated phase-out schedules. The first amendment in June 1990 (London Amendment) added methyl chloroform (MCF) and carbon tetrachloride (CTC) and tightened the phase-out schedule. The second amendment in November 1992 (Copenhagen Amendment), added HCFCs and methyl bromide as controlled substances and further accelerated phase-out schedules. For developed countries, the phase-out dates are :

- Halons : January 1994
- CFCs, MCF and CTC : January 1996
- Methyl Bromide : Year 2010 (except critical agricultural uses)
- HCFCs : Year 2030

3. Turkmenistan declared independence from the former Soviet Union on 26 October 1991. Turkmenistan ratified the Vienna Convention, the Montreal Protocol in November 1993, and the London amendment thereof in March 1994. Turkmenistan has reported data for 1996 to the Ozone Secretariat as required under the Montreal Protocol requirements.

4. The Ministry of the Use of Natural Resources and Environmental Protection is the national co-ordinating body, which is in the process of creating the necessary administrative and legal framework to control the trade and usage of ODS, to enable Turkmenistan to fulfil its obligations under the Montreal Protocol. The Ministry has set up a special body for Ozone Depleting Substances (the Ozone Unit) and is supported in its endeavors by the Ministries of Internal Affairs, Defense, Public Health, Trade, the State Customs Committee, the State Committee of Statistics and other related Ministries, Committees and Institutions. The Ministry constituted a National Country Programme Team (NCPT) comprising of representatives of the various ministries, committees, institutions, etc., to support it in its efforts to facilitate ODS phase-out. The initial country programme for the phase-out of ODS was compiled in 1997 at the initiative of

the UNEP/IE, based on the exhaustive data survey of ODS consumption in various sectors, conducted by the National Country Programme Team.

5. The Government of Turkmenistan clearly understands the country's responsibility as a member of the global community, to protect the ozone layer and that the Republic of Turkmenistan must share the economic and social burden caused by the international efforts to phase out ODS. As a party to the Montreal Protocol classified under Article-2 of the Protocol, Turkmenistan is required to contribute to the Multilateral Fund. However, being an economy in transition, Turkmenistan expects to be technically and financially supported in its efforts to meet its obligations, by the Global Environmental Facility and other international environmental funds.

6. The stated priorities and the strategic goals of the Government, for implementing the compliance with the Montreal Protocol are as below :

- Phase out of the consumption of ODS by the year 2002, except for minor amounts of CFCs used as refrigerants for maintenance purposes)
- Comply with the phase-out schedules for HCFCs and Methyl Bromide as applicable to countries operating under Article-2 of the Montreal Protocol.
- Support the industry in Turkmenistan to convert to ODS-free technologies with support from GEF and other international funds and multilateral agencies (UNDP, UNEP, World Bank, WTO, etc.)  
Develop and establish appropriate legal and regulatory framework to ensure effective and efficient phase-out process
- Develop and establish the necessary monitoring and licensing systems to control the imports and exports of ODS
- Support further scientific research on ozone layer depletion and thus contribute to its protection

7. Turkmenistan does not produce or export any substances controlled under the Montreal Protocol. The bulk of ODS is imported from the Russian Federation and the United Arab Emirates. The ODS producers in the Russian Federation are scheduled to discontinue production by the year 2000. The proposed GEF assistance to ODS consuming sectors in Turkmenistan would enable them to make the transition to non-ODS materials in a planned and gradual manner, thereby avoiding a crisis, when the supplies from the Russian Federation are discontinued. Early reduction in ODS consumption will also reduce demand for ODS from unauthorized sources.

8. In 1996, the total consumption of all ODS in Turkmenistan was 56.8 MT of ODS (equivalent to 31.096 MT ODP). The Refrigeration Sector consumption constitutes the entire ODS consumption. The ODS consumption in this sector is related to servicing and repair of domestic (69.7%) and commercial refrigeration appliances (30.3%), as there is no indigenous manufacture of new refrigeration appliances. The industrial refrigeration applications use ammonia as the refrigerant. The use of Halons and ODS-based Aerosols has been discontinued. The above data is based on the survey conducted by the National Country Programme Team and UNEP in 1997. In the previous ten years (1986-96) the ODS consumption in Turkmenistan has decreased by about 83%, from 181 MT (ODP) to 31.096 MT (ODP), due to structural changes in the industry and significant decrease in the production of refrigeration equipment.

9. It is foreseen that the ODS consumption would fall, due to the worldwide transition to ODS-free technologies and resulting market pressures. It is expected that with the assistance of GEF, by the year 2002, the consumption of ODS would be negligible and nil by the year 2005.

## **RATIONALE AND OBJECTIVES**

10. The main objective of this project is to assist Turkmenistan in the rapid phase-out of ODS consistent with international efforts in this direction. Other CEIT countries were asked by the Implementation Committee to phase out CFCs by the year 2000, and it is likely that this will also apply for Turkmenistan. The GEF proposal presented herewith would allow Turkmenistan to comply with such a requirement.

11. Assistance to sectors representing the bulk of the consumption of ODS, would enable them to make the transition to non-ODS materials before legal supplies of ODS are discontinued. The project will also enable Turkmenistan to meet its phase-out obligations under the Montreal Protocol within a realistic time frame, and also ensure availability of technical assistance to expedite the Country Programme implementation.

12. The project targets priority ODS phase-out activities in the Refrigeration sector. It also provides modest technical assistance at the institutional levels to facilitate the implementation of the Country Programme.

13. The formulation of this project through the PDF grant has been a result of several missions of UNDP/UNEP consultants and assistance from national consultants who carried out the data survey. The full-fledged Country Programme and the Refrigerant Management Plan have been prepared in accordance with the guidelines of the Multilateral Fund for the Montreal Protocol. The project components listed in the ensuing paras are a direct consequence of the strategies formulated in the Country Programme and the Refrigerant Management Plan.

14. The project is formulated as a framework project comprising of one Recovery and Recycling sub-project for Refrigerants and three technical assistance and training components. The project has been designed in full conformity with relevant GEF policies, particularly those on cost-effectiveness, exports, ownership, retroactive financing, operational costs and financial viability as included in Chapter 5 of the GEF Operational Strategy. The summary of the overall project and the sub-projects cost data is provided in Annex-1. Resources provided through a PDF-B grant have been utilized in preparation of the project to a level acceptable for GEF review. The preparation includes detailed technology conversion and related cost analyses. Each sub-project was examined by a STAP reviewer, whose comments were either incorporated or taken into account; the STAP reviews recommended approval of all sub-projects. Both the sub-project documents and the STAP reviews are available at the UNDP's Montreal Protocol Unit in New York.

## **PROJECT ACTIVITIES/COMPONENTS AND EXPECTED RESULTS**

15. In order to achieve the above-mentioned objective, the project contains two components:

- a refrigerant recovery/recycling component
- a technical assistance and training component.

16. The technology conversion component comprises of one sub-project in the Refrigeration sector to be implemented by the UNDP. A brief description of this sub-project is as below :

- Refrigeration (US\$ 139,772) : Under this project a comprehensive national programme for Recovery and Recycling of refrigerants in the Refrigeration and Air-conditioning

sector would be implemented, as a part of a national Refrigerant Management Plan. This would be achieved through provision of recovery and recycling equipment to be used in about 31 centers in the country, leading to an elimination of about 7.533 MT of CFCs annually.

17. The technical assistance & training components comprise of four sub-components : Assistance for training of trainers for refrigeration service, Training for monitoring and control of ODS for Customs Officers, Monitoring of the Refrigerant Management Plan and Maintenance and Development of an Institutional Framework within Turkmenistan for implementing the country programme, to be implemented by the UNEP. The brief descriptions for the technical assistance and training components are as follows :

- Training the Trainers in Refrigeration (US\$ 105,655): This sub-component will provide training to training personnel for service, maintenance and repair in the refrigeration sector, to ensure reduction in ODS emissions during service. This training project is crucial for the successful implementation of the Refrigerant Management Plan (which was prepared simultaneously with the Country Programme) due to the significant contribution of the Refrigeration sector to the overall ODS consumption in the country.
- Assistance for Co-ordinating the Implementation of the Country Programme (US\$ 176,593 including a Government in kind Contribution of US\$ 22,800): This sub-component will provide resources to the Ministry of the Use of Natural Resources and Environmental Protection for strengthening the national institutional structure and monitoring the ODS phase-out activities for a period of three years. The Ozone Unit established within the Ministry will assist in administering the project and co-ordinating the implementation of the Country Programme as per the National Action Plan. This support would include computing and communications equipment, operating costs including telecommunications and office supplies, staff support for a national project co-ordinator, funding for essential public awareness and project support services. This project will ensure proper monitoring of the implementation of the Refrigeration Management Plan. This project will also provide the Customs Department with ODS detection equipment to enable identification of ODS imported in bulk quantities and in equipment and would provide hands-on training for selected customs officials from the various checkpoints in the country. This component will be implemented by UNEP in co-operation with the UNDP country office.

18. Implementation of this project will contribute to the global ODS phase-out efforts by eliminating the use of 31.096 ODP MT of ODS annually. The GEF grant funding will allow Turkmenistan to substantially meet its national obligations under the Montreal Protocol within a three-year period. This will serve to enhance the credibility of the country in the international community. In the longer term, it allows the country to avoid the economic and social disruption that would occur when imported ODS would no longer be available for industrial, commercial and consumer applications. The technology conversion under the project will allow key industries to maintain domestic and export markets. The institutional capacity for monitoring and regulatory enforcement of ODS phase-out will also be strengthened under the project.

## **RISKS AND SUSTAINABILITY**

20. The project will help the Government of Turkmenistan in fulfilling its commitment for phasing out ODS through compensation to enterprises for the incremental costs incurred during

the process of technology conversion. This will allow the beneficiary enterprises to be competitive both in the domestic and export markets. Sustainability of specific sub-projects has been assured through the evaluation of proposed technologies and their cost-effectiveness in relation to other alternatives ensuring the project preparation work and its review by STAP. Assistance under the project for the ozone office will enable the Government to provide a sound institutional and policy framework for the ODS phase-out programme. The Government will aim at meeting its ODS phase-out commitments by ensuring that elimination of ODS consumption takes place through smooth project implementation.

21. UNDP will ensure the accompanying measures stipulated in the Refrigerant Management Plan such as training activities to be carried out by the UNEP will have taken place prior to the Refrigerant Recovery and recycling Project. There are no significant issues that need to be addressed or actions to be taken, prior to implementation of the project. However, if any issues or actions need to be addressed to conform to the GEF Operational Strategy, these will be appropriately addressed

### **STAKEHOLDER PARTICIPATION & IMPLEMENTATION ARRANGEMENTS**

22. As a part of the Country Programme development, the Ministry of the Use of Natural Resources and Environmental Protection undertook consultations with a broad spectrum of enterprises and interested parties such as other ministries, NGOs, industry associations, etc. The industry was provided adequate opportunities to participate in the project and to provide data necessary for the project staff to evaluate the financial viability, technological capability and eligibility. The project will be implemented by UNDP and/or UNEP in co-ordination with the Ministry.

23. The subprojects designated for UNEP will be implemented from the UNEP-IE suboffice in Paris, which has extensive experience for this kind of activities under the Multilateral Fund. UNDP's subprojects will be executed by UNDP's Montreal Protocol Unit in close coordination with UNDP's GEF unit, and in conjunction with the United Nations Office for Project Services (UNOPS), as is the case for most of its Multilateral Fund activities.

### **INCREMENTAL COSTS AND PROJECT FINANCING**

24. The estimated total cost of the project is US\$ 422,020 which includes equipment, services, technical assistance, training, physical and price contingencies and net present value of incremental operating costs wherever applicable. The project will be financed by a GEF grant of US\$ 399,220 and contributions from the beneficiaries amounting to US\$ 22,800.

25. All the costs are incremental in nature and calculated in accordance with the "Indicative List of Eligible Incremental Costs" adopted by the Parties to the Montreal Protocol and accepted under the GEF Operational Strategy. Consistent with GEF guidelines, the grant amount limits eligible assistance for enterprises with export markets to OECD countries. Cost-effectiveness of sub-projects where applicable, are at or below the threshold levels stipulated for projects under the Multilateral Fund.



No	Component	GEF	Co-financing	Total
1	Refrigeration - Recovery & Recycling	139,772	0	139,772
2	Technical assistance – Training of trainers	105,655	0	105,655
5	Technical assistance – Institutional Strengthening	153,793	22,800	176,593
<b>TOTALS</b>		<b>399,220</b>	<b>22,800</b>	<b>422,020</b>

Annex 1 provides a more detailed summary of the sub-project incremental costs.

### **MONITORING, EVALUATION AND DISSEMINATION**

26. Project monitoring will be performed by UNEP/UNDP and the cost for it is included in the budgets that are indicated in Annex-1.

27. Standard evaluation will be performed as stipulated in the recovery/recycling subproject documentation.

28. As implementing agencies for the Multilateral Fund of the Montreal Protocol, UNDP and UNEP are presently implementing ODS phase-out projects in over 60 countries. Several lessons have been learnt from experience with these projects :

- The importance of a national phase-out policy as a basis for assuring commitment and ownership by the recipient country.
- The value of strong linkages between the industry and the government to achieve phase-out objective.
- The need for strengthening the institutional framework and training of the local implementation units.  
Identifying a consistent and committed counterpart team with adequate authority and experience.
- Strong co-ordination among key interested parties at the national, regional and enterprise levels.
- Early and detailed attention to procurement and other execution issues.
- Involvement of national experts with thorough local knowledge.  
Involvement of qualified international technical specialists

29. The above lessons have been duly considered in the formulation of this project.

## **LIST OF ANNEXES:**

**1. Incremental Cost Annex: (1 page)**

**2. Logframe Matrix: (1 page)**

**3. Subproject Descriptions (5 pages) for**

- Recovery/Recycling of Refrigerants
- Training of Trainers in Refrigeration Service
- Institutional Strengthening and Capacity Building

**4. Transmittal letter from the Government**

**5. STAP Roster Technical Review (2 pages)**

**Note 1:** Annex 3 is considered essential even though it is not mentioned as a mandatory annex. It is therefore attached in full (6 pages).

**Note 2:** There are no optional annexes.

**TURKMENISTAN : PROGRAMME FOR PHASING OUT OZONE DEPLETING SUBSTANCES**

**ANNEX-1 : INCREMENTAL COSTS**

<b>Sub-Project/ Enterprise</b>	<b>Sector</b>	<b>Brief Description</b>	<b>I.A.</b>	<b>ODP (MT/y)</b>	<b>C. E. (US\$ per kg/y)</b>	<b>Incremental Investment Costs (US\$)</b>	<b>Incremental Operating Costs (US\$)</b>	<b>Total Project Costs (US\$)</b>	<b>Enterprise or Gov. Financing (US\$)</b>	<b>Proposed GEF Financing (US\$)</b>
National Recovery and Recycling Programme	RAC	Refrigerant recovery and recycling – demonstration of equipment	UNDP	7.53	18.56	139,772	NA	139,772	0	139,772
National Refrigerant Management Plan	RAC	Training of trainers for use of ODS-free refrigerants in maintenance and service	UNEP	6.53	13.48	105,655	NA	105,655	0	105,655
Ministry of Use of Natural Resources and Environmental Protection	Institutional Technical Assistance	Implementation of ODS phase-out programme	UNEP	NA	NA	176,593	NA	176,593	22,800	153,793
<b>TOTAL</b>				<b>14.06</b>	<b>NA</b>	<b>422,020</b>	<b>NA</b>	<b>422,020</b>	<b>22,800</b>	<b>399,220</b>

**KEY : C.E. - Cost Effectiveness, I.A. - Implementing Agency**

**TURKMENISTAN : PROGRAMME FOR PHASING OUT OZONE DEPLETING  
SUBSTANCES**

**ANNEX-2 : PROJECT PLANNING MATRIX**

<b>PROJECT PLANNING MATRIX</b>			
<b>Summary</b>	<b>Objectively verifiable indicators</b>	<b>Means of Verification (monitoring focus)</b>	<b>Critical Assumptions and Risks</b>
<u>Objective</u>  To assist the Republic of Turkmenistan for complying with the Montreal Protocol	1. ODS consuming sectors identified by the National Ozone Team. 2. Production of ODS based equipment and processes 3. Presently the country has limitations in complying with the Montreal Protocol.	1. Survey of ODS users carried out by the National Ozone Team 2. Data on imports of ODS, reported by the Government	Accuracy of reported data on ODS imports and consumption
<u>Outcome</u>  Phase-out of the consumption of Ozone Depleting Substances by the various users	1. Availability of suitable methods to reduce ODS consumption. 2. Appropriate regulatory framework to confirm compliance.	1. International industry and market data on technology 2. Domestic industry and market data on ODS consumption	Non-availability of ODS through imports by 2000, from the Russian Federation and other sources and availability of non-ODS substitutes
<u>Results</u>  Elimination of 31.096 MT annually of ODS within 3 years	Information on pre-project and post-project ODS consumption.	Data on imports of ODS through the relevant Government departments	Accuracy of data and adherence to project schedules
<u>Project Components to be implemented to obtain desired results</u>  One recovery/recycling sub-project and four technical assistance and training sub-projects	Installation of the necessary equipment, processes and introduction of practices envisaged in the sub-projects	1. Reports of vendors of equipment and processes 2. Reports of users 3. Reports of inspection and confirmation of completion by IA experts 4. Project management and evaluation reports	1. Adequacy of the project budgets. 2. Adequacy of financing of the project

### ANNEX-3

#### SUB-PROJECT SUMMARY

<b>COUNTRY</b>	: Republic of Turkmenistan
<b>SUB-PROJECT REFERENCE</b>	: Sub-project Number 1
<b>SUB-PROJECT TITLE</b> Recovery	: Implementation of a National Programme for and Recycling of Refrigerants
<b>SECTOR</b>	: Refrigeration and Air Conditioning
<b>ODS USE IN SECTOR</b>	: 30.096 MT (1996)
<b>SUB-PROJECT IMPACT</b>	: 7.53 MT/y
<b>SUB-PROJECT DURATION</b>	: 2 years
<b>SUB-PROJECT COSTS</b>	: US\$ 139,772
<b>PROPOSED GEF FINANCING</b>	: US\$ 139,772 (includes US\$ 11,541 project support services)
<b>COST-EFFECTIVENESS</b> subsector)	: US\$ 18.56/kg/y (no CE threshold for this subsector)
<b>IMPLEMENTING AGENCY</b>	: UNDP
<b>EXECUTING AGENCY</b>	: UNOPS
<b>CO-ORDINATING NATIONAL BODY</b>	: Ministry of the Use of Natural Resources and Environmental Protection
<b>STAP REVIEW</b>	: Dr. L. J. M. Kuijpers

#### **SUMMARY**

In this project, a comprehensive National Programme for Recovery and Recycling of refrigerants will be implemented for the Refrigeration and Air Conditioning Sector, as part of the national Refrigerant Management Plan (RMP). The project will cover investments involved in provision of refrigerant recovery and recycling units to users. These recovery and recycling units will be installed in 31 centers, to be established for this purpose, where CFC-12 will be collected. The project will also provide for holding three training seminars for technicians performing installation, repairs and maintenance of refrigeration equipment including practical demonstration with the equipment acquired under the project, of the good practice and safety involved. The seminars will also familiarize all involved in the Refrigerant Management Plan, with the different techniques and practices for Recovery and Recycling of refrigerants. A system for monitoring (with periodic evaluation) of the quantity and quality of the CFCs recovered and recycled under this project, to ensure its success.

**ANNEX-3 (Cont'd)**

**SUB-PROJECT SUMMARY**

<b>COUNTRY</b>	: Republic of Turkmenistan
<b>SUB-PROJECT REFERENCE</b>	: Sub-project Number 2
<b>SUB-PROJECT TITLE</b>	: Training of Trainers in Refrigeration
<b>SECTOR</b>	: Refrigeration and Air Conditioning
<b>ODS USE IN SECTOR</b>	: 30.096 MT ODP (1996)
<b>SUB-PROJECT IMPACT</b>	: 6.53 MT ODP
<b>SUB-PROJECT DURATION</b>	: 1.5 year
<b>SUB-PROJECT COSTS</b>	: US\$ 105,655
<b>PROPOSED GEF FINANCING</b>	: US\$ 105,655 (includes US\$ 12,155 project support services)
<b>COST-EFFECTIVENESS</b>	: Not applicable (no CE threshold for training project)
<b>IMPLEMENTING AGENCY</b>	: UNEP
<b>EXECUTING AGENCY</b>	: UNEP-IE
<b>CO-ORDINATING NATIONAL BODY</b>	: Ministry of the Use of Natural Resources and Environmental Protection
<b>STAP REVIEW</b>	: Not applicable

**SUMMARY**

This project will provide technical information and training to maintenance, service and repair personnel in the Refrigeration and Air Conditioning Sector, in order to reduce ODS consumption during service of refrigeration equipment. In order to achieve the objectives as identified in the Country Programme Action Plan and the Refrigerant Management Plan, professional training for hands-on service, maintenance and repair personnel is essential.

The servicing of refrigeration equipment is a large user sector in Turkmenistan, which accounts the bulk of the sectoral consumption. Thus this training project for refrigeration technicians is critical to the success of the ODS phase-out efforts in Turkmenistan.

### **ANNEX-3 (Cont'd)**

#### **SUB-PROJECT SUMMARY**

<b>COUNTRY</b>	: Republic of Turkmenistan
<b>SUB-PROJECT REFERENCE</b>	: Sub-project Number 3
<b>SUB-PROJECT TITLE</b> Building	: Institutional Strengthening and Capacity
<b>SECTOR</b>	: All Sectors
<b>ODS USE IN SECTOR</b>	: 30.096 MT ODP (1996)
<b>SUB-PROJECT IMPACT</b>	: NA
<b>SUB-PROJECT DURATION</b>	: 3 years
<b>SUB-PROJECT COSTS</b>	: US\$ 176,593
<b>PROPOSED GEF FINANCING</b>	: US\$ 153,793 (includes US\$ 17,693 project support services)
<b>COST-EFFECTIVENESS</b>	: Not applicable (no CE threshold)
<b>IMPLEMENTING AGENCY</b>	: UNEP
<b>EXECUTING AGENCY</b>	: UNEP-IE
<b>CO-ORDINATING NATIONAL BODY</b>	: Ministry of the Use of Natural Resources and Environmental Protection
<b>STAP REVIEW</b>	: Not applicable

#### **SUMMARY**

The Ministry of the Use of Natural Resources and Environmental Protection of Turkmenistan is responsible for matters pertaining to the Vienna Convention, the Montreal Protocol (and the London Amendment thereof). Currently, the human and technological resources available to the Ministry to address Ozone issues are limited, which becomes a significant handicap for implementation of projects and strategies formulated as part of the Country Programme and the Refrigerant Management Plan, to phase-out ODS in Turkmenistan. The current staff is inadequate for effectively monitoring and reporting on the ODS consumption in the country. The limited institutional capacity therefore inhibits the Ministry's ability to enable the country to meet the obligations of the Montreal Protocol. This project will strengthen the national institutional capacity to effectively co-ordinate and administer the actions outlined in the Country Programme and the Refrigerant Management Plan. In addition this subproject will contain a component to train customs officers and provide them with ODS Detection kits.

**MINISTRY OF  
THE USE NATURAL RESOURCES  
AND ENVIRONMENTAL  
PROTECTION OF  
TURKMENISTAN**



**МИНИСТЕРСТВО  
ПРИРОДОПОЛЬЗОВАНИЯ  
И ОХРАНЫ  
ОКРУЖАЮЩЕЙ СРЕДЫ  
ТУРКМЕНИСТАНА**

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GEF Council  
Global Environment Facility  
1818 H Street, NW  
Washington DC, 20433 USA

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JUN 25 AM 10:38  
SECRETARIAT

Dear Sirs,

The Ministry of the Use of Natural Resources and Environmental Protection has the honour to submit herewith the Country Program and Investment Project Proposals of the Republic of Turkmenistan for Phasing out of Ozone Depleting Substances under the Montreal Protocol for consideration and approval of the Global Environmental Facility (GEF) Council.

The Republic of Turkmenistan ratified the Vienna Convention and the Montreal Protocol on November 18, 1993 and the London Amendment on March 15 1994. Turkmenistan is a Party to the Montreal Protocol operating under paragraph 1 of Article 2 and is therefore eligible for funding under the GEF Ozone Focal Area.

The Government of Turkmenistan is committed to implementing the actions contained in the Country Programme and the Projects, and shall take all necessary measures to abide by this international agreement. It will update the Country Programme if the conditions of consumption in the country changes from those in the Country Programme and will report these changes and conditions to the GEF Council.

I would like to place on record the appreciation of the Republic of Turkmenistan for the assistance extended to it by the United Nations Environmental Programme, Industry and Environment Office (UNEP IE) for the preparation of the Country Programme, and the United Nations Development Programme (UNDP) for preparation of Project Proposals.

I trust that the GEF Council will approve the request for assistance made in the Project Proposals, as follows:

1. Institutional Strengthening Projects
2. Refrigeration Management Plan, with four sub-projects:
  - 2.a. Monitoring of the implementation of the RMP
  - 2.b. Equipment supply and training to support the national monitoring and control system of ODS
  - 2.c. Training in good practices in refrigeration sector
  - 2.d. Refrigerants recovery and recycling programme

Please accept, Sirs, the assurances of my highest consideration

Yours Sincerely,

P. Kurbanov

Minister