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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Eighty-third Meeting
Montreal, 27– 31 May 2019

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, fifth 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)	64th	35 % by 2020

(II) LATEST ARTICLE 7 DATA (Annex C Group I)	Year: 2017	10.10 (ODP tonnes)

(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)									Year: 2018
Chemical	Aerosol	Foam	Fire fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-123									
HCFC-124					0.00				0.00
HCFC-141b					1.20				1.20
HCFC-141b in Imported Pre-blended Polyol		0.40							0.40
HCFC-142b					0.03				0.03
HCFC-22					7.64				7.64
HCFC-225ca									
HCFC-225cb									

(IV) CONSUMPTION DATA (ODP tonnes)			
2009 - 2010 baseline:	14.10	Starting point for sustained aggregate reductions:	32.21
CONSUMPTION ELIGIBLE FOR FUNDING (ODP tonnes)			
Already approved:	18.93	Remaining:	13.28

(V) BUSINESS PLAN		2019	Total
UNDP	ODS phase-out (ODP tonnes)	0.9	0.9
	Funding (US $)	60,200	60,200

(VI) PROJECT DATA			2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total
Montreal Protocol consumption limits			n/a	n/a	14.10	14.10	12.69	12.69	12.69	12.69	12.69	9.17	n/a
Maximum allowable consumption (ODP tonnes)			n/a	n/a	14.10	14.10	12.69	12.69	12.69	12.69	12.69	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	86,514
Funds approved by ExCom (US $)		Project costs	761,523	0	168,000	0	62,000	0	106,000	0	0	0	1,097,523
		Support costs	57,114	0	12,600	0	4,650	0	7,950	0	0	0	82,314
Total funds requested for approval at this meeting (US $)		Project costs	0	0	0	0	0	0	0	0	56,000	0	56,000
		Support costs	0	0	0	0	0	0	0	0	4,200	0	4,200

* US $560,000 was provided to address HCFC consumption in the refrigeration servicing sector only.

Secretariat's recommendation:	Blanket approval

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 fifth and final tranche of stage I of the HCFC phase-out management plan (HPMP), at the amount of US $56,000, plus agency support costs of US $4,200.[1] The submission includes a progress report on the implementation of the fourth tranche and the tranche implementation plan for 2019 to 2020.

Report on HCFC consumption

2. The Government of Costa Rica reported a consumption of 10.14 ODP tonnes of HCFC in 2017 and estimated a consumption of 8.88 ODP tonnes for 2018, which is 37 per cent below the HCFC baseline for compliance. The 2014-2018 HCFC consumption is shown in Table 1.

Table 1. HCFC consumption in Costa Rica (2014-2018 Article 7 data)

HCFC	2014	2015	2016	2017	2018*	Baseline
Metric tonnes						
HCFC-22	178.16	155.69	155.40	153.38	138.99	181.88
HCFC-123	2.91	2.45	0.00	0.00	0.00	0.36
HCFC-124	0.91	0.67	0.45	0.14	0.14	3.95
HCFC-141b	23.15	19.93	20.30	15.22	10.88	32.59
HCFC-142b	2.43	2.10	1.50	0.48	0.48	6.17
HCFC-225ca	0.90	0.00	0.00	0.00	0.00	-
HCFC-225cb	0.90	0.00	0.00	0.00	0.00	-
Sub-total (mt)	**209.36**	**180.84**	**177.65**	**169.22**	**150.49**	**224.94**
HCFC-141b in imported pre-blended polyols**	10.40	9.06	11.50	4.49	3.66	164.64**
Total (mt)	**219.76**	**189.90**	**189.15**	**173.71**	**154.15**	**389.58**
ODP tonnes						
HCFC-22	9.80	8.56	8.55	8.44	7.64	10.00
HCFC-123	0.06	0.05	0.00	0.00	0.00	0.01
HCFC-124	0.02	0.01	0.01	0.00	0.00	0.09
HCFC-141b	2.55	2.19	2.23	1.67	1.20	3.58
HCFC-142b	0.16	0.14	0.10	0.03	0.03	0.40
HCFC-225ca	0.02	0.00	0.00	0.00	0.00	-
HCFC-225cb	0.03	0.00	0.00	0.00	0.00	-
Sub-total (ODP tonnes)	**12.63**	**10.96**	**10.89**	**10.14**	**8.88**	**14.10**
HCFC-141b in imported pre-blended polyols**	1.14	1.00	1.27	0.49	0.40	18.11**
Total (ODP tonnes)	**13.77**	**11.96**	**12.16**	**10.63**	**9.28**	**32.21**

* Country programme (CP) data submitted on 21 February 2019.
** Based on CP data, starting point included in Agreement based on Average 2007-2009 consumption

3. The HCFC consumption has been decreasing because of the implementation of the import licensing and quota systems and other activities related to the HPMP including capacity building of Customs officers and refrigeration technicians. The significant reduction in consumption of HCFC-141b in imported pre-blended polyol was due to the conversion of the largest user (Mabe) in 2013 as part of stage I of the HPMP; the remaining consumption is associated with very small users and their phase-out is planned to be included in stage II of the HPMP, consistent with the country's overarching strategy.

Country programme (CP) implementation report

4. The Government of Costa Rica reported HCFC sector consumption data under the 2018 CP implementation report of 8.88 ODP tonnes. The 2017 CP data is consistent with the data reported under

[1] As per the letter of 14 March 2019 from the Ministry of Environment and Energy of Costa Rica to UNDP.

Article 7 of the Montreal Protocol for the same year. The Article 7 data for 2018 had not yet been submitted at the time of document preparation.

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

Legal framework

5. The licensing system for import and export of HCFCs and HFCs continues to be operational since 2010, and the HCFC quota system since 2013. The Government continues to operate an online system (TICA) to facilitate and strengthen the monitoring of imports of ODS and other refrigerants (including HFCs) which allows cross-checking of information on ODS import requests, quotas and licenses issued by Customs, importers and other institutions involved in ODS control. The technical capacity of the Customs laboratory was strengthened for the analysis of samples of refrigerants for destruction through the provision of consumables and spare parts for laboratory equipment.

6. National regulations for the design, installation and dismantling of closed circuit ammonia refrigeration systems through Instituto de Normas Técnicas de Costa Rica (INTECO) were adopted; and a decree (Decree 11) which required minimum energy performance standards (MEPS) for public procurement of RAC equipment was approved.

7. The Government of Costa Rica had ratified the Kigali Amendment to the Montreal Protocol in 2018.

Foam manufacturing

8. Stage I of the HPMP included the conversion of Atlas Industrial, SA, the leading manufacturer of domestic refrigeration equipment and the largest consumer of HCFC-141b contained in imported pre-blended polyols in the country. The enterprise converted to the use of cyclopentane as a blowing agent for polyurethane insulation foam in July 2013 resulting in the phase-out of 14 ODP tonnes of HCFC-141b contained in imported pre-blended polyols.

9. UNDP has emphasised the commitment of the enterprise on the sustainable phase-out of HCFC-141b in imported pre-blended polyols.

Refrigeration servicing sector

10. Training on good refrigeration practices was provided to 445 refrigeration and air-conditioning (RAC) technicians through the National Institute of Learning (INA), the Institute of Electricity (ICE), and the Chamber of Industry. INA also evaluated 418 RAC technicians through its skills upgrading programme, and 373 technicians were certified on good practices and refrigerant handling by the Ministry of Environment and Energy (MINAE). As part of the outreach to promote the RAC association and the certification process for technicians, four workshops participated by 90 technicians were conducted. Two engineering schools were provided with refrigerant recovery equipment and storage tanks for their refrigeration laboratories, and four technical schools were given 10 domestic refrigeration equipment with natural refrigerants (R-600a) for training purposes; 500 sets of good practice manual with interactive DVD were distributed in three institutes as part of the training programme.

11. Other activities implemented as part of the servicing sector included a workshop to present the potential of district cooling in Costa Rica with funding outside the HPMP (i.e., Kigali Cooling Efficiency Program); certification of one cement kiln for destruction of unwanted ODS in the country, and an agreement between stakeholders and industry on who will be responsible to destroy ODS waste, and the approach for destruction; and three special waste companies with capacity to manage and store unwanted substances have been identified.

12. The demonstration project approved at the 76th meeting and funded outside the HPMP in line with decision 72/40[2] to replace an HCFC-22 refrigeration system with R-717/R-744 (NH_3/CO_2 cascade) system in a cold storage warehouse of Premezclas Industriales para Panadería S.A. (PINOVA) is being implemented closely with HPMP activities. A study tour was conducted in the premises of PINOVA for 50 students, equipment importers, and installers to highlight the success of the conversion; training of six PINOVA technical staff in the operation, maintenance and safety of NH_3/CO_2 cascade systems was also completed, other technicians will also be trained in this application.

Project implementation and monitoring unit (PMU)

13. The NOU is responsible for project management and monitoring of the HPMP and leads interaction with stakeholders on project implementation, information outreach and day-to-day management of HPMP activities. A Project Coordinator was hired for the HPMP and provided direct technical support for the implementation of the various activities.

Level of fund disbursement

14. As of March 2019, of the US $504,000 approved so far, US $428,220 had been disbursed as shown in Table 2. The balance of US $75,780 will be disbursed in 2019.

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

Agency	First – third tranches		Fourth tranche		Total approved	
	Approved	Disbursed	Approved	Disbursed	Approved	Disbursed
UNDP	991,523	936,757	106,000	84,896	1,097,523	1,021,653
Disbursement rate (%)		94		80		93

Implementation plan for the fifth tranche of the HPMP

15. The following activities will be implemented between March 2019 and December 2020:

(a) Train 80 Customs officers on new regulations, and the continued monitoring of the import and exports of HCFCs and HFCs (UNDP) (funding from previous tranche);

(b) Strengthen the technician certification programme by establishing regulations requiring the mandatory use of those certified technicians with MINAE cards to control the purchase, use and final disposal of refrigerants; and develop new mandatory courses for the renewal of the MINAE card (UNDP) (US $10,000);

(c) Conduct four workshops for service technicians and end-users to promote the use of low-global warming potential (GWP) and natural refrigerants (UNDP) (US $12,000); develop four pilot activities in the RAC sector to install equipment based on natural refrigerants with funding from sources outside the Multilateral Fund;

(d) Develop a coordinated waste refrigerant collection system, in cooperation with technical associations and special waste companies; support the destruction of ODS banks and other contaminated refrigerants; and provide equipment (e.g. isotanks) to partner waste handling companies to facilitate more efficient collection of waste ODS for destruction through a cement kiln (UNDP) (US $21,000); and

[2] The Executive Committee decided to consider at its 75th and 76th meetings, proposals for demonstration projects for low-global-warming potential (GWP) alternatives to HCFCs following a number of specified criteria, pursuant to decision XXV/5 of the Twenty-Fifth Meeting of the Parties (decision 72/40(b)).

(e) Project management and monitoring (UNDP) (US $13,000).

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

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

Legal framework

16. The Government of Costa Rica has already issued HCFC import quotas for 2019 at 8.88 ODP tonnes, which is lower than the Montreal Protocol control targets and its Agreement with the Executive Committee.

17. In clarifying why training of Customs officers which was planned for this reported period did not take place, UNDP explained that this was due to the change in Government which caused delays in the planning of the training courses, and that it will be implemented by the third quarter of 2019.

Refrigeration servicing sector

18. UNDP also clarified the inclusion in the progress report of activities that were not funded as part of the HPMP (i.e., demonstration project for PINOVA, district cooling, certification of a cement kiln), and explained that these activities were complementary to those being implemented as part of the HPMP as they support the phase-out of HCFCs and promote the use of low- and zero-GWP alternatives. The Secretariat welcomed such information and urged UNDP to continue providing these updates which demonstrate the harmonization of related activities in the country.

19. With regard to technician certification, UNDP also clarified that while MINAE issues cards for technicians that have met certain requirements, there are currently no formal restrictions in place for uncertified technicians. However, Government institutions and some private companies require technicians to be certified in order to participate in competitive bidding for equipment installation and servicing. Thus, the certification system is expected to gain broader acceptance in future.

Project implementation and monitoring unit (PMU)

20. The Secretariat noted that the report for expenditures related to the PMU had exceeded 20 per cent of the total HPMP funding (i.e., expenditure of US $150,455 versus US $112,000 allocated). UNDP explained that this was due to internal accounting systems that required the full cost for the project coordinator to be charged in full to the HPMP even the same person was hired only half time for the PMU and half time for other project components. Following discussion, UNDP provided a revised expenditure report clearly showing only the funds for the PMU used for the management of the HPMP, which was within the allocation, as shown in Table 3. UNDP assured that they will continue ensuring that the detailed report on the components for the PMU would include only those for the HPMP and not for other projects for proper accountability of PMU funding.

Table 3. Revised expenditure report for refrigeration servicing sector of stage I of the HPMP for Costa Rica

	Approved funding at 64th meeting (US $)	Revised budget* (US $)	Approved funding (first – fourth tranches) (US $)	Expenditures (first – fourth tranches) (US $)	Balance (first – fourth tranches) (US $)	Requested funding for fifth tranche (US $)	Budget for remaining activities of HPMP (US $)
Capacity building	48,000	75,000	65,000	49,372	15,628	10,000	25,628
Mechanisms for selection of efficient equipment	60,000	63,000	51,000	46,400	4,600	12,000	16,600
Update the import and export control systems	80,000	70,000	70,000	65,673	4,327	-	4,327
Strengthen capacity of HCFC recovery and use	105,000	115,000	110,000	77,195	32,805	5,000	37,805
Establish a mechanism for storage of unwanted ODS including HCFCs	155,000	125,000	109,000	91,550	17,450	16,000	33,450
PMU	112,000	112,000	99,000	98,030	970	13,000	13,970
Total	**560,000**	**560,000**	**504,000**	**428,220**	**75,780**	**56,000**	**131,780**

* Adjusted based on the flexibility clause included in the Agreement between the Executive Committee and the Government of Costa Rica in order to make the most effective use of the resources.

Conclusion

21. The consumption of Costa Rica in 2018 based on its CP report was 30 per cent lower than the limits established in the Agreement for that year and 37 per cent lower than the baseline. UNDP advised that stage II of the HPMP will be submitted to the 85th meeting. The Government continued to set import quotas based on an established and effective quota and licensing system to control HCFCs, supported by an online system. The sustainability of the training programme is ensured with the full support of MINAE through the integration of good refrigeration practices in the curriculum of technical and engineering universities, the training of technicians and the recovery and recycling scheme. The Government of Costa Rica has also initiated other activities with funding outside the Multilateral Fund that are complementary to the HPMP such as consideration of district cooling, which are helpful to support the uptake of alternative low-GWP refrigerants and will contribute to the sustainable phase out of HCFCs.

RECOMMENDATION

22. The Fund Secretariat recommends that the Executive Committee:

(a) Takes note of the progress report on the implementation of the fourth tranche of stage I of the HCFC phase-out management plan (HPMP) for Costa Rica; and

(b) Requests the Government of Costa Rica and UNDP to submit a progress report at the 85th meeting on the implementation of the work programme associated with the final

tranche and the project completion report to the first meeting of the Executive Committee in 2022.

23. The Fund Secretariat further recommends blanket approval of the fifth and final tranche of stage I of the HPMP for Costa Rica, and the corresponding 2019-2020 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, fifth tranche)	56,000	4,200	UNDP