UNITED NATIONS **EP**

United Nations Environment Programme

Distr.
LIMITED

UNEP/OzL.Pro/ExCom/27/44
20 February 1999

ORIGINAL: ENGLISH

EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Twenty-seventh Meeting
Montreal, 24-26 March 1999

COUNTRY PROGRAMME: QATAR

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 Qatar
- Country Programme Cover Sheet
- Country Programme (Executive Summary)

QATAR COUNTRY PROGRAMME EVALUATION SHEET

Ozone Unit, Environment Department, Ministry of Municipal Affairs and Agriculture

Status of ratification of the Vienna Convention and the Montreal Protocol

	Signature	Ratification	Entry into force
Vienna Convention (1985)		22-Jan-96	21-Apr-96
Montreal Protocol (1987)		22-Jan-96	21-Apr-96
London Amendment (1990)		22-Jan-96	21-Apr-96
Copenhagen Amendment (1992)		22-Jan-96	21-Apr-96

Production of controlled substances: No controlled substances produced

***Consumption of controlled substances* (1997)** 137.7 metric tonnes
147.0 weighted tonnes (ODP)

(tonnes)	CFC-11	CFC-12	CFC-113	CFC-114	CFC-115	TOTAL	Halon121	Halon130	TOTAL	CTC	MCF	TOTAL	Me-Br
ODS	18.5	104.2			2.1	124.8	4.7		4.7	8.3		8.3	
ODP	18.5	104.2			1.3	124.0	14.0		14.0	9.1		9.1	

9.1 tonnes of carbon tetrachloride is used as a catalyst activator, which is totally consumed during the industrial process

Distribution of ODP by substance: **CFC** 84.3% **Halon** 9.5% **CTC and MCF** 6.2%

Distribution of ODP by sector:	**Aerosol**	**Foam**	**Halon**	**Refrigeration**	**Solvent**	**Other**
Consumption (ODP tonnes):	0.0	0.0	13.9	124.0	9.1	0.0
Percent of total:			9.5%	84.3%	6.2%	

Country Programme

Duration of country programme: 11 years (1999-2010)

ODS phase out target: Phaseout of halon-1211 and carbon tetrachloride by end of 2000; 25% reduction in consumption of CFC-11 and CFC-12 by end 2004; complete phase out in 2010

Phase out priority area: Refrigeration and halon sectors

Cost of activities in country programme: US $424,450

Strategy:

The Government is committed to phasing out the consumption of ODS in a controlled and cost effective manner in order to meet the freeze and subsequent control measures of the Montreal Protocol. The strategy is based on development and implementation of control measures including legislation, public awareness campaigns and training programmes mainly in the refrigeration servicing sector. Technical monitoring capacity will be improved to ensure effective monitoring of the legal and technical provisions provided for under the Montreal Protocol.

COMMENTS AND RECOMMENDATIONS OF THE FUND SECRETARIAT

COMMENTS

1. The total ODS consumption in the country is estimated at about 138 ODP tonnes, mainly CFC-11 and CFC-12 used for servicing refrigeration equipment and MAC units (124 ODP tonnes), and halon-1211 (14 ODP tonnes). In addition, 9.1 tonnes of carbon tetrachloride is used as a catalyst activator, which is totally consumed during the industrial process. There is no methyl bromide consumption in the country.

2. The Ministry of Electricity and Water (MEW) is the entity responsible for managing air conditioning systems in government buildings and power plants. Private contractors maintain other systems. The majority of the systems are based on CFC-12 and HCFC-22 refrigerants and a few on CFC-11. For many systems, preventive maintenance programmes are already in place, including containment and recovery of refrigerants. This approach has resulted in low consumption of virgin refrigerants. Also, some systems have either been retrofitted to non-ODS refrigerant or replaced with HFC-134a based-systems. In addition, nearly 195,000 vehicles are equipped with CFC-12 based air conditioners.

3. There are several private contractors who service air conditioning systems and a few repair shops for domestic and commercial refrigeration units, with a total number of service technicians estimated at 500.

4. Halons are mainly used by the Civil Defense, the Gas and Petroleum Corporation in critical applications, and Qatar Fertilizer Company. The Petrochemical Company has already removed halon systems from operations and has only 50 kg of Halon 1211 in their computer room.

5. The Government of Qatar has prepared a Refrigerant Management Plan with assistance from UNIDO. The project proposal will be submitted for consideration by the Executive Committee at a future meeting.

6. The country programme also includes a project for the establishment of an Ozone Unit within the Environment Department, Ministry of Municipal Affairs and Agriculture (institutional strengthening) at a cost of US $68,450. The Fund Secretariat's comments and recommendations on this request are presented under UNIDO work programme (UNEP/OzL.Pro/ExCom/27/18).

RECOMMENDATIONS

The Fund Secretariat recommends as follows:

1. To approve the Qatar 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 Qatar 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 April 1999 to 31 December 2000, should be submitted to the Fund Secretariat no later than 1 May 2001.

COUNTRY PROGRAMME COVER SHEET

COUNTRY **STATE OF QATAR**

LEAD NATIONAL AGENCY **ENVIRONMENT DEPARTMENT**
MINISTRY OF MUNICIPAL AFFAIRS AND AGRICULTURE

PERIOD COVERED BY COUNTRY PROGRAMME **1999 2010**

1. PHASE OUT SCHEDULE

Substance	1997 Consumption in ODP Tonnes	Planned Total Cons. until phase-out (tonnes x ODP)	Planned year of Phase-out
CFC-11	18.460	116.539	2010
CFC-12	104.24	842.954	2010
CFC-114	0	0	2005
CFC-115	1.253	10.070	2005
Halon 1211	13.950	69.750	2001
Halon 1301	0	0	2001
Carbon Tetrachloride	9.075	45.400	2001

2. ACTION PLAN OF QATAR

In order to implement its phase out strategy, the Government has developed an Action Plan as follows: (Since 84.33% of ODS consumption is in the Refrigeration and Air-Conditioning sector, this action plan matches the one drawn up within the Refrigerant Management Plan)

- Establish the National Ozone Unit within the Environment Department, Ministry of Municipal Affairs and Agriculture, as the focal point for all activities related to the Montreal Protocol.
- Develop and implement control measures such as:
  - Prohibit imports of ODS using equipment
  - Prohibit new enterprises producing and/or assembling equipment, foams, or aerosols using ODS
  - Establish import quotas into the existing licensing system.
  - Prohibit investments in building new plants using ODS
  - Prohibit venting of CFCs
- Embark on a public awareness programme with assistance of UNIDO, UNEP and funding from the Multilateral Fund
- Train Customs Department, Central Statistical Organisation and NOU in monitoring and collection of data to meet the reporting requirements of the Protocol
- Implement a National Recovery and Recycling project.
- Establish networks and sites for recovery and recycling of ODS and operation of same
- Strengthen monitoring system for ODS imports and consumption

3. PROJECTS

A summary of the projects identified so far, and detailed in Annex 1 and 2 are given below:

Name of Project		Date	Estimated Cost to Multilateral Fund(US$)	ODS Consumed (ODP Tonnes)
Institutional Strengthening		1999 - 2001	68,450	N/A
Refrigerant Management Plan	i) Technician Training	1999	56,000	CFC-11 - 18.46 CFC-12 - 104.24 CFC-114 - 0 CFC-115 - 1.25
	ii) Training in Monitoring and Control of ODS	1999	40,000	
	iii) Recovery/Recycling Project	1999 - 2000	260,000	
National or Regional Halon Bank (project to be submitted later)		1999 - 2000		Halon 1211 - 13.95
Retrofitting of essential hospital chillers at Hamad Medical Corporation (project to be submitted later)		1999 - 2000		
TOTAL			**424,450**	

It should be noted that while there is no consumption of CFC-114 and Halon 1301, these ODS are in use. There is sufficient stock of CFC-114 to meet the hospital's recharge needs. Halon 1301 is currently installed at some critical locations in industry, but will not be replaced when consumed.

4. COSTS

ODP to be phased out	146.978 ODP tonnes
Total Cost of phase-out	US$ 424,450
Cost of projects included in the Country Programme	US$ 424,450
Cost effectiveness	US$ 2.89/kg

EXECUTIVE SUMMARY

The State of Qatar ratified the 1985 Vienna Convention, the 1987 Montreal Protocol, the 1990 London Amendments and the 1992 Copenhagen Amendments on January 22, 1996 and qualifies as an Article 5 country. In order to comply with the provisions of the Protocol, the Government of Qatar has carried out a national survey and formulated its Country Programme with the assistance of UNIDO and funding assistance from the Multilateral Fund.

The Country Programme provides data on import and use of ODS in Qatar and expresses the commitment of the Government to phase out consumption of ODS. An Action Plan has been defined, and steps will be taken to implement some or all of the action items, after scrutiny, to ensure a smooth phase out without causing undue economic hardship to the industrial, commercial and, in particular, the domestic consumers.

Qatar does not produce any ODS and all its requirements are met through imports. The total 1997 ODS consumption (Annex A and Annex B) amounted to 146.978 ODP Tonnes. Annex A consumption was 137.903 ODP Tonnes, resulting in a consumption of 0.264 kg/capita. (1997 population 522,023)

The principal consumption of ODS is in the Refrigeration and Air Conditioning sector – 123.953 ODP Tonnes or 84.33%. Halon1211 and Halon 1301 are in use in critical areas, particularly in the Oil and Gas producing industries and 1997 consumption is estimated at 13.950 ODP Tonnes or 9.50% of total ODS. Carbon Tetrachloride is used as a catalyst activator and totally consumed in the process. The consumption in 1997 was 9.075 ODP Tonnes or 6.17%.

The Government of Qatar is committed to phasing out the consumption of ODS in a controlled and cost effective manner. It will take the steps outlined in the Action Plan to meet the freeze and phase out schedule required by the Protocol. The Government is concerned about availability of a supply of ODS to meet the service requirements of existing ODS based equipment to enable them operate to the end of their economic life. It is expected that by 2010, most equipment will have been retrofitted or replaced with ODS free technology, with some CFC-12 based equipment remaining. It will strongly encourage recovery and recycling to meet this requirement. Market forces such as rising prices and increasing availability of ozone friendly technology are playing a vital role in the shift by consumers to ODS free technology, particularly in the commercial and industrial sector.

The government has nominated the Environment Department, a department of the Ministry of Municipal Affairs and Agriculture, as the focal point for Montreal Protocol activities. An institutional strengthening project is submitted for the formation of the National Ozone Unit. The NOU will be constituted within the Environment Department to act as the focal point, and coordinate and monitor activities towards a complete phase out of ODS.

A total of US$ 424,450 will be requested from the Multilateral Fund to implement the identified projects.