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EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Seventy-sixth Meeting  
Montreal, 9-13 May 2016

**PROJECT PROPOSAL: SRI LANKA**

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

Phase-out

- HCFC phase-out management plan (stage I, third tranche) UNDP and UNEP

## PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

### Sri Lanka

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
HCFC phase out plan (Stage I)	UNDP (lead), UNEP	64 <sup>th</sup>	35% by 2020

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2015	10.31 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2015	
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-123									
HCFC-124									
HCFC-141b									
HCFC-141b in Imported Pre-blended Polyol		1.03							1.03
HCFC-142b									
HCFC-22					10.3				10.3
HCFC-225									

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	13.9	Starting point for sustained aggregate reductions:	14.1
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	4.76	Remaining:	9.14

(V) BUSINESS PLAN		2016	2017	2018	2019	2020	Total
UNEP	ODS phase-out (ODP tonnes)	0.6				0.2	0.7
	Funding (US \$)	84,863				28,137	113,000
UNDP	ODS phase-out (ODP tonnes)	0.9	0.0	0.0	0.0	0.2	1.2
	Funding (US \$)	137,348	0	0	0	33,433	170,781

(VI) PROJECT DATA		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total	
Montreal Protocol consumption limits		n/a	n/a	n/a	13.9	13.9	12.5	12.5	12.5	12.5	12.5	9.1	n/a	
Maximum allowable consumption (ODP tonnes)		n/a	n/a	n/a	13.9	13.9	12.5	12.5	12.5	12.5	12.5	9.1	n/a	
Agreed funding (US\$)	UNDP	Project costs	180,000	0	0	60,000	0	0	127,766	0	0	0	31,100	398,866
		Support costs	13,500	0	0	4,500	0	0	9,582	0	0	0	2,333	29,915
	UNEP	Project costs	125,000	0	0	24,000	0	0	75,100	0	0	0	24,900	249,000
		Support costs	16,250	0	0	3,120	0	0	9,763	0	0	0	3,237	32,370
Funds approved by ExCom (US\$)	Project costs	305,000	0	0	84,000	0	0	0.0	0	0	0	0	389,000	
	Support costs	29,750	0	0	7,620	0	0	0.0	0	0	0	0	37,370	
Total funds requested for approval at this meeting (US\$)	Project costs	0	0	0	0	0	0	202,866	0	0	0	0	202,866	
	Support costs	0	0	0	0	0	0	19,345	0	0	0	0	19,345	

Secretariat's recommendation:	Blanket approval
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## PROJECT DESCRIPTION

1. On behalf of the Government of Sri Lanka, UNDP as the lead implementing agency, has submitted to the 76<sup>th</sup> meeting a request for funding for the third tranche of stage I of the HCFC phase-out management plan (HPMP), at a total cost of US \$222,211, consisting of US \$127,766, plus agency support costs of US \$9,582 for UNDP, and US \$75,100, plus agency support costs of US \$9,763 for UNEP. The submission includes a progress report on the implementation of the second tranche, the verification report on HCFC consumption and the tranche implementation plan for 2016 to 2019.

### Report on HCFC consumption

#### *HCFC consumption*

2. The Government of Sri Lanka reported a consumption of 10.31 ODP tonnes of HCFC in 2015 under Article 7, which is approximately 26 per cent below the HCFC baseline for compliance. The 2011-2015 HCFC consumption is shown in Table 1.

**Table 1. HCFC consumption in Sri Lanka (2011-2015 Article 7 data)**

HCFC	2011	2012	2013	2014	2015	Baseline
<b>Metric tonnes</b>						
HCFC-22	271.18	298.35	227.37	211.22	187.45	218.4
HCFC-123			0.4	2.09		0.0
HCFC-141b	12.87	14.61	7.74	11.21		16.8
<b>Total (mt)</b>	<b>284.05</b>	<b>312.96</b>	<b>235.51</b>	<b>224.52</b>	<b>187.45</b>	<b>235.2</b>
HCFC-141b in imported pre-blended polyol*	5.09	16.88	11.33	21.68	9.41	
<b>ODP tonnes</b>						
HCFC-22	14.91	16.41	12.50	11.62	10.31	12.01
HCFC-123			0.01	0.04	0.0	0.0
HCFC-141b	1.42	1.61	0.85	1.23	0.0	1.85
<b>Total (ODP tonnes)</b>	<b>16.33</b>	<b>18.02</b>	<b>13.37</b>	<b>12.89</b>	<b>10.31</b>	<b>13.90</b>
HCFC-141b in imported pre-blended polyol*	0.56	1.86	1.25	2.38	1.03	

\*Country programme data.

3. The consumption in Sri Lanka has been decreasing since 2013. The use of bulk HCFC-141b for flushing during servicing of refrigeration and air-conditioning (RAC) servicing and for foam manufacturing ceased in 2014.

#### *Verification report*

4. The verification report confirmed that the Government is implementing a licensing and quota system for HCFC imports and exports and that the total consumption of HCFCs for 2015 was 10.31 ODP tonnes. The verification concluded that the import and export licensing and quota system can control the quantities of legitimate HCFC imports. The report includes recommendations to further improve its operation, including controls on the import of equipment containing HCFC.

#### *Country programme (CP) implementation report*

5. The Government of Sri Lanka reported HCFC sector consumption data under the 2015 CP implementation report which is consistent with the data reported under Article 7.

Progress report on the implementation of the second tranche of the HPMP

*Legal framework*

6. The Government, through the National Ozone Unit (NOU), has implemented several regulatory measures including the control of the import and export of HCFCs and HCFC blends from 1 January 2013. The import of HCFC-141b in bulk and contained in imported pre-blended polyols has been banned since 1 January 2015. A new notification for a higher import duty for new HCFC equipment and lower import duty for those using a non-HCFC alternative is being drafted, and is expected to be in place before the end of 2016.

7. During the implementation of the second tranche, priority was given to training of customs and enforcement officers on the application of the Harmonized Item Description and Coding System (HS) for HCFCs. Three trainings workshops were completed where 124 customs and enforcement officers were trained.

*Manufacturing sector*

Foam

8. Stage I of the HPMP for Sri Lanka included funding for the conversion of one enterprise (Regnis Lanka PLC) that produces rigid foam using HCFC-141b for insulation in refrigerators, to cyclopentane. The enterprise completed its conversion in December 2014 resulting in a phase out of 4.1 mt (0.45 ODP tonnes) of HCFC-141b. In addition, one other ineligible enterprise using HCFC-141b in its production of insulation panels and roof tiles also phased out the use of this substance by converting to cyclopentane at its own cost, as of December 2015. As a result of these conversions, the country has fully phased-out the use of HCFC-141b contained in imported pre-blended polyols.

Air-conditioning equipment assembly

9. Stage I included technical assistance for four enterprises assembling domestic air-conditioners using imported reconditioned parts. However, because of a ban imposed by the Government on the import of used or reconditioned equipment from 1 July 2012, these enterprises stopped their assembly operations of such equipment and switched their business to the import of brand new equipment. This was confirmed through field visits conducted in 2013.

10. UNDP indicated that the Government had exercised the flexibility in the Agreement to reprogramme the US \$49,000 allocated for this component, for technical workshops for the RAC sector, focusing on the promotion of low-global warming potential (GWP) technologies. The report indicated that two workshops were completed in 2013 and early 2014, targeting replacements for the use of HCFC-141b in servicing, and encouraging the use of alternatives in large RAC equipment such as chillers with capacity above 5 tonnes that require significant HCFC for servicing and maintenance during their long lifetime.

*Refrigeration servicing sector*

11. The main activities implemented include:

- (a) A train-the-trainer programme including provision of four sets of training equipment (i.e. recovery equipment, gauges, clamps, vacuum pumps, etc), which resulted in 27 trainers trained;

- (b) Eleven trainings workshops on good servicing practices where 500 technicians were trained;
- (c) Introduction of alternatives to HCFC-141b for flushing (i.e. hexane with dry nitrogen, and alcohol for cleaning of electronic parts);
- (d) Monitoring of the established reclaim centres that reported reclaiming and re-using around 72 kg of HCFC-22;
- (e) A replacement incentive scheme for HCFC-based RAC equipment which will continue through 2016 and will result in replacements of equipment with low-GWP alternatives for selected beneficiaries;
- (f) Awareness and information outreach activities on HPMP technology including a conference for RAC equipment importers and service sector.

*Project implementation and monitoring unit (PMU)*

12. The National Ozone Unit (NOU) continues its role as the overall unit responsible for planning activities, and developing strategies under each sub-component of HPMP; coordinating closely with industry, technical institution, other enforcement institutes of Government in implementing sub-activities; developing and maintaining a database of HCFC supplies and users.

Level of fund disbursement

13. As of March 2016, of the US \$389,000 so far approved, US \$312,250 had been disbursed (US \$171,715 for UNDP and US \$140,535 for UNEP). The balance of US \$76,750 will be disbursed in 2016 (Table 2).

**Table 2. Financial report of stage I of the HPMP for Sri Lanka (US \$)**

Agency	First tranche		Second tranche		Total approved	
	Approved	Disbursed	Approved	Disbursed	Approved	Disbursed
UNDP	180,000	149,836	60,000	21,879	240,000	171,715
UNEP	125,000	125,000	24,000	15,535	149,000	140,535
<b>Total</b>	<b>305,000</b>	<b>274,836</b>	<b>84,000</b>	<b>37,414</b>	<b>389,000</b>	<b>312,250</b>
<b>Disbursement rate (%)</b>	90.1		44.5		80.3	

Implementation plan for the third tranche of the HPMP

14. The following activities will be implemented:
- (a) Customs and enforcement officers training for an additional 80 customs officers and providing 2 sets of identifiers (UNEP) (US \$40,000);
  - (b) Providing 10 new refrigerant analysers to support the established reclaim centres as part of the technical assistance promoting refrigerant reclamation, and monitoring their operation (UNDP) (US \$50,000);
  - (c) Two workshops on the equipment replacement programme, and identification of beneficiaries to replace HCFC-22 equipment with low-GWP alternatives, for users of HCFC-22-based refrigeration equipment in larger RAC applications (UNDP)

(US \$50,000);

- (d) Twelve training workshops on good refrigeration practices for industry associations and the service sector to train 240 technicians, (UNEP) (US \$20,000) and
- (e) Awareness-raising activities targeted at end-users to purchase zero-ODP, low-GWP domestic RAC appliances (UNEP) (US \$15,100); and
- (f) Project management and monitoring (UNDP) (US \$27,766).

## SECRETARIAT'S COMMENTS AND RECOMMENDATION

### COMMENTS

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

##### *Legal framework*

15. The Government of Sri Lanka has already issued HCFC import quotas for 2016 at 11.28 ODP tonnes.

##### *Manufacturing sector*

16. The Secretariat inquired about the utilization of the funds allocated for technical assistance for assemblers, and how the two workshops completed have contributed to the phase-out in this sector, noting that, the HCFC-22 being used by the assemblers has already been phased-out when they ceased their assembly operations. It was explained that through these workshops the NOU was able to promote adoption of HCFC-free alternative technologies which are being used in the country and is currently the technology of choice by enterprises installing and servicing larger RAC equipment. In addition, the workshops also provided opportunities for sharing information on other low-GWP alternatives with these users, and encouraged them to replace their current equipment. UNDP emphasised that low-GWP alternatives are at initial stages of adoption in Sri Lanka, and it is expected that these activities would assist in faster uptake of these new alternative in future.

##### *Refrigeration servicing sector*

17. In responding to a question regarding the change in approach from the earlier proposed retrofit incentive scheme which is now designed as a pilot replacement scheme, UNDP explained that the earlier scheme was meant to demonstrate retrofit options and disseminate information on HCFC-free climate friendly alternatives (i.e. HFC-32 and propane air-conditioning) under local conditions, integrated with the recovery and reclaim programme. The new replacement scheme would provide an incentive to replace current HCFC-22 equipment thereby limiting demand. The criteria for participation in the incentive programme and the identification of beneficiaries has already been finalised by the NOU.

#### Conclusion

18. The Secretariat noted that Sri Lanka continues to be in compliance with HCFC consumption targets, has an effective licensing and quota system, and continues to progress in the implementation of the activities approved under stage I. The completion of the funded investment project has resulted in the phase out of all HCFC-141b in the country, and a ban on the import of HCFC-141b in bulk and in imported pre-bended polyols has been in place since January 2015.

**RECOMMENDATION**

19. The Fund Secretariat recommends that the Executive Committee takes note of the progress report on the implementation of the second tranche of stage I of the HCFC phase-out management plan of (HPMP) for Sri Lanka; and further recommends blanket approval of the third tranche of stage I of the HPMP for Sri Lanka, and the corresponding 2016-2019 tranche implementation plan, at the funding levels 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, third tranche)	127,766	9,582	UNDP
(b)	HCFC phase-out management plan (stage I, third tranche)	75,100	9,763	UNEP