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执行蒙特利尔议定书
多边基金执行委员会
第五十三次会议
2007年11月26日至30日，蒙特利尔

国家方案：沙特阿拉伯

本文件由以下几部分组成：

- 国家方案评价表（由基金秘书处编制）
- 基金秘书处的评论和建议
- 沙特阿拉伯国家的送文函
- 国家方案封面
- 国家方案（执行摘要）

执行蒙特利尔议定书多边基金执行委员会的会前文件不妨碍文件印发后执行委员会可能作出的任何决定。

为节省经费起见，本文件印数有限。请各代表携带文件到会，不索取更多副本。

沙特阿拉伯国家方案评价表

国家臭氧单位, 气象和环境局

《维也纳公约》和《蒙特利尔议定书》的批准情况

签署	批准	生效
《维也纳公约》(1985年)	1993年3月1日	1993年6月30日
《蒙特利尔议定书》(1987年)	1993年3月1日	1993年6月30日
《伦敦修正》(1990年)	1993年3月1日	1993年6月30日
《哥本哈根修正》	1993年3月1日	1993年6月30日
《蒙特利尔修正》(1997年)	-	-
《北京修正》(1999年)	-	-
受管制物品的生产量:	未生产任何受管制物品	
受管制物品的消费量: (2005年)	924.5 公吨	
(除氟氯烃外)	906.1 加权吨 (ODP)	
(吨)	CFC-11 CFC-12 CFC-113 CFC-114 CFC-115	总计 哈龙121 哈龙130 总计 CTC MCF MB
ODS	878.5	878.5 46.0
ODP	878.5	878.5 27.6
按物质分列的ODP分布情况:	CFC 97%	MB 3%
按行业分列的ODP分布情况:	气雾剂	泡沫塑料 哈龙 制冷 溶剂 甲基溴
消费量 (ODP 吨):		878.5 27.6
占总数百分比:		97% 3%
《蒙特利尔议定书》	(ODP 吨)	各类氟氯化碳 哈龙 甲基溴
基准消费量	1,798.5	1,064.0 0.6
2007年许可消费量	269.7	532.0 0.5

资料来源: 国家方案 (2007年)

国家方案

国家方案期限: 3年 (2008至2010年)

消耗臭氧层物质淘汰目标: 到2009年底全部淘汰

优先淘汰领域: 制冷维修行业

国家活动费用: 2,135,000美元

战略:

政府承诺以成本效益好的有管制的方式淘汰消耗臭氧层物质消费量。政府将根据《行动计划》采取措施, 履行《议定书》规定的各项义务。《行动计划》的主要内容包括制订并实施管制措施, 开展公共宣传运动, 提供培训。为实现《行动计划》设定的各项目标, 政府在需要时还将颁布新法规, 并制订法令案文。为确保《蒙特利尔议定书》的各项法律和技术规定得到有效监测, 政府还将提高技术监测能力。

基金秘书处的评论和建议

说明

1. 根据沙特阿拉伯编制国家方案时进行的国家调查，2005 年该国消耗臭氧层物质 CFC-12 和甲基溴的消费量估计值分别为 878.5 ODP 吨和 27.6 ODP 吨。沙特阿拉伯根据第 7 条报告了这一消费量数据。
2. 2005 年，消耗臭氧层物质消费大户主要是制冷和空调维修行业，包括 HCFC-22 在内，消费量共计 1,117.72 ODP 吨，占消耗臭氧层物质消费总量的 97.6%。有少量 CFC-12 用于中小型制冷企业，这些企业仍然使用 CFC-12 生产小型制冷设备。2005 年没有进口哈龙 1211 和哈龙 1301，但特别是包括石油生产和天然气生产行业在内的一些重要领域仍然使用这些物质。甲基溴用于熏蒸及检疫和装运前消毒处理。2005 年，甲基溴消费量估计值为 52.8 ODP 吨，其中 27.6 ODP 吨用于熏蒸，25.2 ODP 吨用于检疫和装运前消毒处理。
3. 沙特阿拉伯政府已批准《维也纳公约》、《蒙特利尔议定书》及其相关的《伦敦修正》和《哥本哈根修正》。
4. 政府表明沙特阿拉伯已基本完成各种使用消耗臭氧层物质生产行业的技术转换工作，而且没有向多边基金提出支助请求。目前，沙特阿拉伯请求提供能力建设措施支助和技术援助，以便完成各种氟氯化碳和甲基溴的淘汰工作，并保证泡沫塑料、哈龙和溶剂行业淘汰工作的可持续性。沙特阿拉伯在几年前就完成了气雾剂行业的淘汰工作，目前无意采取进一步活动。政府还希望在设立并支助国家臭氧单位方面得到援助。
5. 沙特阿拉伯政府计划修订现有条例，向海关官员提供培训，推动各项条例的执行工作，打击非法贸易。政府将建立国家制冷和空调行业工作队，帮助相关国家机构进行能力建设，向制冷技术人员传播良好做法观念。政府还将修订业务守则和职业课程，制订强制性认证计划，实施技术人员培训方案。在制冷和汽车空调行业将执行回收和再循环方案，在从事小型制冷设备制造的其他中小型企业行业执行技术援助方案。同时还要向甲基溴行业提供技术援助，完成限制用途甲基溴的淘汰工作。在泡沫塑料、哈龙和溶剂行业将实施小规模技术宣传方案。
6. 由于国家方案所载的拟议活动将于 2007 年底开始实施，实现 2007 年氟氯化碳消费量减少 85% 的目标是一个很具有挑战性的任务，但沙特阿拉伯政府承诺将履行《蒙特利尔议定书》规定的各项义务。目前执行委员会正在审议沙特阿拉伯政府提出的修改甲基溴履约基准数据的请求。
7. 执行委员会第四十九次会议核准向项目编制供资 65,000 美元，用于编制结合了国家淘汰计划的国家方案。

秘书处的评论

8. 国家方案还载有能力建设和技术援助项目，拟议费用为 1,835,000 美元，此外要求为

国家臭氧机构提供体制建设费用 300,000 美元，为期三年。UNEP/OzL.Pro/ExCom/53/52 号文件和 UNEP/OzL.Pro/ExCom/53/18 号文件分别阐述了基金秘书处有关这些请求的评论和建议。

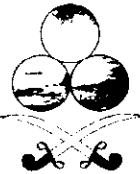
9. 沙特阿拉伯首次提交的合并国家方案/国家淘汰计划提出了该国根据《议定书》在 2007 年淘汰 85% 氟氯化碳的能力问题。在上文中，秘书处有关提供能力建设和技术援助项目的评论已全面解决了这一问题。审查程序结束后要求对最初作为国家淘汰计划提交的项目提案进行修改，因为该计划偏离了能力建设和技术援助方案，没有具体的淘汰目标，在不会对《议定书》不履约机制的业务产生影响的情况下才会审议核准。

10. 另一个问题是沙特阿拉伯的甲基溴消费量和相关履约基准问题，目前设定的履约基准为 0.6 ODP 吨。根据第 7 条报告的 2005 年甲基溴消费量为 27.6 ODP 吨。执行委员会第三十八次会议要求该国修改甲基溴履约基准。执行委员会第 38/35 号建议要求提供支助该提案的补充数据。随后，沙特阿拉伯表示已开始收集数据，但在委员会第三十九次会议前没有充分的时间完成这项活动。在第 XIX/23 号决定中，缔约方认为沙特阿拉伯没有遵守有关甲基溴的管制措施，要求该国对消费量超标做出解释，并提交遵守相关规定的行动计划，其中可以纳入进口配额以及政策和管制文书。这些资料还有待审议，但委员会认为沙特阿拉伯是一个有信誉的国家，应继续向其提供援助。能力建设和技术援助包括 150,000 美元技术援助，用于甲基溴问题的最后供资，帮助沙特阿拉伯淘汰该行业的其他全部消费量。

秘书处的建议

11. 基金秘书处建议核准沙特阿拉伯国家方案，但同时指出这并不意味着核准该方案确定的项目或其供资数额。核准沙特阿拉伯国家方案，不影响到缔约方在执行委员会审议沙特阿拉伯政府根据第 7 条提交的今后消费量数据和改变甲基溴履约基准的请求后做出的任何决定。

12. 基金秘书处还建议，要求沙特阿拉伯政府根据执行委员会有关执行国家方案的决定（UNEP/OzL.Pro/ExCom/10/40，第 135 段），每年向执行委员会提供资料，说明执行国家方案的进展情况。沙特阿拉伯政府应在 2008 年 5 月 1 日前向基金秘书处提交根据核准形式编写的初次报告，所涉时期为 2007 年 1 月 1 日至 2007 年 12 月 31 日。



FACSIMILE TRANSMISSION

Ms. Maria Nolan
Chief Officer
Multilateral Fund Secretariat for the implementation of Montreal Protocol
Montreal, Canada

Subject: Country Programme & National Phase-out Plan of Saudi Arabia for Ozone Depleting Substances

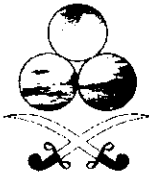
Dear Ms. Nolan,

I would like to convey the commitment of the Government of Saudi Arabia to work with UNIDO as a lead agency and UNEP as a cooperating agency on the implementation of the National Phase-out Plan and program in Saudi Arabia for phasing-out Ozone Depleting Substances.

As you know that currently, the Kingdom is passing through a critical phase of their ODS phasing out plan where we have completed the phasing out targets with major industrial sectors and have come to the informal service sector, where we need technical and financial support to carry-out our plan as required by the Montreal Protocol.

The implementation of the project will enable the Government of Saudi Arabia to achieve its target for a total phase-out of relevant ODS by the year 2010 as required under the control measures set by Montreal Protocol. I would also like to mention that the Government of Saudi Arabia doesn't intend to seek additional support from the Multilateral Fund for phasing out those substances in future.

Please accept, madam, the assurance of my highest consideration and appreciation to the Multilateral Fund Secretariat and to the Executive Committee for the support extended to the Government of Saudi Arabia in the phase out of ozone depleting substances since 1993. We would



also like to use this opportunity to thank UNIDO and UNEP for the cooperation in preparing this project.

With regards

A handwritten signature in black ink, appearing to read 'Ashour', written over a horizontal line.

Dr. Ahmed A. Ashour
Deputy For Environmental Affairs

cc:

Mr. Sidi Menad Si Ahmed
Director, Multilateral Environmental Agreements Branch
UNIDO

Mr. Rajendra Shende
Head of OzonAction Programme
UNEP/DTIE

Paris, France
Dr. Habib Elhabr
Director and Regional Representative
UNEP/ROWA

COUNTRY PROGRAMME COVER SHEET

Country Programme: **Saudi Arabia** Date Received: **October 2007**

Lead National Agency: **National Ozone Committee/ Presidency of Meteorology and Environment**

Period covered: **2007 – 2010**

1. Reported Consumption

Year	CFCs	Halons	Carbon Tetra-chloride	Methyl Chloroform	HCFCs	Methyl Bromide
1995	1,828.4	1,450.0	990.0	-	13.8	-
1996	1,668.2	1,180.0	568.7	-	23.2	-
1997	1,899.0	562.0	326.7	-	29.8	1.2
Baseline	1,798.5	1,064.0	256.2	29.8	-	0.6
1998	1,921.8	346.0	682.0	1.5	34.9	1.4
1999	1,710.4	244.0	57.2	62.0	119.3	1.8
2000	1,593.6	171.0	38.5	25.8	110.6	3.0
2001	1,593.0	286.0	25.3	1.7	143.7	5.4
2002	1,531.0	257.0	-	-	138.4	-
2003	1,300.0	-	-	-	176.0	-
2004	1,150.0	214.0	27.5	-	212.9	-
2005	878.5	0	0.0	0.0	239.2	27.6
Protocol Phase-Out Targets	2010	2010	2010	2015	-	2015

2. The Action Plan

Sector	Action	Date	Expected results
All	Institutional Strengthening of the National Ozone Unit.	January 08	Efficient and effective coordination and administration of ozone matters
	Preparation of Country Program and Capacity Building and Technical Assistance Project	Jan-Sep 07	Submitted to 53 rd ExCom, Nov 2007
Regulations	Contract national legal expert(s)	Jan – Dec 08	Update existing regulation for the control of ODS, train the Customs Officers, promote the enforcement of national relevant regulations among relevant stakeholders and curb illegal trade.
	Update National Regulation based on finding of the review	Jul – Dec 08	
	National enforcement workshops for policy makers and stakeholder	Jan - Dec.09	
	Provision of Identifiers and upgrade testing facilities	Jan – May 08	
	Training program for Customs and related authorities; phase I	Aug – Oct 08	

Sector	Action	Date	Expected results
	Training program for Customs and related authorities; phase II	Dec 08 – Jun 10	
Refrigeration and air conditioning - Training	Establish National Refrigeration and Air-Conditioning Taskforce	Jan – Mar 08	<ol style="list-style-type: none"> 1. Build the capacities of national institutions to disseminate the refrigeration good practice concepts among technicians 2. Update the national educational and vocational refrigeration curricula 3. Promoting the update of the national codes of practice and developing of a compulsory certification scheme 4. Review and promote the update of national standards of refrigerants and refrigeration and air-conditioning systems
	Update refrigeration curricula of the technical educational and vocational training	Jan 08 - Jan 09	
	Update existing Codes of Practice according to the Curricula update	June - Dec 08	
	Develop compulsory certification scheme for refrigeration servicing profession	Nov 08 – Apr 09	
	Prepare mandatory minimum national technical requirements for licensing refrigeration companies/workshops	Jan – Dec 08	
	Review and update relevant national standards	Jan 08 – June 09	
	Upgrade the technical capacities of the technical education and vocational training facilities for the 10 vocational schools and institutes	Jan – Jul 08	
	Training program; Phase I Training of 60 master trainers in two workshops	Aug – Oct 08	
	Training program; Phase II (2500-3000 technicians)	Nov 08 – Sep 10	
Refrigeration and air conditioning – Recovery & Recycling	Preparation of equipment specifications	Feb - Mar 08	Promote good practices in refrigeration servicing; increase recovery and recycling of CFCs, particularly from larger refrigeration appliances or chillers; and make the CFC recovered from dismantled equipment available for other domestic and commercial refrigeration equipment
	Invitation to Bid, receipt of bid evaluation of bids	Apr-Aug 08	
	Purchase order and receipt of equipment	Sep 08-Feb 09	
	Training in use of equipment	April 09	
	Distribution of equipment	May-June 09	
Refrigeration and air conditioning – MAC Recovery & Recycling	Preparation of equipment specifications	Feb-Mar 08	Promote good practices in MAC servicing; increase recovery and recycling of CFC-12
	Invitation to Bid, receipt of bid evaluation of bids	Apr-Aug 08	
	Purchase order and receipt of equipment	Sep 08-Feb 09	
	Training in use of equipment	April 09	
	Distribution of equipment	May-June 09	
Refrigeration and air conditioning – MAC Retrofit	Designing of Awareness Campaign	Feb – May 08	Provide awareness and training on the retrofit CFC-12 MAC systems to HFC-134a based MAC systems
	Implementation of Retrofit Awareness Campaign	Jun 08 – Dec 09	
	Selecting service shops for training retrofitting	Jun – Sep 08	

Sector	Action	Date	Expected results
	Identifying manufacturers in each sector that have converted to non-ODS, and MeBr users	Jun – Dec 08	
	Identifying and contracting experts	Jan 09	
Technical Assistance	Technical assistance workshops in each thematic area	Mar – Dec 09	Enable sound and sustainable conversion
	Manage and co-ordinate the project implementation	Jan 08 – Dec 10	
	Establish policy development and enforcement program		
Project Management and Monitoring	Develop and implement training, awareness and capacity-building activities for key government departments, legislators, decision-makers and other institutional stakeholders, to ensure a high-level commitment to the project objectives and obligations		Close monitoring of the implementation of the project, tracking the promulgation, and enforcement of policy and legislation
	Preparation of annual implementation plans		
	Establish and operate a reporting system of usage of ODS/substitutes		
	Reporting on implementation progress of the project		
	Undertake independent monitoring of all the activities implemented in the project		
	Present reports on project implementation status		
	Prepare periodic (annual) assessment of the consumption of ODS in the refrigeration sector and evaluate the impact of the projects being undertaken		

3. Proposed Budget:

Item	Funding Requested	Implementing Agency
<i>Institutional Strengthening Project</i>		
<i>Institutional Strengthening (3 years)</i>	\$300,000	UNEP
<i>Policy Update, Enforcement and Prevention of Illegal Trade</i>		
Contracting national legal expert(s) to review and update the national regulations	\$10,000	UNEP

Item	Funding Requested	Implementing Agency
National enforcement workshops for policy makers and stakeholder	\$10,000	UNEP
Provision of Identification and Upgrade testing facilities	\$50,000	UNEP
Training program for Customs and related authorities; phase I (30 Master Trainers)	\$10,000	UNEP
Training program for Customs and related authorities; phase II (2,000-2,200 officers)	\$60,000	UNEP
Sub-Total	140,000	
Refrigeration Training, Standardization and Certification		
§ Update the refrigeration curricula of the technical educational and vocational training	\$50,000	UNEP
§ Update the existing Codes of Practice according to the Curricula update		
§ Develop compulsory certification scheme for the refrigeration servicing profession		
§ Prepare mandatory minimum national technical requirements for licensing refrigeration companies/workshops		
§ Review and update relevant national standards		
Upgrading the technical capacities of the technical education and vocational training facilities; (5 sets of training equipment and tools for the 10 vocational schools and institutes)	\$90,000	UNEP
Training program; Phase I Training of 60 master trainers in two workshops	\$20,000	UNEP
Training program; Phase II (2,500-3,000 technicians)	\$115,000	UNEP
Sub-Total	275,000	
Recovery and Recycling		
500 Service Sets for small/medium workshops (\$750 per set)	375,000	UNIDO
50 portable recovery Sets for Medium workshop (\$2,000 per set)	100,000	UNIDO
40 R&R Sets for Large workshops/end-users (\$5,000 per set)	200,000	UNIDO
Assessment, Training, Storage, Distribution, International Expert and Miscellaneous	150,000	UNIDO
Sub-Total	\$725,000	
MAC Recovery/Recycling and Retrofit		
50 R/R/R Sets for MAC workshops (\$2,500 per set)	125,000	UNIDO
MAC Retrofitting Awareness Campaign	45,000	UNIDO
Assessment, Training, Storage, Distribution, International Expert and Miscellaneous	50,000	UNIDO
Sub-Total	\$220,000	
Technical Assistance to Manufacturing Sectors		
CTC & MCF	\$25,000	UNIDO
Foam	\$25,000	UNIDO
Refrigeration Manufacturing	\$100,000	UNIDO
Halon	\$25,000	UNIDO
MeBr	\$150,000	UNIDO
Sub-Total	\$325,000	
Project Implementation and Monitoring		
Project implementation, management and coordination incl. monitoring and reporting	\$160,000	UNIDO
Total cost of Institutional Strengthening plus the Capacity Building and Technical Assistance Project	\$2,135,000	

EXECUTIVE SUMMARY

The Kingdom of Saudi Arabia ratified the 1985 Vienna Convention, 1987 Montreal Protocol, 1990 London Amendments, and the 1992 Copenhagen Amendments by Royal Decree No. 1, dated 25 August 1992 and is classified as an Article 5 country. The Montreal and Beijing Amendments will be ratified at a later date. Saudi Arabia was initially classified as a non-Article 5 Party, but was reclassified in 1994 as an Article 5 Party after data submission and request for reclassification. In order to comply with the upcoming provisions of the Protocol, the Government of Saudi Arabia has carried out a national survey and formulated its Country Programme/National Phase-Out Plan with the assistance of UNIDO and UNEP and funding assistance from the Multilateral Fund.

The Country Programme provides data on import and use of ODS in Saudi Arabia and expresses the commitment of the Government to phase out consumption of ODS. An Action Plan for the required activities has been defined, and steps will be taken to implement the action items to achieve phase out without causing undue economic hardship to the industrial, commercial and, in particular, the domestic consumers. There are major concerns that the country will not be able to comply with the 2007 reduction and may need till 2009 to return to compliance. Legislative actions and market forces such as decrees, licensing systems, leading to rising prices and increasing availability of ozone friendly technologies continue to play a vital role in the shift by consumers to ODS free technology, particularly in the commercial and industrial sector.

Saudi Arabia does not produce any ODS and all its requirements are met through imports. The total 2005 ODS consumption, as per reported Article 7 data amounted to 1,170.52 ODP Tonnes. The country is currently collecting and evaluating data for reporting consumption for 2006.

The principal consumption of ODS in 2005 is in the Refrigeration and Air Conditioning sector – 1,117.72 ODP Tonnes or 95.5% (including HCFC-22). Halon 1211 and Halon 1301 are still in use in critical areas; particularly in the Oil and Gas producing industries although there have been no imports in 2005. Methyl Bromide is used for date fumigation and QPS applications, and 2005 consumption is estimated at 52.8 ODP Tonnes, consisting of 27.6 ODP Tonnes for fumigation and 25.2 ODP Tonnes for QPS applications.

The government has nominated the National Ozone Committee (NOC) within the Presidency of Meteorology and Environment (PME) as the focal point for Montreal Protocol activities. An institutional strengthening project is submitted separately for establishment of a dedicated National Ozone Unit which will coordinate and monitor activities towards a complete phase out of ODS.

A total of US \$2,135,000 is being requested from the Multilateral Fund for the Institutional Strengthening Project (3 years) and to implement the identified project. The project includes policy update and enforcement, refrigeration training and certification, recovery and recycling, MAC Recovery, Recycling and Retrofit and technical assistance for the manufacturing sector (foam, refrigeration, solvent) and Halon and Methyl Bromide user sector, along with project management and monitoring.