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EXECUTIVE COMMITTEE OF  
THE MULTILATERAL FUND FOR THE  
IMPLEMENTATION OF THE MONTREAL PROTOCOL  
Eighty-first Meeting  
Montreal, 18-22 June 2018

**PROJECT PROPOSAL: SAO TOME AND PRINCIPE**

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, fourth tranche)

UNEP

**PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS**  
**Sao Tome and Principe**

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
HCFC phase out plan (Stage I)	UNEP	63 <sup>rd</sup>	35% by 2020

<b>(II) LATEST ARTICLE 7 DATA (Annex C Group I)</b>	Year: 2017	0.08 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2017	
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-123									
HCFC-124									
HCFC-141b									
HCFC-142b									
HCFC-22					0.08				0.08

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	2.2	Starting point for sustained aggregate reductions:	0.15
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	0.05	Remaining:	0.1

(V) BUSINESS PLAN		2018	2019	2020	Total
UNEP	ODS phase-out (ODP tonnes)	0.01	0.00	0.01	0.02
	Funding (US \$)	33,900		18,080	51,980

(VI) PROJECT DATA			2011	2012	2013	2014	2015*	2016	2017	2018	2019	2020	Total
Montreal Protocol consumption limits			n/a	n/a	2.2	2.2	2.0	2.0	2.0	2.0	2.0	1.4	n/a
Maximum allowable consumption (ODP tonnes)			n/a	n/a	0.15	0.15	0.14	0.14	0.14	0.14	0.14	0.10	n/a
Agreed Funding (US\$)	UNEP	Project costs	44,000	0	35,000	0	35,000		0	30,000	00	16,000	160,000
		Support costs	5,720	0	4,550	0	4,550	0	0	3,900	0	2,080	20,800
Funds approved by ExCom (US\$)	UNEP	Project Costs	44,000	0	35,000	0	0	35,000	0	0	0	0	114,000
		Support Costs	5,720	0	4,550	0	0	4,550	0	0	0	0	14,820
Total funds requested for approval at this meeting (US\$)	UNEP	Project Costs	0	0		0	0		0	30,000	0	0	30,000
		Support Costs	0	0		0	0		0	3,900	0	0	3,900

\*Third tranche request planned for 2015 but submitted to the 76<sup>th</sup> meeting in 2016.

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

1. On behalf of the Government of Sao Tome and Principe, UNEP as the designated implementing agency, has submitted a request for funding for the fourth tranche of stage I of the HCFC phase-out management plan (HPMP), at the amount of US \$30,000, plus agency support costs of US \$3,900.<sup>1</sup> The submission includes a progress report on the implementation of the third tranche and the tranche implementation plan for 2018 to 2020.

### Report on HCFC consumption

2. The Government of Sao Tome and Principe reported a consumption of 0.08 ODP tonnes of HCFC in 2017, which is about 96 per cent below the HCFC baseline for compliance. The 2013-2017 HCFC consumption is shown in Table 1.

**Table 1. HCFC consumption in Sao Tome and Principe (2013-2017 Article 7 data)**

HCFC-22	2013	2014	2015	2016	2017	Baseline
Metric tonnes	1.9	1.7	1.6	1.5	1.4	38.95
ODP tonnes	0.1	0.09	0.09	0.08	0.08	2.2

3. HCFC consumption shows a decreasing trend since 2013 due to implementation of stage I of the HPMP and the adoption of alternatives.

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

4. The Government of Sao Tome and Principe reported HCFC sector consumption data under the 2017 country programme implementation report, which is consistent with the data reported under Article 7 of the Montreal Protocol.

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

#### *Legal framework*

5. The decree to facilitate the control, commercialization and use of ODS including HCFCs was approved by the Government in 2007, and includes the mechanisms for granting an import authorization, and establishing import quotas.

#### *Refrigeration servicing sector*

6. The main activities implemented include:

- (a) Two workshops to train a total of 48 customs and other law enforcement officers in the identification of suspicious shipments and identification of imported refrigerants, and the purchase of two refrigerant identifiers;
- (b) Three workshops for a total of 63 refrigeration technicians on good practices, recovery and recycling techniques and safe handling of hydrocarbon refrigerants; and
- (c) The recruitment of two consultants (one refrigeration and one customs expert) to assist the national ozone unit (NOU).

<sup>1</sup> As per the letter of 27 March 2018, from the Ministry of Infrastructure, Natural Resources, and the Environment of Sao Tome and Principe, to the Secretariat.

*Project implementation and monitoring unit (PMU)*

7. The NOU monitored the effectiveness of the implementation of all the HPMP activities, the collection of relevant data and preparation of reports on implementation of the HPMP.

Level of fund disbursement

8. As of March 2018, of the US \$114,000 approved so far, US \$109,000 had been disbursed as shown in Table 2. The balance of US \$5,000 is obligated under an agreement with the country and will be disbursed by 31 July 2018.

**Table 2. Financial report of stage I of the HPMP for Sao Tome and Principe (US \$)**

Agency	First tranche		Second tranche		Third tranche		Total approved	
	Approved	Disbursed	Approved	Disbursed	Approved	Disbursed	Approved	Disbursed
UNEP	44,000	44,000	35,000	35,000	35,000	30,000	114,000	109,000
Disbursement rate (%)	100		100		86		96	

Implementation plan for the fourth tranche of the HPMP

9. The following activities will be implemented between July 2018 and June 2020:
- (a) Two training workshops for at least 20 customs officers and 10 environmental inspectors (US \$10,000);
  - (b) Two workshops for at least 50 refrigeration technicians on good service practices, recovery and recycling technics as well as safe handling of hydrocarbon refrigerants (US \$10,000); and
  - (c) Recruitment of two consultants to assist the NOU in monitoring the effective implementation of the HPMP (US \$10,000).

**SECRETARIAT’S COMMENTS AND RECOMMENDATION**

**COMMENTS**

Verification report on HCFC consumption

10. Funding for the third tranche of the HPMP, which was withheld pending the Secretariat’s review of the verification report of HCFC consumption for 2013, 2014 and 2015, was disbursed to UNEP in November 2016. In response to the verification report’s recommendations, UNEP informed the Secretariat that the Government plans to: continue training of refrigeration technicians in good refrigeration practices focusing on the introduction of technologies with zero ODP, high energy efficiency and low-global-warming potential (low-GWP); continue training enforcement officers to identify HCFCs and HCFC-based equipment and the dissemination of ODS policy and regulations; hire an international consultant to train enforcement officers on the recent revisions of the Harmonized Commodity Description and Coding Systems (HS); and, continue implementing training and awareness activities targeting stakeholders.

11. The verification report recommended that enforcement officers need new generation refrigerant identifiers and would benefit from training on the identification of different refrigerants. UNEP noted that

in 2018, the country's Professional Training Center, built with support from the Brazilian Cooperation Agency (ABC),<sup>2</sup> had provided four multi-refrigerant identifiers and a further two identifiers would be provided in 2019.

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

#### *Legal framework*

12. The Government of Sao Tome and Principe has already issued and HCFC import quota for 2018 at 0.08 ODP tonnes, which is lower than the maximum allowable consumption target in the Agreement.

13. With regard to the country's policy to promote climate-friendly alternatives to HCFCs, UNEP informed that the Government is planning to update its existing legislation to enforce monitoring of ODS alternatives. The Government is promoting the use of economical viable energy-efficient/low-GWP alternatives technologies. While the national ozone committee had recommended the introduction of financial incentives, the Ministry of Environment was reluctant, as the costs of incentives were not well understood; a more integrated approach through the Central African Economic and Monetary Community would be considered.

#### *Refrigeration servicing sector*

14. With regard to the introduction of a mandatory scheme for certifying refrigeration technicians, UNEP reported that the main barriers were: the lack of expertise and infrastructure and the need for human and financial resources to set-up certification rules and legislation; the establishment of a certification body, and an independent monitoring mechanism; a registry; and the additional cost for technicians to renew periodically their certification.

15. In order to ensure the long-term sustainability of training in good practices of refrigeration and in the safe use of flammable or toxic alternatives, the Government is planning to enrol all unskilled technicians in the refrigeration association so they can all benefit from training programmes and be monitored. The vocational centre is currently providing refresher training to 12 RAC technicians from the main RAC association; furthermore, the centre plans to equip the RAC association with refillable refrigerant recovery cylinders and a recovery unit.

16. With regard to other challenges in the refrigeration sector, UNEP reported that Sao Tome and Principe lacked of incentives for recovery and recycling and recalled that the country does not have an investment project to cover any costs related to recovery and recycling. However, the NOU wants to build on the experience of a recovery and recycling pilot project that is underway at the country's Professional Training Center.

### Conclusion

17. The Government of Sao Tome and Principe has been enforcing its HCFC import and export licensing and quota system and the consumption reported under Article 7 at 0.08 ODP tonnes for 2017 was 96 per cent below the baseline for compliance. The activities programmed under the third tranche were implemented and achieved the targets of training 45 customs officers and 60 RAC technicians. The level of disbursement is almost 96 per cent of the funds approved so far. The activities planned under the fourth

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<sup>2</sup> The Professional Training Center was built in 2014 with the support of the Brazilian Cooperation Agency (ABC) in coordination with the Ministry of Education and the Ministry of Labor and Professional Training. The vocational centre provides youth and women with courses in information technology, civil construction, electrical engineering, hydraulics, and auto mechanics.

tranche will further strengthen the refrigeration servicing sector to ensure the long-term sustainability of stage I of the HPMP.

**RECOMMENDATION**

18. The Fund Secretariat recommends that the Executive Committee takes note of the progress report on the implementation of the third tranche of stage I of the HCFC phase-out management plan of (HPMP) for Sao Tome and Principe; and further recommends blanket approval of the fourth tranche of stage I of the HPMP for Sao Tome and Principe, and the corresponding 2018-2020 tranche implementation plan, 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, fourth tranche)	30,000	3,900	UNEP