



**United Nations  
Environment  
Programme**

Distr.  
GENERAL

UNEP/OzL.Pro/ExCom/72/21  
14 April 2014

ORIGINAL: ENGLISH



EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Seventy-second Meeting  
Montreal, 12-16 May 2014

**PROJECT PROPOSAL: THE PLURINATIONAL STATE OF BOLIVIA**

This document consists of the comments and recommendation of the Fund Secretariat on the following project proposal:

Phase-out

- HCFC phase-out management plan (stage I, second tranche) Germany/UNDP

**PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS****The Plurinational State of Bolivia**

<b>(I) PROJECT TITLE</b>	<b>AGENCY</b>
HCFC phase out management plan (stage I)	Germany (lead)

<b>(II) LATEST ARTICLE 7 DATA</b>	Year: 2012	6.79 (ODP tonnes)
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<b>(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)</b>							<b>Year: 2012</b>			
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab Use	Total sector consumption	
				Manufacturing	Servicing					
HCFC123					0.02				0.02	
HCFC124					0.01				0.01	
HCFC141b									0	
HCFC141b in Imported Pre-blended Polyol		0.54							0.54	
HCFC142b					0.77				0.77	
HCFC22					5.45				5.45	

<b>(IV) CONSUMPTION DATA (ODP tonnes)</b>			
2009 - 2010 baseline:	6.10	Starting point for sustained aggregate reductions:	6.10
<b>CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)</b>			
Already approved:	2.1	Remaining:	4.0

<b>(V) BUSINESS PLAN</b>		2013	2014	2015	2016	2017	2018	2019	2020	Total
UNDP	ODS phase-out (ODP tonnes)	0	0	5.62	0	0	0	0	0	5.62
	Funding (US \$)	0	0	61,000	0	0	0	0	0	61,000
Germany	ODS phase-out (ODP tonnes)	0.51	0	0.35	0	0	0.16	0	0.17	1.19
	Funding (US \$)	106,785	0	72,885	0	0	33,900	0	35,595	249,165

<b>(VI) PROJECT DATA</b>		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total	
Montreal Protocol consumption limits		n/a	n/a	6.10	6.10	5.49	5.49	5.49	5.49	5.49	3.97	n/a	
Maximum allowable consumption (ODP tonnes)		n/a	n/a	6.10	6.10	5.49	5.49	5.49	5.49	5.49	3.97	n/a	
Agreed Funding (US\$)	Germany	Project costs	94,500	0	94,500	0	64,500	0	0	30,000	0	31,500	315,000
		Support costs	12,285	0	12,285	0	8,385	0	0	3,900	0	4,095	40,950
	UNDP*	Project costs	0	0	0	0	0	0	0	0	0	0	0
		Support costs	0	0	0	0	0	0	0	0	0	0	0
Funds approved by ExCom (US\$)	Project costs	94,500										94,500	
	Support costs	12,285										12,285	
Total funds requested for approval at this meeting (US\$)	Project costs			94,500								94,500	
	Support costs			12,285								12,285	

\*UNDP might implement a project for the phase-out of HCFC-141b contained in imported pre-blended polyols if submitted by the Government of Bolivia during the implementation of stage I of the HPMP.

<b>Secretariat's recommendation:</b>	For blanket approval
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## PROJECT DESCRIPTION

1. On behalf of the Government of the Plurinational State of Bolivia, the Government of Germany, as the lead implementing agency, has submitted to the 72<sup>nd</sup> meeting a request for funding for the second tranche of stage I of the HCFC phase-out management plan (HPMP)<sup>1</sup> at the amount of US \$94,500, plus agency support costs of US \$12,285 for the Government of Germany only. The submission includes a progress report on the implementation of the first tranche of the HPMP and annual implementation plan for 2014 to 2015.

### Progress report on the implementation of the first tranche of the HPMP

2. The Government of the Plurinational State of Bolivia ratified the Beijing Amendment to the Montreal Protocol on 4 September 2013. Since the CFC phase-out, the Government has a national law in place for controlling ODS and meeting the Montreal Protocol phase-out targets. The decree has recently been adjusted through an Administrative Resolution issued by the Vice Ministry of Environment, Biodiversity, Climate Change and Forest Management and Development, to revise the HCFC phase-out schedule from 2040 to 2030. The decree also clarifies the roles of key governmental stakeholders involved in the overall ozone environmental governance, including monitoring and control over HCFC supplies.

3. This decree is under review and adjustment to allow for various HCFC control measures to be enforced. It is pending approval by both national legislative and executive authorities. The decree in place has already allowed the authorities to enforce control measures and limit ODS imports; therefore, pending approval of the revised decree does not compromise the country's ability to meet the HCFC phase-out targets. The country has begun enforcement of the licensing and quota system since 1 January 2013.

4. The following activities have been implemented in the refrigeration and air-conditioning servicing sector: 37 customs officers have been trained on the application of the quota system and detection of ODS; the training manual has been updated to integrate HCFC issues into routine training for customs officers; 24 trainers were trained in April 2014 in good service practices including retrofit to alternative refrigerants and safe handling of hydrocarbon refrigerants. The phase-out of HCFC-141b contained in imported pre-blended polyols in the foam sector is under preparation. Alternative technologies with low global-warming-potential (GWP) are under assessment. It is planned to submit a project proposal for the foam sector to the 73<sup>rd</sup> meeting. The project management and monitoring unit has become operational.

5. As of April 2014, of the US \$94,500 in funds approved for the first tranche, US \$28,725 (30.4 per cent) had been disbursed and US \$45,075 had been committed. The balance of US \$20,700 will be used during the second tranche.

### Annual plan for the second tranche of the HPMP

6. The following activities will be implemented during the second tranche of the HPMP:
- (a) Continuing enforcement of licensing and quota system on imports of HCFCs and HCFC-based equipment; and development of regulatory measures to support HCFC phase-out (use the remaining funds of US \$9,000 from the first tranche);
  - (b) Training of additional 666 custom officers by trainers through established training network (no funds is requested for the second tranche);

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<sup>1</sup> The HPMP for the Plurinational State of Bolivia was approved by the Executive Committee at its 64<sup>th</sup> meeting to reduce HCFC consumption by 35 per cent of the baseline by 1 January 2020.

- (c) Training of additional 150 technicians, through three vocational training institutions, in good servicing practices, refrigerant recovery, reuse and retrofit, and safety issues related to the use of hydrocarbon refrigerants (US \$42,500);
- (d) Training of technicians in the refrigeration assembly sector and provision of tools (using the remaining funds of US \$14,200 from the first tranche);
- (e) Strengthening refrigerant recovery and reclamation system, provision of equipment and training of technicians in refrigeration recovery and reclamation (US \$40,000); and
- (f) Project coordination, monitoring and verification of achievements (US \$12,000).

## SECRETARIAT'S COMMENTS AND RECOMMENDATION

### COMMENTS

#### Operational licensing system

7. In line with decision 63/17, confirmation has been received from the Government that an enforceable national system of licensing and quotas for HCFC imports and exports is in place and that the system is capable of ensuring compliance with the Montreal Protocol HCFC phase-out schedule.

8. The Government had established an HCFC import quota of 6.1 ODP tonnes for 2013; the quota for future years will be set at the maximum allowable levels specified in the Agreement.

#### HCFC consumption

9. The HCFC baseline for compliance has been established at 6.1 ODP tonnes based on the actual consumption reported under Article 7 of the Montreal Protocol as shown in Table 1. When the HPMP was approved, the starting point was established based on the estimated baseline of 4.8 ODP tonnes, plus 0.6 ODP tonnes of HCFC-141b contained in imported pre-blended polyol systems, resulting in 5.4 ODP tonnes. Based on the established baseline, the starting point is 6.7 ODP tonnes, which is 1.3 ODP tonnes higher than that based on the estimated baseline. The change in the baseline for compliance and the starting point will not change the funding level approved in principle for stage I of the HPMP for the Plurinational State of Bolivia.

**Table 1. HCFC consumption in the Plurinational State of Bolivia (2007-2012 Article 7, 2013 estimated)**

HCFC	2007	2008	2009	2010	2011	2012*	2013**	Baseline
<b>Metric tonnes</b>								
HCFC-22	56.1	77.3	59.4	118.3	109.71	99.05	12.83	88.9
HCFC-123	-	-	0.2	0.2	0.37	0.73		0.2
HCFC-124	1.2	-	3.0	0.4	-	0.48		1.7
HCFC-141b	8.1	12.7	7.9	9.8	12.11	4.93		8.9
HCFC-142b	-	4.7	3.7	1.4	1.90	11.86		2.6
Total (mt)	65.4	94.7	74.2	130.1	124.10	117.05		102.3
HCFC-141b in imported polyols (mt)	3.3	5.2	7.9	15.0	8.45	27.64	6.09	5.5
<b>ODP tonnes</b>								
HCFC-22	3.1	4.3	3.3	6.5	6.03	5.45	0.90	4.9
HCFC-123	-	-	0	0	0.01	0.01		0.0
HCFC-124	-	-	0.1	0	-	0.01		0.0
HCFC-141b	0.9	1.4	0.9	1.1	1.33	0.54		1.0
HCFC-142b	-	0.3	0.2	0.1	0.12	0.77		0.2

HCFC	2007	2008	2009	2010	2011	2012*	2013**	Baseline
Total (ODP tonnes)	4.0	6.0	4.4	7.7	7.50	6.79	0.90	6.1
HCFC-141b in imported polyols (ODP t)	0.4	0.6	0.9	1.7	0.93	3.04	0.67	0.6

\*A consumption of 17.97 ODP tonnes (313 mt) was reported for 2012 in the progress report of the first tranche.

\*\*Estimated data, the data needs to be further verified.

10. The Secretariat queried why the estimated 2013 consumption is significantly lower than the baseline. The Government of Germany explained that the country imported 313 mt (17.976 ODP tonnes) of HCFCs in 2012. A significant part of 2012 imports were in stockpile, therefore, the 2013 imports were much less than required. The Secretariat noted that the 2012 reported consumption was 117 mt and not 313 mt and requested the Government of Germany to further verify the data. The Plurinational State of Bolivia provided customs records of all HCFC imports in 2012 which show approximately 313 mt (17.97 ODP tonnes) of HCFCs were imported. The country informed that it will verify the data and decide whether the 2012 Article 7 data needs to be revised. The Secretariat further enquired about the increase of HCFC-142b consumption in 2012. The Government of Germany explained that this was due to the increased imports of refrigerant blends of R-406A (55 per cent of HCFC-22, 41 per cent of HCFC-142b and 4 per cent of R-600a) and R-409A (60 per cent of HCFC-22, 25 per cent of HCFC-124 and 15 per cent of HCFC-142b) which were used as refrigerants to replace CFC-12. The Secretariat also noted that the import of pure HCFC-141b was used as a blowing agent in the polyurethane foam sector and not as a flush agent in the servicing sector as originally identified. After discussion, it was agreed that the phase-out of the consumption of pure HCFC-141b will be addressed in the foam sector plan to be submitted during the implementation of the stage I.

#### Review of the progress report and 2014-2015 tranche implementation plan

12. The Secretariat enquired about the import of the HCFC-141b pre-blended polyols from 2010 to 2013 and whether this use has been controlled through the licensing and quota system. The Government of Germany advised that the import of HCFC-141b pre-blended polyols has been included into the licensing system and all the importers are registered. Since there is no requirement for reduction of this use, the Plurinational State of Bolivia has not set a quota for this kind of import.

13. The Secretariat enquired about the retrofit component and the safe use of hydrocarbons in the country and advised that promotion of hydrocarbons should focus on its replacement with new hydrocarbon-based units rather than retrofitting. The Government of Germany informed that the training in the use of hydrocarbons was provided to the technicians during CFC phase-out. Techniques of safe handling of hydrocarbons, recharging and conversion from CFC-based domestic equipment to hydrocarbons had been developed and integrated into the curriculum of some vocational institutions. Some practical norms and safety measures had been used to guide the handling of hydrocarbons and flammable refrigerants. However, the use of hydrocarbon refrigerants is only limited to training. Currently the hydrocarbon refrigerants and appliances are not available in the market. The replacement technologies are mainly HFCs. The Government of Germany further informed that the main strategy to achieve reduction is through leakage control, not retrofits. The activities in the second tranche will focus on the continuous training of technicians in good servicing practices, refrigerant recovery and reuse. It is expected that this will improve their skills for servicing equipment and reduce the demand of HCFCs in the servicing sector.

#### Revision to the HPMP Agreement

14. The HPMP for the Plurinational State of Bolivia was approved prior to the establishment of the HCFC baseline for compliance. Accordingly, in approving the HPMP the Executive Committee requested the Secretariat to, *inter alia*, update Appendix 2-A (“The targets, and funding”) to the Agreement with the figures for the maximum allowable consumption, and to notify the Executive Committee of the resulting levels accordingly (decision 64/27(e)). Based on the data reported by the Government of the Plurinational

State of Bolivia under Article 7 and its revised phase-out schedule, the relevant paragraphs and appendices of the Agreement have been updated, and a new paragraph has been added to indicate that the updated Agreement supersedes that reached at the 64<sup>th</sup> meeting, as shown in Annex I to the present document. The full revised Agreement will be appended to the final report of the 72<sup>nd</sup> meeting.

Conclusion

15. The Secretariat noted that sufficient level of implementation of the first tranche of the HPMP has been achieved. The import licensing and quota system is operational and will enable the country achieving compliance with the Montreal Protocol’s phase-out schedule for HCFCs. The activities in the servicing sector are progressing and are being implemented in close coordination with stakeholders. As reported by the Government of Germany, training of trainers and technicians and providing them with tools will enable good practices and reduce refrigerant demand. The integration of ODS issues into curriculum of vocational training institutions for customs officers and technicians will ensure continuous capacity building and the long-term sustainability of HCFC reduction achieved in stage I of the HPMP.

**RECOMMENDATION**

16. The Fund Secretariat recommends that the Executive Committee:

- (a) Takes note of the progress report on the implementation of the first tranche of stage I of the HCFC phase-out management plan (HPMP) for the Plurinational State of Bolivia;
- (b) Notes that the Fund Secretariat had updated paragraphs 1 and 2, Appendices 1-A and 2-A of the Agreement between the Government of the Plurinational State of Bolivia and the Executive Committee, based on the established HCFC baseline for compliance, and that a new paragraph 16 had been added to indicate that the updated Agreement superseded that reached at the 64<sup>th</sup> meeting, as contained in Annex I to the present document; and
- (c) Further notes that the revised starting point for sustained aggregate reduction in HCFC consumption was 6.7 ODP tonnes, calculated using actual consumption of 4.4 ODP tonnes and 7.7 ODP tonnes reported for 2009 and 2010, respectively, under Article 7 of the Montreal Protocol, plus 0.6 ODP tonnes of HCFC-141b contained in imported pre-blended polyols.

17. The Fund Secretariat further recommends blanket approval of the second tranche of stage I of the HPMP for the Plurinational State of Bolivia, and the corresponding 2014-2015 tranche implementation plan, with associated support costs at the funding level shown in the table below:

	<b>Project Title</b>	<b>Project Funding (US \$)</b>	<b>Support Cost (US \$)</b>	<b>Implementing Agency</b>
(a)	HCFC phase-out management plan (stage I, second tranche)	94,500	12,285	Germany

**Annex I**

**TEXT TO BE INCLUDED IN THE UPDATED AGREEMENT BETWEEN THE GOVERNMENT OF THE PLURINATIONAL STATE OF BOLIVIA AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUOROCARBONS**  
(Relevant changes are in bold font for ease of reference)

1. This Agreement represents the understanding of the Government of the Plurinational State of Bolivia (the “Country”) and the Executive Committee with respect to the reduction of controlled use of the ozone-depleting substances (ODS) set out in Appendix 1-A (“The Substances”) to a sustained level of ODP tonnes **3.97** ODP tonnes by 1 January 2020 in compliance with Montreal Protocol schedules.

2. The Country agrees to meet the annual consumption limits of the Substances as set out in row 1.2 of Appendix 2-A (“The Targets, and Funding”) in this Agreement as well as in the Montreal Protocol reduction schedule for all Substances mentioned in Appendix 1-A. The Country accepts that, by its acceptance of this Agreement and performance by the Executive Committee of its funding obligations described in paragraph 3, it is precluded from applying for or receiving further funding from the Multilateral Fund in respect to any consumption of the Substances which exceeds the level defined in row 1.2 of Appendix 2-A (“maximum allowable total consumption of Annex C, Group I Substances”; the Target) as the final reduction step under this Agreement for all of the Substances specified in Appendix 1-A, and in respect to any consumption of each of the Substances which exceeds the level defined in rows 4.1.3, 4.2.3, 4.3.3 **and 4.4.3** (phase-out and remaining eligible consumption).

**16. This updated Agreement supersedes the Agreement reached between the Government of the Plurinational State of Bolivia and the Executive Committee at the 64<sup>th</sup> meeting of the Executive Committee.**

**APPENDIX 1-A: THE SUBSTANCES**

Substance	Annex	Group	Starting point for aggregate reductions in consumption (ODP tonnes)
HCFC-22	C	I	<b>4.89</b>
HCFC-141b	C	I	<b>0.97</b>
HCFC-142b	C	I	<b>0.17</b>
HCFC-124*	C	I	<b>0.07</b>
Sub-total	C	I	<b>6.10</b>
HCFC-141b in imported pre-blended polyols	C	I	<b>0.60</b>
Total	C	I	<b>6.70</b>

(\*) Including negligible amounts of HCFC-123 (0.004 ODP tonnes).

**APPENDIX 2-A: THE TARGETS, AND FUNDING**

		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (ODP tonnes)	n/a	n/a	6.10	6.10	5.49	5.49	5.49	5.49	5.49	3.97	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (ODP tonnes)	n/a	n/a	6.10	6.10	5.49	5.49	5.49	5.49	5.49	3.97	n/a
2.1	Lead IA (Germany) agreed funding (US \$)	94,500		94,500		64,500			30,000		31,500	315,000
2.2	Support costs for lead agency (US \$)	12,285		12,285		8,385			3,900		4,095	40,950
2.3	Cooperating IA (UNDP) agreed funding (US \$) *	0		0		0			0		0	0
2.4	Support costs for cooperating agency (US \$)	0		0		0			0		0	0
3.1	Total agreed funding (US \$)	94,500		94,500		64,500			30,000		31,500	315,000
3.3	Total support costs (US \$)	12,285		12,285		8,385			3,900		4,095	40,950
3.3	Total agreed costs (US \$)	106,785		106,785		72,885			33,900		35,595	355,950
4.1.1	Total phase-out of HCFC-22 under this Agreement (ODP tonnes)											1.89
4.1.2	Phase-out of HCFC-22 in previously approved projects (ODP tonnes)											n/a
4.1.3	Remaining eligible consumption for HCFC-22 (ODP tonnes)											3.00
4.2.1	<b>Total phase-out of HCFC-141b under this Agreement (ODP tonnes)</b>											<b>0.00</b>
4.2.2	<b>Phase-out of HCFC-141b in previously approved projects (ODP tonnes)</b>											n/a
4.2.3	<b>Remaining eligible consumption for HCFC141b (ODP tonnes)</b>											<b>0.97</b>
4.3.1	<b>Total phase-out of HCFC-142b and HCFC-124 under this Agreement (ODP tonnes)</b>											<b>0.24</b>
4.3.2	<b>Phase-out of HCFC-142b and HCFC-124 in previously approved projects (ODP tonnes)</b>											n/a
4.3.3	<b>Remaining eligible consumption for HCFC-142b and HCFC-124 (ODP tonnes)</b>											<b>0.00</b>
4.4.1	Total phase-out of HCFC-141b in the imported pre-blended polyols agreed to be achieved under this Agreement (ODP tonnes)											0.00
4.4.2	Phase-out of HCFC-141b in the imported pre-blended polyols to be achieved in previously approved projects (ODP tonnes)											n/a
4.4.3	Remaining eligible consumption for HCFC-141b in the imported pre-blended polyols (ODP tonnes)											0.60

\*UNDP might implement a project for the phase-out of HCFC-141b contained in imported pre-blended polyols if submitted by the Government of Bolivia during the implementation of stage I of the HPMP.