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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Forty-second Meeting
Montreal, 29 March - 2 April 2004

**COUNTRY PROGRAMME UPDATE: DEMOCRATIC PEOPLE'S
REPUBLIC OF KOREA**

This document consists of:

- Background Information
- Comments and recommendations of the Fund Secretariat
- Transmittal letter from the Government of D.P.R. Korea
- Revised country programme cover sheet
- Revised country programme (Executive Summary)

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D.P.R. KOREA COUNTRY PROGRAMME UPDATE

BACKGROUND INFORMATION

1. The country programme update of the Democratic People's Republic of Korea (D.P.R. Korea) was submitted for consideration of the Executive Committee at the 40th Meeting together with a country programme evaluation sheet in document UNEP/OzL.Pro/ExCom/40/47. The Secretariat noted in its comments that a number of data discrepancies had been identified during the review of the country programme update. While discrepancies with respect to CFC data had been clarified by UNEP, those relating to CTC still remained. Following its consideration the Executive Committee decided (in Decision 40/51) to note the proposed country programme update, and to request UNEP and UNIDO to address the issues raised by the Fund Secretariat regarding CTC data discrepancies, to revise the country programme update document accordingly and to resubmit it, using the format approved in Decision 35/58, to a future meeting of the Executive Committee.

2. Essentially the CTC data discrepancies would have resulted in baseline production and consumption values of 2,053.7 ODP tonnes against 1,285.2 ODP tonnes calculated for D.P.R. Korea by the Ozone Secretariat based on D.P.R. Korea's officially reported data.

3. Prior to the 41st Meeting, following discussions between the Secretariat and UNIDO of a proposed CTC sector phase-out plan for D.P.R. Korea, an agreement was reached with the Government of D.P.R. Korea on the basis for the calculation of the remaining eligible CTC consumption in the country and its funding. While using the latest (2002) consumption figure reported in the country programme update as well as to the Ozone Secretariat as the basis for determining the CTC consumption phase-out schedule, D.P.R. Korea's officially calculated baseline consumption would be maintained and form the basis for calculating the eligible remaining unfunded consumption. This meant that compliance of D.P.R. Korea with the CTC consumption phase-out requirements would continue to be measured against its current baseline consumption of 1,285.2 ODP tonnes and not 2,053.7 ODP tonnes as presented in the original country programme update. Based on this understanding the CTC phase-out sector plan was prepared and submitted by UNIDO to the 41st Meeting and approved at a total value of US \$5,684,840 to phase out estimated 2,200 ODP tonnes of CTC.

SECRETARIAT'S COMMENTS AND RECOMMENDATIONS

COMMENTS

4. UNEP has revised the country programme update to reflect the above-mentioned understandings as well as the Agreement between the D.P.R. Korea and the Executive Committee for the phase-out of carbon tetrachloride (CTC) adopted by the Executive Committee at the 41st Meeting.

5. The following table summarises the differences in the data relating to CTC in the original country programme update submitted to the 40th Meeting and the country programme update as revised and resubmitted to the 42nd Meeting.

	Original Country Programme Update	Revised Country Programme Update
Baseline CTC consumption (ODP tonnes)	2,053.7	1,285.2
Annual maximum allowable consumption, 2005-2007 (ODP tonnes)	308	193
Planned CTC consumption in 2005	280	193
Total cost of CTC phase-out (US \$)	14,500,000	5,684,840

6. The country programme cover sheet and the executive summary of the revised country programme update showing in bold italics changes of significance made to the country programme update are attached to this document. The country programme evaluation sheet prepared by the Secretariat may be consulted in document UNEP/OzL.Pro/ExCom/40/47 which is available on request.

RECOMMENDATIONS

7. The Fund Secretariat recommends approval of the D.P.R. Korea country programme update as revised, noting that approval of the country programme does not denote approval of the projects identified therein or their funding levels.

FROM : UNDP

FAK NO. : 3817587

Feb. 27 2004 15:45 P1



조선민주주의인민공화국 환경민족조정위원회

DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA
National Coordinating Committee for Environment

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February 27, 2004

Dear Ms. Nolan,

Subject: DPR Korea Country Programme Update

In reference to the decision of the 40th Executive Committee Meeting of Multilateral Fund, the Democratic People's Republic of Korea has updated the Country Programme in close cooperation with UNEP, UNIDO and China.

We have the honor to herewith submit to you the Updated Country Programme for the approval in the 42nd Executive Committee Meeting of Multilateral Fund.

Thank you for your cooperation

Kim Yong U
Kim Yong U
National Ozone Coordinator

Ms. Maria Nolan
Chief Officer
Secretariat of Multilateral Fund
Fax: (1 514) 282 00 68

cc: Mr. Surendra Shrestha
Director
UNEP ROAP
Fax: (66 2) 280 38 29

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COUNTRY PROGRAMME COVER SHEET (Revised)**Country:** Democratic People's Republic of Korea**Date Received:** 24 February 2004**Lead National Agency:** National Coordinating Committee for Environment**Period covered by Country Programme:** 2003-2010**Lead Implementation Agency:** UNEP**1. Phase-out Schedule**

Substances	Current consumption (tonnes x ODP in (year)	Planned total consumption till phase-out (tonnes x ODP	Planned year of phase-out
CFC-11	(64 ODP tonnes) in 2002	192 ODP tonnes	2009
CFC-12	(235 ODP tonnes) in 2002	768 ODP tonnes	2009
CFC-113	0	0	Already phased out in 2001
Halon 1211	0	0	2009
Halon 1301	0	0	
CTC	1843 MT x 1.1 ODP = 2027.3 ODP MT	3745 MT x 1.1 ODP = 4119 ODP	2006
MTC	in 2002	MT	2006
Total:	2,326 ODP tonnes	5079.5 ODP tonnes	2009

2. Government Action Plan

Year(s)	Description of action	Sector (if any)	Intended effect	Estimated costs
2003-2005	Refrigerant Management Plan (Phase I)	Refrigeration service	Phase-out 56 tonnes of CFC-12	230,000
2006-2010	Refrigerant Management Plan (Phase II)			1,066,994
2003 - 2005	Sector plan for production conversion of refrigerator and compressor	Refrigeration Production	Phase-out 243 tonnes of CFC-11 and CFC-12	1,365,011
2003-2010	Halon Management Plan	Halon	Sustain halon phase-out of 10 ODP tonnes	300,000
2003-2005	CTC phase out in solvent sub-sector	Solvent	332.3 ODP tonnes of CTC	2,636,080
2003-2005	CTC phase out in process agent sub-sector	Process agent	774.ODP tonnes of CTC	
2003-2010	CTC phase out in fumigation sector	Fumigation	335.5 ODP tonnes of CTC	1,148,000
2003-2005	CTC Sector phase-out monitoring			516,800
2003-2005	Prepare and promulgate legislation and standard for ODS phase-out	All sectors	Control use of ODS for all sectors; Control import and export of ODS and equipment that consumes ODS; License and monitor refrigeration service system, Establish National CFCs Recovery and Recycling Network;	Cost is included in above sector plans

Note: Italics denote revisions to the information in the original country programme update submitted to the 41st Meeting.

3. Project Summary

Year (s)	Type of project	Project description	Project cost	Incremental cost	Participating Implementing Agencies (if any)	Tonnes x ODP Phased out
2003-2005	Training, workshops and capital	Refrigerant Management Plan	1,296,994	1,296,994	UNEP, UNIDO	243 ODP tonnes
2003 - 2005	Capital investment	Sector plan for production conversion of refrigerator and compressor	1,365,011	1,365,011	UNIDO	56 ODP tonnes direct, 21 tonnes indirect
2003-2010	Training, workshops	Halon Management Plan	300,000	300,000	UNEP	10 ODP tonnes
2003-2005	Capital investment	<i>CTC phase out in solvent sub-sector</i>	<i>2,636,080</i>	<i>2,636,080</i>	<i>UNIDO</i>	<i>332 ODP tonnes</i>
2003-2005	Capital investment	<i>CTC phase out in process agent sub-sector</i>	<i>6,500,000</i> <i>1,383,960</i>	<i>1,383,960</i>	<i>UNIDO</i>	<i>544 ODP tonnes</i>
2003-2005	Capital investment	<i>CTC phase out in fumigation sector</i>	<i>1,148,000</i>	<i>1,148,000</i>	<i>UNIDO</i>	<i>336 ODP tonnes</i>
	Monitoring	<i>Monitoring CTC Sector Phase-out activities</i>	<i>516,800</i>	<i>516,800</i>	<i>UNIDO</i>	<i>N.A.</i>
	Pre investment	Preparation of sector plan for refrigerator and compressor	50,000	50,000	UNIDO	N.A.
	Pre investment	Preparation of National CTC Phase-out Plans (fumigation, solvent and process agent)	60,000	60,000	UNIDO	N.A.
	Pre investment	Preparation of Halon Management Plan	50,000	50,000	UNEP	N.A.
2003-2010	Training information transfer	Institutional Strengthening	500,000	500,000	NCCE/UNEP	N.A.

Project types include: pre-investment, training, workshops, information transfer, capital.

Note: Italics denote revisions to the information in the original country programme update submitted to the 41st Meeting.

4. Costs

Cost of Activities and Projects in Country Programme (US \$)	<i>9,306,845</i>
Estimated cost of complete phase out (US \$)	<i>9,306,845</i>
Estimated cost effectiveness (US \$/kg)	<i>6.16¹</i> per kg x ODP

Note: Italics denote revisions to the information in the original country programme update submitted to the 41st Meeting.

¹ Calculated on 1511 ODP tonnes of “remaining un-funded consumption” although the Multilateral Fund funding is committed on the basis of 999 ODP tonnes of “eligible for funding”

EXECUTIVE SUMMARY (REVISED)

8. The country programme update for the Democratic People's Republic of Korea (D.P.R. Korea) provides an overview of activities implemented under the Montreal Protocol on Substances That Deplete the Ozone Layer in D.P.R. Korea. This overview also includes an assessment of the assistance provided by the Multilateral Fund for the Implementation of the Montreal Protocol (Multilateral Fund) for supporting D.P.R. Korea's effort in meeting its obligations under the Montreal Protocol as given in the initial country programme. It also includes an analysis of remaining ODS phase out that is required in the country and presents a strategy, an action plan and cost estimates to complete the phase out of remaining ODS.

9. D.P.R. Korea is committed to complete ODS phase out in accordance with the control measures under the Montreal Protocol. D.P.R. Korea ratified the Montreal Protocol (MP) on 24 January 1995, and is eligible to receive grants from the Multilateral Fund. D.P.R. Korea received financial assistance from the Multilateral Fund for the development of a country programme in 1995. The country programme was completed with the assistance of UNEP in December 1996 and approved by the Executive Committee of the Multilateral Fund at its 21st meeting in February 1997.

10. D.P.R. Korea, with an economic policy of industrial self-sufficiency, is a consumer and a producer of ODS. In 1995, the production and consumption of controlled substances in the country was 895 ODP tonnes (excluding CTC), and 815 ODP tonnes (excluding CTC) respectively. ODS demand and supply has been severely impacted by the natural disasters of 1996-1997 that led to lower production and consumption in the subsequent years. The economic recovery after 1997 saw an increase in the production and consumption of ODS in the country. However, the country was able to meet its 1999 freeze commitment as specified in the Montreal Protocol.

11. ODS consumption in 2002 was 2,326 ODP tonnes. This includes 299 ODP tonnes of CFC-11/12 and 2,027 ODP tonnes of CTC (1,843 ODS tonnes). As of 2002, D.P.R. Korea has stopped producing and consuming CFC-113, halon-1211, halon-1301, Methyl Chloroform and Methyl Bromide. The remaining ODS use of CFC-11/12 is in the production of domestic and commercial refrigerators and in the refrigeration servicing sector. CTC is used in solvents cleaning, as process agent and in fumigation. In the country programme update, the only household refrigerator production facility is proposed for conversion from ODS to HFC-134a as the refrigerant.

12. The National Ozone Unit (NOU) of D.P.R. Korea, set up within the National Coordinating Committee for Environment (NCCE), has played a key role in developing and implementing the ODS phase out programme. When the programme was initiated in 1996, with the assistance of UNIDO and UNEP, NCCE was actively involved in implementing and monitoring the ODS phase out projects and were able to develop its management capacities.

13. The original country programme set quantitative intermediate targets for ODS phase-out in Table 3.1. Assessing progress against the Montreal Protocol control measures, D.P.R. Korea has been able to meet the first Montreal Protocol control measure of 1999 freeze level for

Annex A Group I substances. CFC consumption for 1999 was 106 ODP tonnes against the planned target of 287.27 ODP tonnes for 1999 in the original country programme. This represents 24 % of the freeze level (441.67 ODP tonnes) for CFC consumption. CFC production in 1999 was 106 ODP tonnes against the base line of 403.3 ODP tonnes. This is 26 % of the freeze level for CFC production. However, it may be mentioned that this drastic reduction in consumption and production was primarily due to the economic downslide witnessed by the country during 1995-1999.

14. UNEP and UNIDO carried out reviewing and updating of ODS data in February 2000, analyzing the consumption trends in the post 1999 period and the data for 2002, it is presumed that D.P.R. Korea may be able to achieve the 2005 and 2007 reduction targets if relevant phase out activities proposed in the country programme update are implemented.

15. At the 36th Meeting of the Executive Committee (March 2002), D.P.R. Korea's CFC production sector phase out plan for shutdown and dismantling its ODS production facilities was approved. ODS production phase out will be completed as per the Agreement between D.P.R. Korea and the Executive Committee. CFC-113 and MCF production facilities have already been dismantled, showing the proactive actions of the country to phase out the ODS use in the country. The CFC-11/12 and CTC production facilities will be dismantled in 2003 and 2005 respectively. CTC production for solvent, process agent and fumigant will be dismantled in 2005. Future demand for critical/essential uses of Halons is proposed to be met through the halon management plan.

16. The country programme update has been prepared based on a review of the current assessment of the implementation of the original country programme and the Amendment to the original country programme, and a critical assessment of the required policy, strategy and action plan to complete the phase out of remaining ODS in the country. Approved activities will continue to be implemented as designed. These include ongoing institutional strengthening project, solvent sector projects, and ODS production closure project.

17. In addition, D.P.R. Korea has decided to address the remaining consumption of ODS through the following national phase out plans:

- ***National CTC Phase out plan was submitted and approved in December 2003.***
- Refrigerant Management Plan (RMP) submitted to 40th Meeting in July 2003 and the first phase of RMP activities was approved by the Executive Committee.
- Refrigeration manufacturing sector plan submitted to 40th Meeting in July 2003. Halon Management Plan will be developed separately in 2004 to meet the essential uses.

18. These plans will be coordinated and implemented by the NCCE as NCCE will assume the lead role in managing the ODS phase out plan. The country has requested UNIDO and UNEP to assist it in implementing the investment and non-investment components of the above-mentioned plans. NCCE will also be in charge of technical support and technical assistance programme for addressing the residual consumption in a large number of workshops through a combination of awareness-raising, training and financial support. Future servicing needs of all remaining ODS containing equipment is proposed to be met through recovered and recycled ODS under the project activities of National CFCs Recovery and Recycling Network proposed by the RMP or

through imported ODS which will be controlled by Import/export Monitoring and Control measures under the activities of Legislative provisions and regulations of RMP and Customs Training Component of RMP from 2006 to 2010. The proposed Action Plan is presented in Chapter III.

19. The overall targets for phase out in all sectors will be:

Sector	By when
ODS production	2005
Process agent CTC uses	2005
Remaining solvent CTC uses	2005
CTC uses in fumigation	2005
CFC use to meet the refrigeration service requirements	2010
Halon requirements	2010
Conversion of refrigerator and refrigeration compressor production	2005

20. *The estimated incremental cost of remaining unfunded consumption of 1511 ODP tonnes is approximately US\$9,306,845. The costs effectiveness, therefore, is US\$6.16/kg ODP.*

21. This country programme update is the result of assistance received from UNEP and UNIDO. An innovative approach of South-South cooperation was utilized to get hands-on expertise of SEPA China. This also resulted into wider consultation with the stakeholders within the country.