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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Twenty-fifth Meeting
Montreal, 29-31 July 1998

COUNTRY PROGRAMME: MOLDOVA

This document consists of:

- Country Programme Evaluation Sheet (prepared by the Fund Secretariat)
- Comments and Recommendations of the Fund Secretariat
- Transmittal Letter from the Government of Moldova
- Country Programme Cover Sheet
- Country Programme (Executive Summary)

MOLDOVA COUNTRY PROGRAMME EVALUATION SHEET

National Ozone Unit, Hydro-meteorological Service, Department for Environmental Protection

Status of ratification of the Vienna Convention and the Montreal Protocol

	Signature	Ratification	Entry into force
Vienna Convention (1985)		24-Oct-96	22-Jan-97
Montreal Protocol (1987)		24-Oct-96	22-Jan-97
London Amendment (1990)			
Copenhagen Amendment (1992)			

Production of controlled substances: No controlled substances produced

Consumption of controlled substances (1996) 51.5 metric tonnes
51.5 weighted tonnes (ODP)

(tonnes)	CFC-11	CFC-12	CFC-113	CFC-114	CFC-115	TOTAL	Halon1211	Halon1301	TOTAL	CTC	MCF	TOTAL	Me-Br
ODS		51.5				51.5							
ODP		51.5				51.5							

Distribution of ODP by substance: CFC 100.0% Halon CTC and MCF

Distribution of ODP by sector: Aerosol Foam Halon Refrigeration Solvent Other

Consumption (ODP tonnes): 0.0 0.0 0.0 51.5 0.0 0.0

Percent of total: 100.0%

Country Programme

Duration of country programme: 3 years (1998-2001)

ODS phase out target: Complete phase-out by 2008

Phase out priority area: Refrigeration servicing sector

Cost of activities in country programme: \$1,408,250

Strategy:

The Government is committed to the elaboration and implementation of the National Programme for Phasing Out ODSs. It proposes to phase out consumption of CFCs by the year 2008 and to follow the phaseout schedules set for non-Article 5(1) countries regarding HCFCs, accelerate the ratification of the London and Copenhagen Amendments to the Montreal Protocol, establish the legal and regulatory framework to ensure the phaseout process as well as the necessary monitoring and licensing systems to control the import of ODS and to ensure the phase-out process, support of local industries to adopt ODS-free technologies.

COMMENTS AND RECOMMENDATIONS OF THE FUND SECRETARIAT

COMMENTS

1. When Moldova ratified the Vienna Convention and the Montreal Protocol on 27 July 1996, it was classified as an Article 2 country. Subsequently, the Government of Moldova applied for reclassification as an Article 5 Party. By its Decision IX/26, the Parties re-classified Moldova as such.
2. The Moldova country programme was prepared with technical assistance provided by UNEP and UNDP, and with financial resources provided by the Global Environment Facility (GEF).
3. The Country Programme conforms to the format of the approved guidelines. The total ODS consumption in the country is estimated at 51.4 metric tonnes of CFC-12 used for servicing refrigeration equipment and MAC units.
4. For the last ten years, ODS consumption in the refrigeration sector has been steadily decreasing from 279.50 ODP tonnes used in 1986 to 37.77 ODP tonnes in 1994, 88.41 ODP tonnes in 1995 and 51.65 ODP tonnes in 1996. This decrease of more than 81 percent, is mainly due to the economic transition of the country, as well as to the restructuring of the industry and privatization process.
5. In Moldova there are two companies producing refrigeration equipment: Factory for Domestic Refrigerators in Chisinau and, "Mashfrigcomplet", a joint-stock company in Straseni manufacturing commercial refrigeration equipment. The annual production capacity of the domestic refrigeration factory is 250,000 to 300,000 units. However, during the last four years its production decreased considerably, because of non-profitable production cycle. Until 1996, Mashfrigcomplet was specialized in production of cold rooms (up to 200 tonnes) for fruits and vegetables using CFC-12 and HCFC-22 refrigerants. In 1996 the company was restructured and comprises 30 small companies, of which four manufacture and repair refrigeration equipment. (two specialized in refrigeration equipment using CFC-12 and HCFC-22 and the other two in maintenance and repair of ammonia based refrigeration equipment).
6. Servicing and maintenance of refrigeration equipment is undertaken by nearly 1,000 refrigeration technicians operating in 350 service workshops.
7. The Government of Moldova has prepared a Refrigerant Management Plan and is requesting financial assistance for its implementation. Description of the project together with the Fund Secretariat's comments and recommendations are included under document UNEP/OzL.Pro/ExCom/25/40.

8. The country programme also includes a project for the establishment of an Ozone Unit within the Hydro-meteorological Service of the Department for Environmental Protection (institutional strengthening). The Government of Moldova is requesting a total of US \$135,000 for the implementation of this project. The Fund Secretariat's Comments and Recommendations on this request are presented under UNEP work programme amendments (UNEP/OzL.Pro/ExCom/25/21).

RECOMMENDATIONS

The Fund Secretariat recommends as follows:

1. To approve the Moldova Country Programme. Approval of the Country Programme does not denote approval of the projects identified therein or their funding levels.
2. To request the Government of Moldova to present annually information to the Executive Committee on progress being made in the implementation of the country programme, in accordance with the decision of the Executive Committee on implementation of country programmes (UNEP/OzL.Pro/ExCom/10/40, para 135). Using the approved format, the initial report, covering the period 1 August 1998 to 31 December 1999, should be submitted to the Fund Secretariat no later than 1 May 2000.



Department for Environmental Protection
Hydrometeorological Service

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Rec'd

27 MAI 1998

Registry No. 1995 By: [Signature] Reg'd ☐

To : OMS ABR

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I have the honour to submit herewith the Country Programme of the Republic of Moldova for the consideration and approval of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol.

The Republic of Moldova adhered to the Protocol on 24 July 1996 and became a Party on 22 January 1997 . It is classified as operating under Paragraph 1 of Article 5 of the Montreal Protocol.

I would like to place on record the appreciation of the Government of the Republic of Moldova for the assistance extended to it through the UNEP IE OzonAction programme for the preparation of the Country programme which started in 1998. I am pleased to say that the Government is committed to the implementation of actions contained in the Country Programme.

I further assert that it is the Government's intention to monitor compliance with the Protocol. If necessary, further and different action from those specified in the Country programme will be updated and submitted to the Executive Committee of the Multilateral Fund.

I hope that the Executive Committee will approve the request for assistance made in respect of the following actions

- ## 1. Institutional Strengthening

2. Refrigerant management plan
 - 2.1 Training in Monitoring and Control of ODS
 - 2.2 Training the Trainers of Technicians in Refrigeration
 - 2.3 Refrigerant recovery & recycling programme
3. Phase-out CFCs in the Production of Domestic Refrigerators.

Please accept, Sir, the assurances of my highest consideration

Yours sincerely,

V. Sofroni
Deputy of the General Director
of the Department for
Environmental Protection

Sofroni

The Government of Republic of Moldova

**Country Programme for Phasing Out
Ozone Depleting Substances
In Moldova**

**Hydro-Meteorological Service
Department for Environmental Protection**

May 1998

Country Programme Cover Sheet

Country:

Moldova

Date Received:

Lead National Agency:

Hydro-Meteorological Service of the Department
for Environmental Protection

Lead Implementation Agency:

UNDP, UNEP

Period Covered by

Country Programme:

1998-2001

1. Phase Out Schedule

SUBSTANCES	CURRENT CONSUMPTION IN 1996, ODP TONS	PLANNED TOTAL CONSUMPTION TILL PHASE-OUT, ODP TONS	PLANNED YEAR OF PHASE OUT
Annex A & B			
CFC 11		2.63	
CFC 12	51.45	287.01	2008*
CFC 113			
Halon 1211			
Halon 2402			
Methyl chloroform			
Annex C			
HCFC 22	0.20		As per MP
Annex E			
Methyl bromide			
Total Annex A & B	51.45	289.64	
Total	51.65	289.64	

*Minor volumes of CFC 12 needed for servicing domestic and commercial equipment beyond 2007

2. Government Action Plan

YEARS	DESCRIPTION OF ACTION	SECTOR	INTENDED EFFECT
1998-2001	1. Institutional Strengthening	All	Coordinate and Monitor the implementation of Country Programme Action Plan and Refrigerant Management Plan (RMP), and overall ODS phaseout.
1998-2001	2. Legal and regulatory system for ODS control	All	Development of National Law on Protection of the Ozone Layer and ratification of London and Copenhagen Amendments Development and implementation of a system of appropriate legal and regulatory acts, and decrees on enforcement of the phaseout process.
1998	3. Association of ODS importers and users	All	Registration and establishment of the association to be actively participating in the analysis ODS consumption and to initiate measures
1998	4. ODS quota system	All	Establish quota system on ODS aiming to discourage continued use and to encourage recovery/recycle of refrigerants
1998-2001	5. Licensing	Refrigeration, all	Establish a licensing system for service sector, later use of all ODS

1998-2003	6. Monitoring	All	Develop of a monitoring system to comply with Montreal Protocol, track ODS Phaseout and Train officers in new system
1998	7. Recovery & Recycling of Refrigerants	Refrigeration	Implementation of National recovery and recycling programme through demonstration of equipment
1998-2005	9. Support local Industry	Refrigeration, all	Support research and development of alternative refrigeration equipment, and monitor the phasing out of the CFC in domestic refrigerators production
1998-2005	10. Public Awareness	All	Develop public awareness campaigns through the mass media and the NGOs to increase consciousness of general public, and demonstrate and promote the strategy for accelerated phaseout. Announce and broadly discuss new policies

3. Projects Submitted for Funding

YEAR	PROJECT		Implementing Agency	ODP Tonnes Phased out	Project Cost In USD	Contribution Government In USD	MF Contribution i USD
1998 - 2001	Institutional Strengthening		UNEP	N/A	107,000	27,000	80,000
1998	Refrigeration Management Plan	Training the Trainers of Technicians in Refrigeration	UNEP	7.75	66,000		66,000
1998		Training in Monitoring and Control of ODS	UNEP	N/A	71,550	5,000	66,550
1998		Refrigerant recovery & recycling programme	UNDP	12.15	254,150		254,150
1998	Phasing Out CFCs in the Production of Domestic Refrigerators		UNDP	28.02	700,000		700,000
TOTAL				47.92	1,198,700	32,000	1,166,700

4. Costs

Cost to the MF of Projects in the Country Programme in USD	1,166,700
Estimated Cost of Complete ODS Phaseout in USD	2,798,700
Estimate Cost Effectiveness for MF Funded Projects USD/kg	24.3
Estimated Cost Effectiveness for Complete Phaseout USD/kg	54.3

EXECUTIVE SUMMARY

Background

The Republic of Moldova has ratified the Vienna Convention and the Montreal Protocol on 27 July 1996 and was classified as an Article 2 country that obliged it to phase out the consumption and the production of most of the ozone depleting substances by the 1st January 1996. This schedule, however, has proven to be extremely difficult to meet for the Countries with Economies in Transition (CEITs), including Moldova.

The Government of Moldova applied for reclassification as an Article 5 (1) and the request was approved during the 9th Meeting of the Parties, September 1997 in Montreal (see Decision IX/26; UNEP/OzL.Pro.9/12).

The territory of Moldova covers a total land area of 33,851 sq. km. and is divided administratively into 38 districts each with an average surface area of approximately 840 sq. km. and population ranging from 26,800 up to 130,000 inhabitants.

The total population of the country is 4,345,700 (as per year 1995) and 4,334,400 (as per year 1996) and 4,320,000 (as per year 1997). The population density is 127.8 inhabitants per 1 sq. km. In Chisinau, the capital of Moldova, live about 753,500 people (as per year 1997).

Moldova is going through a difficult economic transition period. At present, the Government is proceeding with the restructuring of the industrial insolvent enterprises, incapable of producing competitive goods. Following three are the priority areas on which the Government has based its actions:

- further privatisation of state enterprises and privatisation of land and real estate ;
- promotion of priority industrial enterprises;
- further development of small- and medium-size enterprises.

The highest priority of the re-structuring of the economy is the agrarian reform based on the privatisation of the land. This process, though quite dynamic, is still going with slow pace. However, agricultural production shows a growth of 4.0% in 1995, while the industrial sector shows a decline of 7.0%, compared to the year 1994.

The difficulties that the Moldova's economy is going through are partially due to the political problems within two regions of the country, the Gagauzian region and Transnistria. While the problems Gagauzia have been solved with its proclamation as an autonomous territorial unit (23 December 1994), a similar solution was not accepted by the Government of the self proclaimed republic of Transnistria. More than 35% of the industrial enterprises of Moldova are situated on the territory of this region. This hinders the whole restructuring and privatisation process in the country.

However, much of the industry of Moldova is ripe now for radical re-tooling and re-investment which will be needed to switch to ODS substitute technologies.

Current Situation

Moldova does not manufacture any substances controlled under the Montreal Protocol. The country currently consumes approximately 51.65 ODP tons of ozone depletion substances (ODSs), out of which Annex A, Group I substances (only CFCs 12) constitute 51.45 ODP tons (99.6 %). Annex C (HCFCs) constitutes approximately 0.20 ODP tons. The consumption of all Annex A and B substances is 0.0119 kg per capita.

In ten years (1986-1996) the ODSs consumption Moldova has decreased of about 85% from a total consumption of 333.5 ODP tons in 1986 to some 51.65 ODP tons in 1996. This decrease in the

consumption was due to the structural change of the industry, and especially because the production of refrigeration equipment has dramatically decreased.

The refrigeration sector uses most of the ODS substances.

Implementing the Phase-out

The Government of Moldova is committed to follow the Montreal Protocol phaseout schedule. It is also committed to ratification of the London and Copenhagen Amendments. The main industries are studying the options for introducing ODS substitutes and other phaseout technologies. Administrative measures are being introduced to impose import restrictions and to collect reliable information on ODSs. Introduction of import bans for equipment using CFCs is in preparation.

Import quotas are to be imposed on ODS importers, in order to freeze the imports at the current level and to support the phaseout schedule. Additionally, a training programme for the customs officials in ODS monitoring and control has been proposed.

The Government of Moldova is proposing specific projects to be implemented; including an institutional strengthening project, establishing a recovery and recycling scheme in the refrigeration sector, elimination of CFCs in the manufacture of domestic refrigeration equipment, training the trainers in refrigeration servicing and training in monitoring and control.

Project Summary Table

PROJECT NAME		TOTAL PROJECT COST IN USD	COST TO THE MF IN USD
1. Institutional Strengthening *		107,000	80,000
2. Refrigeration Management Plan	2a. Training the Trainers of Technicians in Refrigeration	66,000	66,000
	2b. Training in Monitoring and Control**	71,550	66,550
	2c. Refrigerant Recovery & Recycling Programme	254,150	254,150
3. Elimination of CFCs in the Manufacture of Domestic Refrigerators		700,000	700,000
TOTAL		1,198,700	1,166,700

*Requested funding from the MF is US\$80,000; Government contribution will be US\$27,000.

**Requested funding from the MF is US\$66,550; Government contribution will be US\$5,000.

The direct phaseout effect of the proposed projects is estimated at 47.92 ODP tons, i.e. more than 87 percent of the total ODSs consumption in ODP tons at 1996 level. The remaining ODS consumption, 3.73 ODP tons, will be phased out by the market through technological change and economic incentives, supported by some awareness and information campaigns.

The Government expects that all ODSs in Annex A and B will be phased out by the year 2008, except for the servicing tail, through active co-operation between industry and the Government, by implementing regulative measures as described in the National Action Plan, and by implementing the aforementioned projects. The requirements for the servicing of refrigeration equipment will have to be met by recycling projects. The HCFC phaseout will follow the target dates set in the Montreal Protocol and its Amendments for non-Article 5 countries.