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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Eightieth Meeting
Montreal, 13-17 November 2017

PROJECT PROPOSAL: COSTA RICA

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) UNDP

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Costa Rica

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
HCFC phase out plan (Stage I)	UNDP (lead)	64 th	35% by 2020

(II) LATEST ARTICLE 7 DATA (ANNEX C GROUP I)	YEAR: 2016	10.89 (ODP tonnes)
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP TONNES)								Year: 2016	
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-141b					2.23				2.23
HCFC-141b in imported pre-blended polyol		1.27							1.27
HCFC-142b					0.10				0.10
HCFC-22					8.55				8.55

(IV) CONSUMPTION DATA (ODP TONNES)			
2009 - 2010 baseline:	14.1	Starting point for sustained aggregate reductions:	32.21
CONSUMPTION ELIGIBLE FOR FUNDING (ODP TONNES)			
Already approved:	18.93	Remaining:	13.28

(V) BUSINESS PLAN		2017	2018	2019	TOTAL
UNDP	ODS phase-out (ODP tonnes)	1.7	0.0	0.9	2.7
	Funding (US \$)	113,950	0	60,200	174,150

(VI) PROJECT DATA		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	TOTAL	
Montreal protocol consumption limits		n/a	n/a	14.1	14.1	12.7	12.7	12.7	12.7	12.7	9.17	n/a	
Maximum allowable consumption (ODP tonnes)		n/a	n/a	14.1	14.1	12.7	12.7	12.7	12.7	12.7	9.17	n/a	
Agreed funding (US \$)	UNDP	Project costs	761,523	0	168,000	0	62,000	0	106,000	0	56,000	0	1,153,523
			Support costs	57,114	0	12,600	0	4,650	0	7,950	0	4,200	0
Funds approved by ExCom (US \$)		Project costs	761,523	0	168,000	0	62,000	0	0	0	0	0	991,523
		Support costs	57,114	0	12,600	0	4,650	0	0	0	0	0	74,364
Total funds requested for approval at this meeting (US \$)		Project costs	0	0	0	0	0	0	106,000	0	0	0	106,000
		Support costs	0	0	0	0	0	0	7,950	0	0	0	7,950

Secretariat's recommendation:	Blanket approval
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PROJECT DESCRIPTION

1. On behalf of the Government of Costa Rica, UNDP 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 \$106,000, plus agency support costs of US \$7,950.¹ The submission includes a progress report on the implementation of the third tranche, the verification report on HCFC consumption and the tranche implementation plan for 2017 to 2018.

Report on HCFC consumption

HCFC consumption

2. The Government of Costa Rica reported a consumption of 10.89 ODP tonnes of HCFC in 2016, which was 14.2 per cent lower than the limits established in the Agreement and 22.8 per cent lower than the baseline. The 2012-2016 HCFC consumption is shown in Table 1.

Table 1. HCFC consumption in Cost Rica (2012-2016 Article 7 data)

HCFC	2012	2013	2014	2015	2016	Baseline
Metric tonnes						
HCFC-22	308.67	178.16	178.16	155.69	155.4	181.88
HCFC-123	0.54	2.78	2.91	2.45	0.00	0.36
HCFC-124	2.31	0.83	0.91	0.67	0.45	3.95
HCFC-141b	48.62	23.41	23.15	19.93	20.3	32.59
HCFC-142b	9.36	2.42	2.43	2.1	1.5	6.17
HCFC-225ca	0.00	0.00	0.9	0.00	0.00	-
HCFC-225cb	0.00	0.00	0.9	0.00	0.00	-
Sub-total (mt)	369.50	207.60	209.36	180.84	177.65	224.94
HCFC-141b in imported pre-blended polyols*	0.00	0.00	10.40	9.06	11.5	164.64**
Total (mt)	527.41	207.60	219.76	189.90	189.15	389.58
ODP tonnes						
HCFC-22	16.98	9.80	9.80	8.56	8.55	10.00
HCFC-123	0.01	0.06	0.06	0.05	0.00	0.01
HCFC-124	0.05	0.02	0.02	0.01	0.01	0.09
HCFC-141b	5.35	2.58	2.55	2.19	2.23	3.58
HCFC-142b	0.61	0.16	0.16	0.14	0.10	0.40
HCFC-225ca	0.00	0.00	0.02	0.00	0.00	-
HCFC-225cb	0.00	0.00	0.03	0.00	0.00	-
Sub-total (ODP tonnes)	23.00	12.60	12.63	10.96	10.89	14.1
HCFC-141b in imported pre-blended polyols*	0.00	0.00	1.14	1.00	1.27	18.11**
Total (ODP tonnes)	40.37	12.60	13.77	11.96	12.16	32.21

*Based on CP data

**Average consumption between 2007 and 2009 in line with decision 61/47.

3. The decrease in HCFC consumption is due to the implementation of the activities related to the HPMP and the strict implementation of the import licensing and quota system.

Country programme (CP) implementation report

4. The Government of Costa Rica reported HCFC sector consumption data under the 2016 CP implementation report which is consistent with the data reported under Article 7 of the Montreal Protocol.

¹ As per the letter of 27 September 2017 from the Ministry of Environment and Energy of Costa Rica to UNDP.

Verification report

5. The verification report confirmed that the Government is implementing a licensing and quota system for HCFC imports and exports, that the total consumption of HCFCs for 2016 was 10.89 ODP tonnes, and that a regulatory framework is in place to fulfill its commitments under Montreal Protocol.

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

Legal framework

6. The licensing system for import of HCFCs and HFCs has been operational since 2010, and the HCFC quota system since 2013. An online system (TICA) to facilitate and strengthen monitoring of import of ODS and other refrigerants (including HFCs) was established prior to the implementation of the third tranche. The system allows cross-checking of information on ODS import requests, quotas and licenses by customs, importers and other institutions involved in ODS control. Training was provided for 75 customs and enforcement officers to continue implementation of the online monitoring system.

7. The Ministry of Environment and Energy (MINAE) and the National Ozone Unit (NOU) determines the national quota and distributes it to each importer taking into consideration their historical import of HCFCs. The total quotas issued for 2017 were at 10.61 ODP tonnes.

Manufacturing sector

8. The introduction of cyclopentane technology at Atlas Industrial, SA (Mabe) that phased out 14.4 ODP tonnes of HCFC-141b in imported pre-blended polyols was completed prior to the implementation of the third tranche, in July 2013.

Refrigeration servicing sector

9. Training on good refrigeration practices was provided to 258 refrigeration and air-conditioning (RAC) technicians through partnerships with the National Institute of Learning (INA), the Institute of Electricity (ICE), and the Chamber of Industry. The engineering schools of the University of Costa Rica (UCR) and the Technological Institute of Costa Rica (TEC) formed a commission to integrate issues of refrigeration servicing into their relevant curricula. A total of 140 technicians participated in workshops providing information on activities in the HPMP and ODS regulation, and 1,223 RAC technicians were certified. The ODS recovery network was provided with five recovery units and 15 tanks, and has reported the recovery of 175 kg of refrigerant. With the support of a training institution from Brazil (SENAI) and Colombia (SENA), a new curriculum on "Industrial Refrigeration and Air-Conditioning with Ammonia" was developed and training was organized for five instructors from INA.

10. The pilot project demonstrating the use of ammonia and CO₂-based refrigeration in a food supplier for supermarkets (PINOVA) has completed the design of the installation, purchased and installed the equipment in the beneficiary enterprise, and the piping for ammonia and CO₂ is currently being undertaken. Project implementation will continue during the next tranche, where results of the demonstration project will be disseminated to encourage other users to change to this technology.

Project implementation and monitoring unit (PMU)

11. The NOU is responsible for project management and monitoring of the HPMP, with the support of an inter-agency commission led by the Department of Environment and other agencies. The commission provides guidance to the NOU for its work schedule related to HPMP implementation, and allocation of

tasks and responsibilities. The NOU leads interaction with stakeholders on project implementation, information outreach and day-to-day management of HPMP activities.

Level of fund disbursement

12. As of September 2017, of the US \$991,523 approved so far, US \$967,427 had been disbursed as shown in Table 2. The balance of US \$24,096 will be disbursed in 2017-2018.

Table 2. Financial report of stage I of the HPMP for Costa Rica (US \$)

Agency	First and second tranches		Third tranche		Total approved	
	Approved	Disbursed	Approved	Disbursed	Approved	Disbursed
UNDP	929,523	929,523	62,000	37,904	991,523	967,427
Disbursement rate (%)	100.0		61.1		97.6	

Implementation plan for the fourth tranche of the HPMP

13. The following activities will be implemented in 2017 and 2018:

- (a) Training of 80 customs officers on ODS regulations (US \$10,000);
- (b) Training of 150 RAC technicians on good refrigeration practices including ammonia-based systems, development of a new model for technicians certification system, two training sessions for university professors on the use of natural refrigerants (CO₂, HC, NH₃), continuation of the pilot demonstration project to support the adoption of non-ODS low-GWP technologies (ammonia and CO₂) for a food supplier for supermarkets (PINOVA), and support to engineering schools in the use of natural refrigerants (US \$59,000);
- (c) Develop a system of managing unwanted ODS, including HCFCs (US \$14,000);
- (d) Complete the development of a system of eco-labelling for energy-efficient RAC equipment by having at least four types of systems certified and getting the commitment of four companies to import eco-efficient equipment (funding approved from the third tranche); and
- (e) Project implementation and monitoring (US \$23,000).

SECRETARIAT’S COMMENTS AND RECOMMENDATION

COMMENTS

Report on HCFC consumption

14. In reviewing the verification report, the Secretariat noted minor differences between the customs data and Article 7 data due to blends not being recorded correctly at customs. While these differences did not influence the overall consumption verified, UNDP clarified that the country will address the issue through future customs trainings.

Progress report on the implementation of the third tranche of the HPMP*Legal framework*

15. The Government of Costa Rica will issue HCFC import quotas for 2018 at 10.88 ODP tonnes, lower than the maximum allowable consumption under the Montreal Protocol (12.69 ODP tonnes), and its Agreement with the Executive Committee.

Refrigeration servicing sector

16. The Secretariat requested additional information on the progress of training with ammonia-based systems, *vis-à-vis* the new curricula developed in 2015, and its long-term sustainability. UNDP clarified that Costa Rica is aiming to reach carbon neutrality by 2021; therefore the uptake of these alternatives is considered a priority and the technicians need training in servicing such equipment. Furthermore, the Government is working with importers, equipment suppliers and servicing enterprises to facilitate and encourage adoption of low-GWP technologies.

17. The Government believes that the specialty courses like the Industrial Refrigeration and Air-Conditioning prepared at INA with support of SENA (Colombia) will ensure the sustainability of training courses, as it will allow technicians to get new information on new and emerging technologies. In addition, these trainings will support the certification system for technicians in the country.

18. The Secretariat sought clarification on the pilot demonstration project with PINOVA that is currently on going, the sustainability of the technology selected, and whether the beneficiary enterprise would provide co-financing. UNDP confirmed that PINOVA has provided co-funding even at the development stage, and thereby demonstrating its strong commitment to supporting the adoption of the proposed technology.

Conclusion

19. The consumption of Costa Rica in 2016 was 14.2 per cent lower than the limits established in the Agreement and 22.8 per cent lower than the baseline. The Government has established an effective quota and licensing system to control HCFCs, supported by an online system. The activities so far implemented in the servicing sector particularly the integration of good refrigeration practices in the curriculum of technical and engineering universities, the training of technicians and the recovery and recycling scheme, including those planned under the fourth tranche will ensure the long-term sustainability of the activities, and continue to enable the country to meet its compliance obligations under the Montreal Protocol. The Secretariat further noted that the pilot project for one beneficiary enterprise (PINOVA) to support the uptake of alternative low-GWP refrigerants is receiving co-financing from the enterprise thereby demonstrating its commitment to supporting the adoption of ammonia and CO₂ technology.

RECOMMENDATION

20. 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 (HPMP) for Costa Rica; and further recommends blanket approval of the fourth tranche of stage I of the HPMP for Costa Rica, and the corresponding 2017 – 2018 tranche implementation plan, at the funding level shown in the table below.

	Project title	Project funding (US \$)	Support cost (US \$)	Implementing agency
(a)	HCFC phase-out management plan (stage I, fourth tranche)	106,000	7,950	UNDP