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执行蒙特利尔议定书
多边基金执行委员会
第三十二次会议
2000年12月6日至8日，瓦加杜古

国家方案：利比亚

本文件载有：

- 国家方案评价表（基金秘书处编制）
- 基金秘书处的评论和建议
- 利比亚政府的送文函
- 国家方案简介
- 国家方案（执行摘要）

利比亚国家方案评价表

国家臭氧机构，气候变化国家委员会执行办公室

《维也纳公约》和《蒙特利尔议定书》批准情况

签字	批准	生效
《维也纳公约》（1985）	1990 年 7 月 11 日	1990 年 10 月 9 日
《蒙特利尔议定书》（1987）	1990 年 7 月 11 日	1990 年 10 月 9 日
《伦敦修正案》（1990）		
《哥本哈根修正案》（1992）		

受管制物质生产情况：不生产任何受管制物质

受管制物质消耗情况（1999 年）：904.5 公吨
1,052.4 加权吨（ODP）

吨数	CFC-11	CFC-12	CFC-113	CFC-114	CFC-115	共计	哈龙 121	哈龙 130	共计	CTC	MCF	共计	甲基溴
ODS	770.0	110.9		10.4	7.7	899.0	0.5	5.0	5.5				175.0
ODP	770.0	110.9		10.4	4.6	895.9	1.5	50.0	51.5				105.0

不同物质的 ODP 所占比例：CFC 85.1% 哈龙 4.9% CTC 和 MCF 甲基溴 10.0%

各行业的 ODP 所占比例：	气雾剂	泡沫塑料	哈龙	制冷	溶剂	其他	甲基溴
耗量（ODP 吨）	0.0	758.5	51.5	137.4	0.0	0.0	105.0
所占百分比：		72.1%	4.9%	13.1%			10.0%

蒙特利尔议定书	CFCs (ODP 吨)	哈龙	甲基溴
基础耗量	716.7	633.1	
2005 年的允许耗量	358.4	316.6	

资料来源：UNEP/OzL.Pro.11/6(1999 年 10 月 5 日)

国家方案

国家方案期限：10 年（2001—2010 年）
 ODS 停用目标：在 2005 年底之前淘汰 80%，在 2010 年之前实现全部淘汰
 优先停用领域：泡沫、制冷和熏蒸剂行业
 国家方案活动所需费用：1,109,000 美元

战略：

利比亚政府保证以有控制和成本效益好的方式逐步淘汰 ODS 的消费。工作重点是公营的泡沫和制冷设备制造厂在多边基金的供资下改用非 CFC 技术。制冷设备维修行业的战略则以培训、限制使用、回收和再循环为主。规划、实施控制措施、宣传和培训活动是行动计划的主要内容。将出台法律，并在必要时阐明颁布的法律条文。将增进技术监测能力，以便保证有效地监测实施《蒙特利尔议定书》的法律和技术规定。将成立气候变化国家委员会执行办公室，作为《蒙特利尔议定书》相关活动的联络点。

基金秘书处的评论和建议

评论

1. 1999 年，利比亚的 ODS 总耗量估计为 1,052.3 ODP 吨，在各行业分布情形如下：895.9 ODP 吨 CFCs 用于制造泡沫产品、家用及小型商用制冷设备和制冷设备维修；51.5 ODP 吨哈龙和 105 吨甲基溴用作土壤熏蒸剂。
2. 计算得出的 1995—1997 年期间附件 A 物质年耗量为 701.8 吨，是用以确定利比亚对《蒙特利尔议定书》的遵守情况的基础耗量。因此，利比亚政府目前没有遵守《蒙特利尔议定书》。1995—1998 年期间的甲基溴基础耗量为 39 ODP 吨。
3. 在编制利比亚国家方案期间，调查发现 20 家制造软泡和硬泡产品的公司消耗高量的 CFC-11（770 ODS 吨，相当于该国 ODS 总耗量的 73%）（该国家方案包括这 20 家制造厂分别的 CFC 耗量）。
4. 有三家使用 CFCs 的家用制冷设备制造厂和一家冷藏设备制造厂属于国营的家用电器公司，另有五家私人公司生产冷水槽和/或水暖器。制冷设备维修行业约有 3,000 名技师，其中有几位曾在职业训练学校受训。但是，至金尚未建立制冷设备和空调技师资格审定方案。
5. 利比亚钢铁公司、炼油厂和石化厂仍在使用哈龙系统（哈龙 1211 移动系统和哈龙 1301 固定系统）。目前尚未就这些系统的替代制定淘汰计划。但利比亚政府正在考虑成立国家哈龙库的可行性。
6. 利比亚尚未批准《蒙特利尔议定书》的《伦敦修正案》、《哥本哈根修正案》和《蒙特利尔修正案》。工发组织已通知秘书处《伦敦修正案》已获部长会议通过；但仍需议会批准，一经议会批准，外交部将向联合国交存批准书（预计将在 2001 年 3 月前）。负责臭氧单位业务的气候变化国家委员会已向部长会议提交相关文件以通过《哥本哈根修正案》（预计将在 2001 年 6 月前）。
7. 国家方案包括一个在气候变化国家委员会执行办公室中成立国家臭氧办公室的项目（体制建设）。利比亚政府申请为此项目提供\$201,500 美元的执行经费。基金秘书处关于这项申请的评论和建议载于工发组织工作方案修正案（UNEP/OzL.Pro/ExCom/32/26）。
8. 国家方案还包括一项制冷剂管理项目（RMP）的申请。利比亚政府申请为此项目提供\$1,407,500 美元的执行经费。基金秘书处认为申请利比亚制冷剂管理项目的执行经费为时过早，原因如下：
 - (a) 利比亚政府尚未批准《蒙特利尔议定书》的任何修正案（未明确将采取的行动和通过修正案的可能日期）；
 - (b) 尚未成立臭氧单位；
 - (c) 该国的制冷设备制造仍以 CFCs 技术为主。按国家方案的建议完全改用非 CFCs 技术将在 2001—2004 年期间实现；

- (d) 泡沫行业是该国最大的 CFC 使用者。本行业的改用项目 (计划在 2001 年和 2004 年期间实现) 将对该国淘汰 CFC 产生最大的影响。
 - (e) 该国尚未出台任何控制、管理 ODSs 的政策法规 (必须具备以执行制冷剂管理项目中的回收和再循环项目部分);
 - (f) 1999 年制冷设备维修行业的 CFCs 耗量仅占该国 ODS 总耗量不到 15%。因此现在执行制冷剂管理项目对 CFC 的整体淘汰影响不大。
9. 利比亚政府同意将制冷剂管理项目推迟到未来执委会会议上审议。

建议

基金秘书处建议如下:

1. 核准利比亚的国家方案。核准该国家方案并不意味着核准其中提出的项目或项目经费数额。
2. 请利比亚政府根据执行委员会关于国家方案执行问题的决定 (UNEP/OzL.Pro/ExCom/10/40, 第 135 段) 每年向执委会报告国家方案的执行情况。第一次报告所涉期间为 2000 年 12 月 1 日至 2001 年 12 月 31 日, 应采用核准的格式提交基金秘书处, 提交日期最迟不得晚于 2002 年 5 月 1 日。
3. 执委会还可考虑敦促利比亚政府尽早批准《蒙特利尔议定书》的《伦敦修正案》、《哥本哈根修正案》和《蒙特利尔修正案》。



الأسسسة الوطنية للنفط
NATIONAL OIL CORPORATION

10 / 10 / 1992

Dr. Omar El-Arini
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2026 / 2
الى الاخ/ الدكتور عمر العريش
المدير التنفيذي
أمانة الصندوق المتعدد الأطراف
لتنفيذ بروتوكول مونتريال

Dear Sir,

I have the honour to submit herewith the country programme of the Great Socialist People's Libyan Arab Jamahiriya for the consideration and approval of the Multilateral Fund for the implementation of the Montreal Protocol.

The Socialist People's Libyan Arab Jamahiriya adhered to the Protocol on 6th March 1992 and qualifies as an Article 5 Country. On behalf of the Socialist People's Libyan Arab Jamahiriya, the Country programme was prepared with the assistance of UNIDO.

I can also assure you that it is Libya's intention to monitor compliance with the protocol. If necessary, further and different actions from those specified in the Country programme will be updated and submitted to the Executive Committee of the Multilateral Fund.

بعد التحية:

يسعني أن أقدم إليكم البرنامج الوطني للجمهورية العربية الليبية الشعبية الاشتراكية العظمى للنظر في اعتماده من قبل الصندوق المتعدد الأطراف المعني بتنفيذ بروتوكول مونتريال.

التزمت الجمهورية بروتوكول مونتريال في 1992/3/6 إفرنجي و تعتبر من الدول النامية المنصوص عليها في المادة الخامسة من البروتوكول، وقد تم إعداد هذا البرنامج الوطني نيابة عن الجمهورية بدعم من منظمة الأمم المتحدة للتنمية الصناعية .

أيضا أود أن أؤكد أن لدى الجمهورية النية في مراقبة الامتثال لنصوص البروتوكول ، وستعمل الجمهورية عند الضرورة علي اتخاذ إجراءات أخرى بالإضافة إلى الإجراءات المبينة بالبرنامج الوطني ، و تعديله إحالته إلى اللجنة التنفيذية للصندوق المتعدد الأطراف .

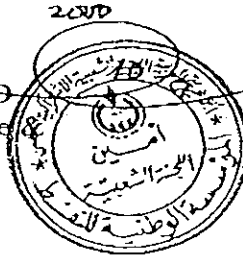


المؤسسة الوطنية للنفط NATIONAL OIL CORPORATION

I hope that the Executive Committee will also approve the request for institutional strengthening of the Executive Office of the National Committee for Climate Change by establishing a separate unit for the country programme and the provisions of the Montreal Protocol.

نأمل أن تعتمد اللجنة التنفيذية للصندوق المتعدد الأطراف الطلب الخاص بدعم زيادة القدرات بالمكتب التنفيذي للجنة الوطنية لتغير المناخ . وذلك بتأسيس وحدة إدارية خاصة بالبرنامج الوطني و متابعة تنفيذ بروتوكول مونتريال .

AHMED ABDULKARIM AHMED
Secretary of the People's Committee
Chairman of National Committee
for Climate Change



أحمد عبد الكريم أحمد
أمين اللجنة الشعبية
رئيس اللجنة الوطنية لتغير المناخ

COUNTRY PROGRAMME COVER SHEET

COUNTRY

LIBYAN ARAB JAMAHIRIYA

LEAD NATIONAL AGENCY

National Committee for Climate Change

PERIOD COVERED BY COUNTRY PROGRAMME

2001 – 2010

1. PHASE OUT SCHEDULE

Substance	1999 Consumption in ODP Tonnes	Planned Total Cons. until phase- out (tonnes x ODP)	Planned year of Phase-out
CFC-11	769.95	4,277.28	2010
CFC-12	110.90	981.20	2010
CFC-114	10.37	0.98	2007
CFC-115 (as R-502)	4.60	42.31	2010
Halon 1211	1.50	10.50	2007
Halon 1301	50.00	459.89	2010
Methyl Bromide	122.50		2010

2. ACTION PLAN OF LIBYA

The General Peoples' Committee has established the National Committee for Climate Change (NCCC), (reporting to the Secretary of the General Peoples' Committee), and entrusted it with duties to develop a strategy and action plan for phasing out Ozone Depleting Substances. In order to implement these duties the NCCC has developed an Action Plan as follows:

- Establish the Executive Office of the NCCC as a focal point for all activities related to the Montreal Protocol.
- Embark on a public awareness program with funding from the Multilateral Fund
- 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
 - Prohibit expansion of existing manufacturing facilities with ODS based technologies
 - Establish a cap on total ODP tonnage imported through existing licensing system
 - Encourage conservation of refrigerant
- Train Customs Department, National Information Centre and NOU in monitoring and collection of data to meet the reporting requirements of the Protocol
- Seek funding and monitor projects to convert refrigeration and foam manufacturing facilities
- Identify other investment projects not covered in this Country Programme and submit proposals for funding
- Implement a National Recovery and Recycling project.
- Identify key refrigeration installations and submit retrofitting proposals to the Multilateral Fund.

3. PROJECTS

A summary of the projects identified so far, including Institutional Strengthening - Annex 1 and Refrigerant Management Plan – Annex 2 are given below:

(i) Name of Project	Date	Estimated Cost to Multilateral Fund(US\$)	ODS Consumed (ODP Tonnes)
Institutional Strengthening	2001 - 2004	\$201,500	Annex A: 947.32 MeBr: 122.50
Conversion of Electrical Household Appliances - Musrata Unit (freezer)	2001 - 2004	tba	29.60
Conversion of Electrical Household Appliances - Tripoli Unit (Domestic Refrigerators)	2001 - 2004	tba	14.90
Conversion of Electrical Household Appliances - Rujban Unit (Domestic Refrigerators)	2001 - 2004	tba	14.00
Conversion of Electrical Household Appliances –Tajura Unit (Water Heaters – Rigid Foam Insulation)	2001 - 2004	tba	16.60
Conversion of General Company for Plastic and Foam Industry (GCPFI) – Bayan at Green Square Unit	2001 - 2004	tba	91.00
Conversion of GCPFI – Ben Ghazi Unit (Flexible Foam)	2001 - 2004	tba	34.00
Conversion of GCPFI – Derna Unit (Flexible Foam)	2001 - 2004	tba	32.00
Conversion of GCPFI – El Wahda Unit (Flexible Foam)	2001 - 2004	tba	94.00
Conversion of GCPFI - Garabouli Unit (Flexible Foam)	2001 - 2004	tba	37.00
Conversion of GCPFI - Musrata Unit (Flexible Foam)	2001 - 2004	tba	57.00
Conversion of GCPFI - El-Houria Unit (Flexible Foam)	2001 - 2004	tba	96.00
Conversion of GCPFI - Sebha Unit (Flexible Foam)	2001 - 2004	tba	26.00
Conversion of Jenzour Company (Flexible Foam)	2001 - 2004	Tba	60.00
Conversion of Foam Company for Foam Industry (Flexible Foam)	2001 - 2004	Tba	58.00
Conversion of Kanoun Company for Foam Industry (Flexible Foam)	2001 - 2004	tba	57.00
Conversion of Brothers Company for Water Heater (Rigid Foam Insulation)	2001 - 2004	tba	11.00
Conversion of Essourur Company for Water Heater (Rigid Foam Insulation)	2001 - 2004	tba	10.00
Conversion of Eshams Company for Cold Water Tank (Rigid Foam Insulation)	2001 - 2004	tba	12.00
Conversion of Musrata company for Cold water tank (Rigid Foam Insulation)	2001 - 2004	tba	10.00
Conversion of Ali Sannoga (Rigid Foam Insulation)	2001 - 2004	tba	8.85
Retrofitting of Key Refrigeration Installations (To be identified and prepared later)		tba	N/A

Refrigerant Management Plan	i) Technician Training	2001	135,000	CFC-11 – 4.22 CFC-12 – 139.35 CFC-114 – 0.14 CFC-115 – 5.85
	ii) Training in Monitoring and Control of ODS	2001	28,000	947.32
	iii) Recovery/Recycling Project	2001 - 2002	744,500	CFC-12 – 139.35 CFC-115 – 5.85
	iv) Additional projects including end-user application	After 2004	500,000	
National or Regional Halon Bank (project to be submitted later)		2001 - 2002		1211 – 1.50 1301 – 50.00
Phase-Out projects for Methyl Bromide				122.50

Halon 1211 and 1301 are currently installed at some critical locations in industry, and conservation measures will begin soon. Plans for total replacement of Halons have not yet been developed.

4. COSTS

ODP to be phased out

947.32 ODP tonnes

Total Cost of phase-out

Cannot be determined till all investment projects are prepared and approved.

Cost of projects being submitted with this Country Programme

US\$ 1,109,000

EXECUTIVE SUMMARY

The Libyan Arab Jamahiriya ratified the 1985 Vienna Convention and the 1987 Montreal Protocol on July 11, 1990 and qualifies as an Article 5 country. In order to comply with the provisions of the Protocol, the National Committee for Climate Change (NCCC) of Libya has carried out a national survey in 2000 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 Libya and expresses the commitment of the country 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 the domestic consumers.

Libya does not produce any ODS and all its requirements are met through imports. The total 1999 Annex A ODS consumption amounted to 947.32 ODP Tonnes, resulting in a consumption of 0.18 kg/capita. (1999 estimated population 5.3 million)

The principal consumption of ODS is in the Foam sector (including refrigerator and water heater insulation) – 758.45 ODP Tonnes or 80%, followed by the Refrigeration and Air Conditioning sector – 137.37 ODP Tonnes or 14.5%. Halon 1211 and 1301 are in use in critical areas, particularly in the Oil and Gas producing industries and 1999 consumption is estimated at 51.50 ODP Tonnes or 5.5% of total ODS. Methyl Bromide is used for soil treatment. The consumption in 1999 was 122.50 ODP Tonnes.

Libya is committed to phasing out the consumption of ODS in a controlled and cost effective manner. Following the lifting of the embargo, production in the foam and refrigeration sector has begun picking up, and is yet to reach peak levels. As can be seen from the consumption figures, 1999 ODS consumption is much higher than earlier years. It will take some or all of the steps outlined in the Action Plan to comply with the phase out schedule required by the Protocol. With timely assistance from the Multilateral Fund to phase out ODS in the Foam and R&AC manufacturing enterprises, the NCCC is confident of meeting the 2005 compliance requirements of 50% reduction in consumption. However, the NCCC is concerned about availability of a supply of ODS to meet the service requirements of existing ODS based R&AC 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, along with phase-out in the manufacturing sector with assistance from the Multilateral Fund, will play a vital role in the shift by consumers to ODS free technology, particularly in the commercial and industrial sector.

The General Peoples' Committee has nominated the National Committee for Climate Change, which reports to the Secretary of the General Peoples' Committee, for the preparation of the Country Programme and Refrigerant Management Plan. An institutional strengthening project is submitted for the formation of the National Ozone Unit. The NOU will be constituted within the

Executive Office of the National Committee for Climate Change to co-ordinate and monitor activities towards a complete phase out of ODS.

A total of US\$ 1,109,000 is being requested from the Multilateral Fund to implement the Institutional Strengthening Project and components of the Refrigerant Management Plan. All the investment projects in the R&AC, Foam and Methyl Bromide sectors will be prepared and submitted through UNIDO and UNDP for implementation in 2001/2002.