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EXECUTIVE COMMITTEE OF
THE MULTILATERAL FUND FOR THE
IMPLEMENTATION OF THE MONTREAL PROTOCOL
Ninety-fifth Meeting
Montreal, 4-8 December 2024
Items 9(c) and (d) of the provisional agenda¹

PROJECT PROPOSALS: THE PACIFIC ISLAND COUNTRIES

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

Phase-out

- | | | |
|---|--------------------------------------|------------------|
| • HCFC phase-out management plan (stage II, second tranche) | UNEP and the Government of Australia | Blanket approval |
|---|--------------------------------------|------------------|

Phase-down

- | | | |
|---|--------------------------------------|--------------------------|
| • Kigali HFC implementation plan (stage I, first tranche) | UNEP and the Government of Australia | Individual consideration |
|---|--------------------------------------|--------------------------|

¹ UNEP/OzL.Pro/ExCom/95/1

Pre-session documents of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol are without prejudice to any decision that the Executive Committee might take following issuance of the document.

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Pacific Island Countries

(I) PROJECT TITLE	AGENCY	MEETING APPROVED	CONTROL MEASURE
HCFC phase-out plan (stage IIO)	UNEP (lead), the Government of Australia	86 th	100% phase-out by 2030

(II) LATEST ARTICLE 7 DATA (Annex C, Group I)	Year: 2023	0.11 ODP tonnes
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(III) LATEST COUNTRY PROGRAMME SECTORAL DATA (ODP tonnes)								Year: 2023	
Chemical	Aerosol	Foam	Fire-fighting	Refrigeration		Solvent	Process agent	Lab use	Total sector consumption
				Manufacturing	Servicing				
HCFC-22					0.11				0.11

(IV) CONSUMPTION DATA (ODP tonnes)			
2009-2010 baseline:	3.6	Starting point for sustained aggregate reductions:	3.6
CONSUMPTION ELIGIBLE FOR FUNDING			
Already approved:	3.6	Remaining:	0

(V) ENDORSED BUSINESS PLAN		2024	2025*	2026	Total
UNEP	ODS phase-out (ODP tonnes)	0	0.86	0.0	0.86
	Funding (US \$)	0	2,925,570	0	2,925,570
Government of Australia	ODS phase-out (ODP tonnes)	n/a	n/a	n/a	n/a
	Funding (US \$)	n/a	n/a	n/a	n/a

* Including US \$1,356,000 for UNEP for additional activities to maintain energy efficiency (decision 89/6)

(VI) PROJECT DATA			2020	2021-2023	2024*	2025	2026-2029	2030	Total
Montreal Protocol consumption limits (ODP tonnes)			39.4	39.4	39.4	19.7	19.7	0	n/a
Maximum allowable consumption (ODP tonnes)			39.4	10.32	10.32	5.19	5.19	0	n/a
Funding agreed in principle (US \$)	UNEP	Project costs	2,165,400	0	0	2,772,000	0	294,000	5,231,400
		Support costs	279,469	0	0	348,188	0	37,675	665,332
	Government of Australia	Project costs	375,000	0	0	382,000	0	0	757,000
		Support costs	48,603	0	0	44,667	0	0	93,270
Funds approved by ExCom (US \$)		Project costs	2,540,400						2,540,400
		Support costs	328,072						328,072
Total funds recommended for approval at this meeting (US \$)		Project costs			3,154,000				3,154,000
		Support costs			392,855				392,855

* The second tranche was requested in 2024 instead of 2025 in order to align with the submission of stage I of the Kigali HFC implementation Plan (KIP). Funding requested in 2024 includes US \$1,356,000 (with agency support costs) for additional activities to maintain energy efficiency (decision 89/6).

Secretariat's recommendation:	Blanket approval
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PROJECT DESCRIPTION

1. On behalf of the Governments of the Cook Islands, Kiribati, the Marshall Islands, Federated States of Micronesia, Nauru, Niue, Palau, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu (hereinafter referred to as the Pacific Island Countries (PICs)), UNEP, as the lead implementing agency, has submitted a request for funding for the second tranche of stage II of the HCFC phase-out management plan (HPMP), at a total cost of US \$3,546,855, consisting of US \$2,772,000, plus agency support costs of US \$348,188, for UNEP and US \$382,000, plus agency support costs of US \$44,667, for the Government of Australia.² The submission includes a progress report on the implementation of the first tranche; the verification reports on HCFC consumption from 2020 to 2023 for Palau, Samoa, Solomon Islands, and Tonga; a request for funding additional activities to maintain energy efficiency in the refrigeration servicing sector;³ and the tranche implementation plan for 2024 to 2030.

Report on HCFC consumption

2. The Governments of the PICs reported a consumption of 0.11 ODP tonnes of HCFCs in 2023, which is 97 per cent below the country's HCFC baseline for compliance. The 2019-2023 HCFC consumption is shown in table 1.

Table 1. HCFC consumption in Pacific Island Countries (2019-2023 Article 7 data)

HCFC-22	2019	2020	2021	2022	2023	Baseline
Metric tonnes (mt)						
Cook Islands	0.00	0.00	0.00	0.00	0.00	0.86
Kiribati	0.45	0.07	0.01	0.00	0.11	0.97
Marshall Islands	0.00	0.00	0.00	0.00	0.00	3.99
Federated States of Micronesia *	1.82	0.00	0.22	1.25	0.00	2.55
Nauru	0.00	0.00	0.00	0.00	0.00	0.18
Niue	0.00	0.00	0.00	0.00	0.00	0.15
Palau	0.13	0.34	0.00	0.05	0.00	2.97 ^a
Samoa	0.19	0.78	0.12	0.29	0.53	4.6
Solomon Islands	1.49	1.47	1.41	1.68	1.28	35.05 ^a
Tonga	0.02	0.02	0.15	0.00	0.00	2.55 ^a
Tuvalu	0.00	0.03	0.00	0.00	0.00	1.64
Vanuatu **	0.48	0.00	0.15	0.00	0.07	5.11 ^a
Total (mt)	4.58	2.70	2.07	3.27	2.00	60.62
ODP tonnes						
Cook Islands	0.00	0.00	0.00	0.00	0.00	0.1
Kiribati	0.02	0.00	0.00	0.00	0.01	0.1
Marshall Islands	0.00	0.00	0.00	0.00	0.00	0.2
Federated States of Micronesia *	0.10	0.00	0.01	0.07	0.00	0.2
Nauru	0.00	0.00	0.00	0.00	0.00	0.00 ^b
Niue	0.00	0.00	0.00	0.00	0.00	0.00 ^b
Palau	0.01	0.02	0.00	0.00	0.00	0.20 ^a
Samoa	0.01	0.04	0.01	0.02	0.03	0.3
Solomon Islands	0.08	0.08	0.08	0.09	0.07	2.00 ^a
Tonga	0.00	0.00	0.01	0.00	0.00	0.10 ^a
Tuvalu	0.00	0.00	0.00	0.00	0.00	0.1
Vanuatu **	0.03	0.00	0.01	0.00	0.00	0.30 ^a
Total (ODP tonnes)	0.25	0.15	0.11	0.18	0.11	3.6

* Federated States of Micronesia also had 0.02 mt of HCFC-124 in 2021.

** Vanuatu including 0.002 mt (0.0001 ODP tonnes) of HCFC-142b and 0.003 mt (0.0001 ODP tonnes) of HCFC-124.

^a HCFC consumption for 2009 was revised as per decision XXIII/29 of the Meeting of the Parties.

^b Very low consumption where rounding of figures to two digits shows zero consumption.

² As per the letters dated between 9 August and 11 September 2024 from the relevant ministry of the Governments of the Cook Islands, Kiribati, the Marshall Islands, Federated States of Micronesia, Nauru, Niue, Palau, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu to UNEP.

³ In line with decision 89/6, low-volume-consuming countries can include in their HPMPs additional activities for the introduction of alternatives to HCFCs with low or zero global-warming potential and for maintaining energy efficiency in the refrigeration servicing sector.

3. The consumption of HCFC-22 in the PICs has been used exclusively for the servicing of air conditioners, commercial refrigeration, and cold storage sectors. The overall HCFC-22 consumption has been decreasing in all 12 PICs; eight countries reported zero consumption in 2023 (in mt) and six of these have maintained zero consumption since 2022. The sustained decrease in HCFC consumption is attributed to the implementation of the HPMP, inter alia, enforcement of control measures including licensing and quota systems, activities in the refrigeration servicing sector and public awareness campaigns that have resulted in a lower demand for HCFCs for servicing. In addition, an increase in the import of non-HCFC-based equipment has contributed to the reduction in consumption. Specifically, replacement equipment has been based on R-410A and HFC-32 in residential air-conditioning (AC), on HFC-134a, R-404A, R-290 and R-600a in commercial refrigeration equipment, and on R-404A in cold storage.

Country programme implementation report

4. The Governments of the PICs reported HCFC sector consumption data under their 2023 country programme (CP) implementation reports that is consistent with the data reported under Article 7 of the Montreal Protocol.

Verification report

5. The verification reports confirmed that the Governments of Palau, Samoa, Solomon Islands, and Tonga are implementing a licensing and quota system for HCFC imports and exports and that the total consumption of HCFCs, reported under Article 7 of the Montreal Protocol for 2020 to 2023, was correct (as shown in table 1 above). The verifications concluded that the four countries have consistently met or exceeded their commitments under the Montreal Protocol and have workable and enforceable licensing and quota systems.

Status of implementation of stage I of the HCFC phase-out management plan

6. Stage I of the HPMP was completed on 1 December 2022, in line with the extension approved by the Executive Committee in decision 87/18. The project completion report was submitted on 23 April 2023.

Progress report on the implementation of the first tranche of stage II of the HCFC phase-out management plan

Legal framework

Regional component

7. Through the regional component of stage II of the HPMP, UNEP supported the PICs in strengthening legislation through four virtual workshops on the implementation of stage II of the HPMP; policy options for the implementation of mandatory labelling requirements for HCFC cylinders; and the development and implementation of a certification system for refrigeration and air-conditioning (RAC) technicians; and organized one in-person workshop on the establishment and implementation of a competency-based certification system for RAC technicians. In total, the meetings were attended by 133 participants including (63 women).

8. A regional training workshop on ODS/HCFC trade control and reporting was held in Samoa with 42 participants (including 21 women) from all 12 PICs, including customs officers (12), staff from national ozone units (NOUs) (18), and staff from UNEP and Samoa support staff (12). The workshop aimed to integrate approaches to enforcement of the HCFC licensing system in the PICs. UNEP developed a training programme for customs brokers and importers, which was launched in parallel. The training aims to assist countries in delivering national training under the HPMP.

9. UNEP, in close collaboration with the Oceania Customs Organisation (OCO), has supported the PICs with the inclusion of specific regional HS (Harmonized System) codes for HCFCs in the Pacific Harmonized Commodity Description and Coding System (PACHS) 2017 edition. During the first tranche implementation, UNEP facilitated the assignment of distinct HS codes for HFCs and HFC blends in line with the World Customs Organization's (WCO) 2022 classification structure. The integration of these specific codes into the PACHS-17 and PACHS-22 has provided the PICs with a standardized framework for categorizing and tracking goods traded within the region.

National component

10. Six countries, which did not yet have bans in place on HCFC-based equipment (Kiribati, Federated States of Micronesia, Nauru, Samoa, Solomon Islands, Tuvalu) conducted stakeholder consultation meetings, and reviewed and drafted provisions related to the ban. Federated States of Micronesia finalized and endorsed the ODS Amended Regulations 2021, which included a ban on the import of HCFC-based equipment effective immediately from February 2021. Tuvalu finalized and endorsed the Ozone Layer Protection and Refrigerant Management Amendment Act 2023, which included a ban on HCFC-based equipment effective immediately from August 2023. In the remaining four countries, the draft provisions will be presented in a second consultation meeting under planning before finalization.

11. Eight countries implemented mandatory labelling requirements for HCFC cylinders (Kiribati, Federated States of Micronesia, Palau, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu) during the first tranche. In these countries, the customs officials received training to support implementation, and the NOUs continued to engage stakeholders in workshops and meetings, focusing on monitoring the labelling process to ensure compliance and providing ongoing technical support. The countries have developed a template for a non-reusable, counterfeit-proof stickers for HCFC cylinders, which all importers must affix to all imported cylinders before market release.

12. Training programmes were carried out in 10 of the PICs (Kiribati and Niue were the exceptions) for a total of 386 customs and enforcement officers (132 women) and 201 customs brokers and importers (including 82 women) as shown in table 3 below. Training programmes in Kiribati and Niue are under preparation to commence in the last quarter of 2024. UNEP initiated the procurement process for the acquisition of 47 refrigerant identifiers for distribution among the PICs.

Table 2. Summary of training workshops for customs officers, customs brokers and importers

PIC	Customs training		Custom brokers / importers training	
	Workshops	Participants	Workshops	Participants
Cook Islands	1	5 (2 women)	1	2 (1 woman)
Kiribati	-	-	-	-
Marshall Islands	2	24 (1 women)	1	14 (3 women)
Federated States of Micronesia	4	34 (4 women)	4	33 (0 women)
Nauru	1	10 (4 women)	1	21 (13 women)
Niue	-	-	-	-
Palau	2	52 (18 women)	2	35 (22 women)
Samoa	3	80 (32 women)	1	16 (3 women)
Solomon Islands	2	45 (22 women)	1	20 (7 women)
Tonga	3	70 (23 women)	1	20 (5 women)
Tuvalu	2	23 (13 women)	1	6 (1 woman)
Vanuatu	4	43 (13 women)	4	34 (29 women)
Total	24	386 (132 women)	17	201 (84 women)

13. The status of HCFC and energy efficiency-related regulations in the 12 countries are outlined in table 3 below.

Table 3: Status of HCFC legislative and regulatory measures in the 12 Pacific Island Countries

PICs	Legislative measures (status)
Regulatory framework for control of HFCs	
All	As of 1 January 2021: Cook Islands, Kiribati, Marshall Islands, Federated States of Micronesia, Niue, Palau, Samoa, Tonga, Tuvalu, Vanuatu As of 23 November: Solomon Islands As of 1 May 2023: Nauru
Operational licensing and quota system	
All – quotas are based on baseline year consumption for all PICS	Paper-based system: Cook Islands, Kiribati, Marshall Islands, Nauru, Niue, Palau, Samoa, Tonga, and Tuvalu Electronic system: Federated States of Micronesia, Solomon Islands and Vanuatu
Adoption of WCO's harmonized code for HCFCs	
Cook Islands, Kiribati, Federated States of Micronesia, Nauru, Niue, Palau, Samoa, Solomon Island, Tonga, Tuvalu, and Vanuatu	Adoption of the 2017 HS codes
Marshall Islands	No HS coding system in place, all entries are recorded manually and uploaded on excel datasheet
Control of ban on the import and export of HCFC-based equipment	
Kiribati, Nauru, Samoa, and Solomon Islands	In the process of putting in place a regulation to ban the import of HCFC-based equipment
Cook Islands, Marshall Islands, Federated States of Micronesia, Niue, Palau, Tonga, Tuvalu, and Vanuatu	Cook Islands: Prohibited since 2021 Marshall Islands: Prohibited since 2013 Federated States of Micronesia: Prohibited since February 2021 Niue: Prohibited since 2021 Palau: Prohibited since 1 January 2017 Tonga: Prohibited since 1 January 2016 Tuvalu: Prohibited since August 2023 Vanuatu: Prohibited since May 2020
Permit/license requirement for handling, storage and sale of HCFC	
Cook Islands, Kiribati, Marshall Islands, Federated States of Micronesia, Palau, Samoa, Solomon Islands, Tonga and Vanuatu	Requirement in place
Nauru, Niue and Tuvalu	In the process of putting in place a regulation to require permit/license requirement for handling, storage and sale of HCFCs
Mandatory labeling requirements for HCFC cylinders	
Kiribati, Federated States Micronesia, Palau, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu	Requirement in place
Cook Islands, Marshall Islands, Nauru, and Niue	Not in place but have committed zero consumption of HCFC during stage II of the HPMP
Pre-blended polyols	
All	Banned import of pre-blended polyols containing HCFCs
Minimum Energy Performance Standards (MEPS) and labelling	
Cook Islands, Niue, and Tonga	Legislation for MEPS and labelling has been drafted
Kiribati, Samoa, Solomon Islands, Tuvalu and Vanuatu	Legislation for MEPS and labelling approved and implemented
Marshall Islands, Federated States of Micronesia, Nauru and Niue	No legislation/regulations in place

*Refrigeration servicing sector**Regional component*

14. During the first tranche implementation, a thematic meeting was organized on the benefits of RAC associations, which aimed to also strengthen the networking between national ozone officers (NOOs) and RAC associations. A roundtable discussion was organized on available ozone- and climate-friendly technologies in the region. Both events were held back-to-back with the Network Meetings of the Pacific Island Countries, for a total of 46 participants (including 19 women) comprising staff from the NOUs and representatives from RAC industries. The good practices curriculum at technical and vocational education and training (TVET) institutes and course materials were reviewed, redesigned and updated to reflect current industry needs using best practice examples, or case studies in the Pacific region. Two, five-day, train-the-trainer workshops were organized on good servicing practices, for a total of 24 master trainers; the number of participants from each PIC is shown in table 4 in the national component section below. Standardized training materials for good servicing practices in RAC were developed, covering the prevention of leaks and servicing equipment-based on flammable alternatives, and were distributed during the delivery of the national good servicing practices training for RAC technicians. Two workshops were organized on the integration of good servicing practices into national certification schemes. Based on the outcome of these meetings, country participants have started to streamline frameworks for RAC good servicing practices into the national certification systems, to establish mechanisms to conduct competency-based assessments for RAC technicians, and to monitor the servicing sector compliance with certification requirements.

15. A regional expert was recruited to develop a communication plan and materials for national adoption, and a virtual meeting was organized for all PICs to present the strategy. Each country also had individual meetings with the regional consultant to assist in the adoption of the strategy. A procurement process is underway for the development of 12 short videos to be used by the PICs as part of national social media campaigns. UNEP is in the process of hiring a regional consultant to conduct an assessment on policy and technical options for the management of HCFC-22 in the fisheries sector in six countries (Kiribati, Federated States of Micronesia, Marshall Islands, Solomon Islands, Tuvalu, and Vanuatu). The consultant will work with the NOUs to conduct a survey on the fisheries sector, including both marine and onshore facilities. New and emerging Ozone2Climate technologies, suitable for this region, were presented in various regional events such as thematic workshops, meetings, and other relevant public events.

National component

16. Training workshops were held at the local level in six PICs (Federated States of Micronesia, Palau, Samoa, Solomon Islands, Tonga, and Vanuatu) for a total of 308 technicians trained (including 32 women), and the workshops in the Cook Islands and Kiribati have been planned for the end of 2024. For the remaining four PICs (i.e., Marshall Islands, Nauru, Niue, and Tuvalu) there are no RAC training centres and/or the number of RAC technicians is low. UNEP is in the process of identifying a regional expert to visit these countries to provide hands-on practical training, which is anticipated by the end of 2024.

Table 4. Summary of training workshops for RAC master trainers and technicians

PIC	Training of master trainers (total participants from two workshops)	RAC technicians	
		Workshops	Participants
Cook Islands	2	-	-
Kiribati	1	-	-
Marshall Islands	-	-	-
Federated States of Micronesia	2	4	41 (0 women)
Nauru	1	-	-

PIC	Training of master trainers (total participants from two workshops)	RAC technicians	
		Workshops	Participants
Niue	-	-	-
Palau	2	3	63 (10 women)
Samoa	5	3	56 (7 women)
Solomon Islands	5	3	61 (9 women).
Tonga	4	2	40 (4 women)
Tuvalu	-	-	-
Vanuatu	2	4	47 (2 women)
Total	24	19	308 (32 women)

17. A procurement process was initiated for the acquisition of the RAC servicing tools for RAC training centres, RAC workshops and Customs. However, the process was cancelled as none of the bidders were able to supply the complete range of equipment specified in the procurement list. Since then, UNEP has launched a new procurement process by grouping the procurements by type of equipment rather than by country to encourage more bidders. This is currently being finalized and the equipment is anticipated for distribution to the countries by the end of 2024. After distribution, training on the operation and maintenance of the tools is planned for the servicing workshops. Eight PICs (Cook Island, Kiribati, Federated States of Micronesia, Palau, Samoa, Solomon Islands, Tonga, and Vanuatu) received one to two training pods,⁴ which were donated by the Australian RAC industry association to assist in the delivery of training in good servicing practices and these are being actively utilized.

18. In Solomon Islands and Vanuatu awareness was raised on HCFC-22 phase-out among the fishing industry and UNEP in the process of identifying a consultant who can travel to lead the target training sessions in this sector. All countries have participated in communication planning through the regional component and have been promoting OzonAction tools and materials (e.g., Customs authorities have been encouraged to use WhatGas for cross-checking procedures, refrigerant identification and to record the HS codes of shipments, and RAC technician training videos and quick guides for good servicing practices for flammable refrigerants have been promoted in vocational schools). Five PICs (Marshall Islands, Nauru, Niue, Samoa, and Solomon Islands) have launched their media campaigns, which have included activities such as awareness-raising, and translation and dissemination of awareness-raising materials (including brochures for Customs, RAC technicians, and schools).

Project implementation and monitoring

19. The US \$286,000 approved for project implementation and monitoring was fully disbursed to support travel costs during implementation.

Level of fund disbursement

20. As of October 2024, of the US \$2,540,400 approved so far (US \$2,165,400 for UNEP and US \$375,000 for the Government of Australia), US \$680,401 (27 per cent) had been disbursed (US \$381,668 for UNEP and US \$298,733 for the Government of Australia). The balance of US \$1,859,999 will be disbursed in 2025.

⁴ The training pods include (i) a mounting table with mounting panel and wheels to facilitate moving of training pod, (ii) a split-type-air-conditioner mounted on one side, (iii) a fabricated compressor and condenser showing refrigerant piping kit mounted on the other side.

Implementation plan for the second tranche of stage II of the HCFC phase-out management plan

21. The activities described in table 5 will be implemented between December 2024 and December 2030.

Table 5. Activities to be implemented during the second tranche of stage II of the HPMP for the PICs

Strategic component	Regional activities	National activities
Institutional capacity and legislation	- Organize three annual thematic workshops,⁵ back-to-back with PIC network meetings to identify, review and update countries on emerging issues, and discuss concrete actions to support the PICs in the implementation of their HPMPs; and - Conduct one three-day regional training on competency-based assessment for master assessors. (UNEP) (US \$280,000 and funds from previous tranche)	- Continue the development and implementation of legislation and/or updated regulations on mandatory labelling requirements for HCFC cylinders and the production of stickers (Kiribati, Federated States of Micronesia, Palau, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu); - Finalize draft regulations and implementation of the ban on imports of HCFC-based equipment (Kiribati, Nauru, Samoa, and Solomon Islands). (UNEP) (US \$40,000 and funds from previous tranche)
Customs entry and training	- One three-day train-the-trainer workshop from all 12 PICs in 2026). (UNEP) (US \$60,000)	- Organize 97 training workshops for customs and enforcement officers, for all 12 PICs, on regulatory measures for control of HCFCs and HCFC-based equipment (22 workshops from previous tranche) and 43 training workshops for customs brokers/importers of HCFCs, other refrigerants and RAC equipment (13 workshops from previous tranche); and - Distribute 25 refrigerant identifiers based on the number of entry points in each PIC. (UNEP) (US \$180,000 and funds from previous tranche)
RAC training and certification	- Organize a five-day train-the-trainers workshop in 2026 and an expert trainer to visit eight PICs to mentor trainers in delivery of local training workshops (excluding Marshall Islands, Nauru, Niue, and Tuvalu); - Continue the work with the Kiribati Institute of Technology to develop a training programme for level II RAC certification; - Continue the work on assessment frameworks for both good servicing practices and flammability modules; and - Conduct training for RAC master assessors.	- Conduct 90 training workshops on good servicing practices for RAC technicians in all 12 PICs (23 training workshops from previous tranche); build support for certification programme for RAC technicians and implementation of good servicing practices into the national certification schemes;⁶ and - Complete procurement of servicing tools for RAC training centres and workshops and provide training on tools for service workshops (all 12 PICs). (UNEP) (US \$254,000 and funds from previous tranche)

⁵ Initial thematic areas include integrated approach to strengthen the monitoring, reporting, verification and enforcement (MRVE) system; how to enforce bans on HCFC-based equipment; permitting/licensing systems for handling refrigerants for RAC technicians; collaboration with Customs departments through memorandum of understanding and standard operating procedures; preparation for the adoption of PACHS22.

⁶ Under the second tranche, in the countries with the small number of technicians (i.e., Marshall Islands, Nauru, Niue, and Tuvalu) the training could be conducted by a RAC technicians/RAC expert in a similar approach to the first tranche.

Strategic component	Regional activities	National activities
	(Government of Australia) (US \$135,000 and funds from previous tranche)	
Communications and awareness	- Support annual media campaigns and production of materials to be used by each PIC; biennial technology and servicing roadshows to be coordinated with regional events to promote climate-friendly technologies; and - Engage a media company to develop 12 short reels to be used by PICs for their national social media campaigns. (UNEP) (US \$30,000 and funds from previous tranche)	- Implement annual media campaigns targeting importers, service workshops, technicians, and end users; and translate materials into local languages to support the implementation of stage II. (UNEP) (US \$294,000 and funds from previous tranche)
Management of the fisheries sector	- One regional consultation workshop (for Kiribati, Marshall Islands, Federated States of Micronesia, Solomon Islands, Tuvalu, and Vanuatu) on country readiness and identification of country-specific activities for managing the use of HCFC-22 in the fisheries sector; and - Hire a regional consultant to conduct the assessment survey on the fisheries sector in six PICs and identify policy and technical options for phasing out HCFC-22 in the sector. (UNEP) (US \$60,000 and funds from previous tranche)	- Technical assistance to Solomon Islands and Vanuatu to replace the HCFC-22 cold storage equipment with climate-friendly technology and training for a total of 40 stakeholders on good practices for industrial refrigeration. (UNEP) (US \$65,000 and funds from previous tranche)
Activities to maintain energy efficiency	- Regional activities are described in detail in the following section. (UNEP) (US \$405,000) (Government of Australia) (US \$247,000)	- National activities are described in detail in the following section. (UNEP) (US \$548,000)
Implementation, coordination and monitoring	- No regional component.	- Domestic travel to support implementation of stage II of the HPMP in 12 PICs. (UNEP) (US \$556,000 and funds from previous tranche)

Activities to maintain energy efficiency in the refrigeration servicing sector

22. The project related to energy efficiency, submitted in line with decision 89/6, has been designed to support the development, updating, and enforcement of policy and regulations to enhance energy efficiency in RAC appliances with consideration of low- and zero-global-warming-potential (GWP) alternatives, capacity building of concerned stakeholders, and awareness and outreach activities on energy efficiency. The description and proposed cost breakdown of regional and national activities to maintain energy efficiency in the servicing sector are described in table 6 below.

Table 6. Additional activities proposed to maintain energy efficiency in the servicing sector

Component	Regional activities	National activities
Exploring opportunities for end-user incentive programmes with national/regional financial institutes	- Assessment of consumer behaviour and market barriers to the adoption of energy-efficient equipment in four selected countries and recommendations to address challenges related to market acceptance. (US \$80,000)	- Explore opportunities for end-user incentive programmes with national/regional financial institutions in five selected countries (Federated States of Micronesia, Samoa, Solomon Islands, Tonga, and Vanuatu); and

Component	Regional activities	National activities
		(US \$50,000) - National consultations and bilateral meetings with concerned stakeholders on potential financial mechanisms (two consultation meetings for up to 30 stakeholders in each country). (US \$20,000)
Subtotal component 1	(UNEP) US \$80,000	(UNEP) US \$70,000
Capacity building for NOOs, Customs and energy officials	- One two-day training workshop for NOOs, energy officials, Customs, and enforcement authorities, for a total of 36 participants from all 12 PICs, on the enforcement of MEPS in RAC appliances (back-to-back with the training workshop on product registration procedures under component 4.2 and with other HPMP training). (US \$30,000)	- Twelve training workshops for 180 Customs and enforcement officers and 12 workshops for 180 importers of RAC equipment on new or updated MEPS and labelling for RAC. equipment. (US \$30,000)
Subtotal component 2	(UNEP) US \$30,000	(UNEP) US \$30,000
Capacity building on energy efficiency performance in RAC servicing sector	- Develop a training module and assessment framework for energy efficiency linked to good servicing practices for RAC applications; (US \$27,000) - One three-day training and assessment workshop on energy efficiency for 12 RAC master trainers from all 12 PICs; and (US \$60,000) - Energy audits of common equipment to demonstrate benefits of properly installed and serviced equipment in three to four selected countries (Micronesia, Samoa, Solomon Islands and Vanuatu). (US \$160,000)	- Delivery of 20 training workshops on energy efficiency and competency-based assessments for 245 RAC technicians nationally in all 12 PICs. (US \$33,000)
Subtotal component 3	(Government of Australia) US \$247,000	(UNEP) US \$33,000
Updating MEPS and labelling: 1. Reviewing and updating MEPS and labelling, enhancing product registration and approval procedures	- Review of existing MEPS in other countries (Australia/New Zealand and United States) and development of a proposal to update regional MEPS and labelling in the PICs; and (US \$40,000) - Review product registration procedures and generate agreement on a standardized way forward for information sharing on appliances approved for import in the region. (US \$15,000)	- Develop and adopt the legislative framework for establishment of the MEPS and labelling and adoption of registration procedures in Marshall Islands, Federated States of Micronesia, Nauru, and Palau; (US \$80,000) - Stakeholder consultation and approval of legislative framework for updated MEPS and labelling and adoption of updated registration procedures in Cook Islands, Kiribati, Niue, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu; and (US \$80,000) - Configuring and updating the national product registration system at the national level. (US \$40,000)
Subtotal component 4.1	(UNEP) US \$55,000	(UNEP) US \$200,000

Component	Regional activities	National activities
Updating MEPS and labelling: 2. Capacity Building on MEPS and labeling, product registration, information sharing and regional RAC professional network	- One two-day training for NOOs, energy officials, and RAC industry stakeholders, for a total of 36 participants, on the proposal to improve MEPS based on case studies and on establishing a regional professional network; and (US \$130,000) - One two-day workshop for NOOs and energy officials, for a total of 24 participants, on procedures for product registration and approval based on energy efficiency and refrigerants; procedures for verifying energy performance from testing results and agreed way forward on information sharing on appliances approved for import in the region. (US \$85,000)	No activities.
Subtotal component 4.2	(UNEP) US \$215,000	0
Updating MEPS and labelling: 3. Public procurement policy and building codes	No activities.	- Meeting with 15 national agencies per country on the development of national procurement and foreign-aid policies for energy-efficient appliances and facilitating internal processes; and (US \$60,000) - Meeting with 15 national agencies per country on the integration of energy efficient and low-GWP RAC appliances into existing building codes and facilitating internal processes. (US \$60,000)
Subtotal component 4.3	0	(UNEP) US \$120,000
Awareness and outreach programmes	- Development of public awareness materials on energy audits and other contents to support implementation of the project. (US \$25,000)	- Development of outreach programmes for technicians, consumers and retailers on MEPS, labelling, the benefits of using energy-efficient appliances and maintaining RAC appliances. (US \$95,000)
Subtotal component 5	(UNEP) US \$25,000	(UNEP) US \$95,000
Total	Regional component US \$652,000	National component US \$548,000

23. The revised project and agency support costs for each of the 12 PICs and for the regional activities under the second tranche including the energy efficiency component are summarized in table 7.

Table 7. Revised second tranche project and agency support costs including energy efficiency component (US \$)

Components	Approved second tranche	Proposed costs for activities to maintain energy efficiency	Revised second tranche project total	Revised second tranche agency support costs	Revised total agreed costs second tranche	Approved stage II total	Revised project total for stage II	Revised agency support costs stage II	Revised total agreed costs stage II
Regional									
UNEP	430,000	405,000	835,000	97,327	932,327	785,000	1,190,000	140,900	1,330,900
Australia	135,000	247,000	382,000	44,667	426,667	510,000	757,000	93,270	850,270
Total	565,000	652,000	1,217,000	141,994	1,358,994	1,295,000	1,947,000	234,170	2,181,170
National									

Components	Approved second tranche	Proposed costs for activities to maintain energy efficiency	Revised second tranche project total	Revised second tranche agency support costs	Revised total agreed costs second tranche	Approved stage II total	Revised project total for stage II	Revised agency support costs stage II	Revised total agreed costs stage II
Cook Islands	105,000	36,500	141,500	18,396	159,896	285,300	321,800	41,834	363,634
Kiribati	161,000	28,500	189,500	24,635	214,135	387,850	416,350	54,126	470,476
Marshall Islands	97,000	38,500	135,500	17,615	153,115	183,450	221,950	28,854	250,804
Federated States of Micronesia	188,000	60,500	248,500	32,305	280,805	423,350	483,850	62,901	546,751
Nauru	47,000	38,500	85,500	11,115	96,615	117,700	156,200	20,306	176,506
Niue	47,000	28,500	75,500	9,815	85,315	93,450	121,950	15,854	137,804
Palau	70,000	46,500	116,500	15,145	131,645	266,250	312,750	40,658	353,408
Samoa	118,000	70,500	188,500	24,505	213,005	334,200	404,700	52,611	457,311
Solomon Islands	196,500	50,500	247,000	31,160	278,160	497,000	547,500	70,225	617,725
Tonga	119,000	50,500	169,500	22,035	191,535	338,300	388,800	50,544	439,344
Tuvalu	54,000	28,500	82,500	10,726	93,226	140,700	169,200	21,996	191,196
Vanuatu	186,500	70,500	257,000	33,410	290,410	425,850	496,350	64,526	560,876
Total	1,389,000	548,000	1,937,000	250,861	2,187,861	3,493,400	4,041,400	524,432	4,565,832
<i>UNEP subtotal</i>	<i>1,819,000</i>	<i>953,000</i>	<i>2,772,000</i>	<i>348,188</i>	<i>3,120,188</i>	<i>4,278,400</i>	<i>5,231,400</i>	<i>665,332</i>	<i>5,896,732</i>
<i>Government of Australia subtotal</i>	<i>135,000</i>	<i>247,000</i>	<i>382,000</i>	<i>44,667</i>	<i>426,667</i>	<i>510,000</i>	<i>757,000</i>	<i>93,270</i>	<i>850,270</i>
Grand total	1,954,000	1,200,000	3,154,000	392,855	3,546,855	4,788,400	5,988,400	758,602	6,747,002

SECRETARIAT'S COMMENTS AND RECOMMENDATION

COMMENTS

Report on HCFC consumption and verification

24. While the verifications concluded that the Governments of Palau, Samoa, Solomon Islands and Tonga have workable and enforceable licensing and quota systems, each report contains a number of recommendations for further improvements. The recommendations from each country for implementation by the NOUs are summarized in table 8 below.

Table 8. Verification recommendations by country*

Recommendations	Palau	Samoa	Solomon Island	Tonga
The NOU should improve communication with importers and increase importer awareness of common HCFCs and their corresponding HS codes	(Y)		(Y)	(Y)
Mandatory reporting for importers should be enforced with penalties for mis-declarations by importers and customs brokers	(Y)	(Y)	(Y)	(Y)
NOU should work collaboratively with customs and enforcement and participate in surprise inspections of the domestic refrigerant market	(Y)	(Y)	(Y)	(Y)
Improvements should be made to the permit document	(Y)			(Y)
The NOU should work collaboratively to establish/finalise a standard operating procedure for the clearance process, data monitoring, and reporting requirements	(Y)		(Y)	(Y)
An expression of interest process for importers should be implemented to assist the NOU in quota allocation		(Y)		

Recommendations	Palau	Samoa	Solomon Island	Tonga
A database to track shipment data and to enable cross-checking of quota data should be established		(Y)		
The reallocation of quotas from enterprises that did not adhere to the conditions of their approved importer licenses should be formally documented		(Y)		
The per shipment import license should be shortened to no more than three to five months		(Y)		
The complete 8-digit HS code should be included in the import license		(Y)		
A database to collect allocated quotas and actual quarterly imports should be developed and a filing mechanism implemented		(Y)		
Additional training for customs and importers should be organized	(Y)	(Y)	(Y)	(Y)
Guides should be developed for customs and border officers, importers and the general public on import and export control of ODS.	(Y)		(Y)	(Y)
Stakeholder awareness should be raised on regulations, licensing, and the quota system related to HCFC trade, particularly for importers, shipping companies, customs brokers, retailers, and servicing workshops		(Y)		

(Y) indicates recommended

25. UNEP confirmed that the recommendations made relating to strengthening monitoring and control of HCFCs, including licensing and quota system for HCFCs, would be implemented during the implementation of the second tranche and where relevant, during KIP implementation.

Fluctuating consumption trends and achieving the HPMP targets

26. On the fluctuating consumption of HCFCs, including an increase in consumption of HCFCs in certain PIC countries and eight PICs with zero consumption of HCFCs in 2023, UNEP informed that in 2022, it is possible that some importers in the PICs had stockpiled HCFCs imported for use in 2023 to ensure availability for servicing needs, especially as they transition away from HCFC-22. Bringing in excess HCFC imports within the limits of the licenses, is a common practice among importers and is driven by commercial practices and transport costs. The total quantity of HCFCs imported is controlled and monitored by the licensing and quota systems implemented in the countries.

27. On illegal trade, UNEP explained that a few instances of illegal trade were identified in three countries (Marshall Islands, Nauru, and Solomon Islands).⁷ These cases are being investigated by the respective NOUs and the HCFCs are confiscated and are being stored. UNEP has discussed with the countries actions to take with the confiscated refrigerant. One issue is that re-exporting to the original country might be difficult, given that this should have been carried out at the customs checkpoint in rejecting the shipment. At the moment, it has been suggested to request the Customs Authority or the NOU to keep those stocks in their premises so that they are not released to the market. Confiscated refrigerants will be included as part of the national inventory to explore the possibility of destruction. In the case of the Marshall

⁷ Marshall Islands: In January 2024, 24 cylinders of HCFC-22 were confiscated from a construction firm upon inspection. These cylinders are currently stored in secure containers at the Environmental Protection Authority's premises. The case remains under investigation, and appropriate legal action will be taken once the investigation concludes.

Nauru: In March 2024, the Customs seized three 22.7 kg cylinders of HCFC-22 that were imported by a construction firm for the new seaport. These cylinders are currently stored in secure containers at the NOU's premises.

Solomon Islands: In 2023, two instances of illegal importation without the required quotas and licence were identified the first concerning four 13.6 kg cylinders of HCFC-22 and the second concerning three 13.6 kg cylinders of HCFC-22; both importers were fined accordingly for these violations. These cylinders are currently stored on Customs' premises.

Islands and Solomon Islands, another option being considered is to auction these confiscated cylinders, but this needs to be further explored with the Customs based on their regulations.

Progress report on the implementation of the first tranche of stage II of the HCFC phase-out management plan

Legal framework

28. The Governments of the PICs have already issued HCFC import quotas for 2024 at a total of 0.43 ODP tonnes (7.81 mt) for all PICs, which is lower than the Montreal Protocol control targets.

29. The Secretariat noted with appreciation that no licenses will be issued for HCFCs from 2025 to 2030 and onwards by the Governments of Cook Islands, Marshall Islands, Nauru, and Niue, which are fully aware of the maximum allowable consumption in their Agreements with the Executive Committee, all of which mandate zero consumption of HCFC-22 from 1 January 2021.

30. On adoption of 2022 HS codes, UNEP explained that the challenge of the WCO's 2022 HS codes is that there is no dedicated HS code for individual HFCs and HFC-blends. In collaboration with the OCO, UNEP has worked on codes for the identification of HFCs and HFC blends, which were adopted in the PACHS 2022 and are being made available to the PICs for adoption. Palau, Solomon Islands, and Vanuatu have adopted these; Kiribati is in the transitioning period, the Cook Islands is in the final stages of consultation and legal approval, and remaining PICs are aligning their national customs frameworks with the updated codes. UNEP is working closely with the countries to finalize the adoption of the revised HS codes to strengthen controlling and monitoring of HCFCs and HFCs in the countries.

31. The Secretariat inquired on the countries which have not yet implemented an official ban on the import on HCFC-based equipment and when this would be completed. UNEP informed that the new regulation in Kiribati is expected to be submitted to the Parliament for approval by the end of 2024 and that Samoa and the Solomon Islands are expected to enact and enforce the regulation in 2025. UNEP also informed that the countries are aware of importance of this regulation to avoid further dependence on HCFC-based equipment.

Implementation plan for the second tranche of stage II of the HCFC phase-out management plan

Certification system and capacity building of technicians

32. The Secretariat requested additional information and clarifications on the certification systems for technicians in the PICs. UNEP explained that for the implementation of stage II of the HPMP, the 12 PICs have been categorized into two groups based on the existence of formal vocational education and a RAC training curriculum in the country as follows:

- (a) Countries without formal vocational education /or with formal vocational education but no RAC training curriculum, which includes eight countries: Cook Islands, Kiribati, Marshall Islands, Nauru, Niue, Palau, Tonga, and Tuvalu. For these countries, a specific training on good servicing practices with a more robust design and a stand-alone competency-based certification system will be designed and implemented to ensure the competency of the RAC technicians before they are allowed to handle RAC equipment.
- (b) Countries having formal vocational education with RAC training curricula, which includes four countries: Federated States of Micronesia, Samoa, Solomon Islands, and Vanuatu. These countries have initiated discussions with the relevant educational authorities to strengthen the existing infrastructure to increase the level of education and skill from the training programmes, which will be linked with conditions to ensure competency before

RAC technicians are allowed to perform the job. These four countries are willing to provide training support to other PICs, depending on the training schedules and availability of trainers in each country.

33. UNEP further explained that while, the above mentioned, four PICs are working with TVET institutes to integrate good servicing practices in the context of the Montreal Protocol into the national qualification framework for training and assessment, the curriculum offered by these vocational institutes is for formal education (e.g., semester study) and not designed for RAC technicians who have worked in the sector. Therefore, the stand-alone competency-based certification will also be considered in these countries to address the time constraints of RAC technicians working in the sector and enable them to be certified. The certification programmes cover the residential air conditioner sector to ensure that technicians are competent on leak management and safe practices for HCFCs and alternatives. As indicated in the second tranche request, the training of master assessors on competency-based assessment will be conducted to standardize the certification programmes among all 12 PICs. The topics covered under the regional component emphasize leak management and safe practices and the modules developed under the energy efficiency project will later be integrated. Under stage I of the KIP, a similar programme would be implemented to target sectors not addressed under the ongoing HPMP.

34. On the use of flammable refrigerants for retrofitting equipment, UNEP explained that retrofitting equipment with flammable refrigerants is not practiced in the PICs as it is strongly discouraged due to the significant safety risks involved. The training organized under the HPMP for master trainers and RAC technicians emphasized that the use of flammable refrigerants requires specialized expertise and tools, which are often lacking in many parts of the Pacific. The training programmes focus on safety protocols and best practices to avoid unnecessary risks to ensure safe servicing and maintenance practices and discourage retrofitting for the use flammable refrigerants in equipment that is not designed for this use.

HCFC consumption in the fisheries sector

35. On addressing HCFC consumption in the fisheries sector, UNEP explained that under stage II of the HPMP, they are prioritizing policy and technical assistance. UNEP will provide policy support to countries and organize a workshop for Kiribati, the Marshall Islands, Micronesia, Solomon Islands, Tuvalu, and Vanuatu, where they will review the assessment of the HCFC phase-out in the fisheries sector to be conducted as one of the remaining activities from the first tranche and receive training on managing HCFC use in the fisheries sector and on leak management. Solomon Islands and Vanuatu will receive technical assistance based on the assessments of the cold storage facilities for the fish processing plants to identify alternative technologies that can be adopted cost-effectively. UNEP also explained that the PICs will work on drafting regulations to ban the new registration of vessels that operate HCFC-based refrigeration equipment.

Activities to maintain energy efficiency in the refrigeration servicing sector

36. In line with decision 89/6(d), UNEP and the Government of Australia have included in the tranche implementation plan, a request for funding associated with additional activities to maintain energy efficiency.

Status of implementation of minimum energy performance standards for refrigeration and air-conditioning equipment

37. UNEP explained that five countries (Kiribati, Samoa, Solomon Islands, Tuvalu, and Vanuatu) have implemented MEPS for domestic RAC equipment and in three countries (Cook Islands, Niue, and Tonga), MEPS are in the process of development. The proposed project under decision 89/6 is expected to help the countries to update or develop and implement MEPS and labelling including consideration of the refrigerant for RAC equipment, and to build capacity for NOOs, customs authority and energy authorities on the

implementation and enforcement of new or updated MEPS and labelling. A training workshop for NOOs, energy officers and RAC industry will be organized to review a study of MEPS and labelling in Australia/New Zealand and the United States, which will be undertaken, and to discuss standardized MEPS and labelling in the PICs. UNEP will also work on developing a standardized product registry system which includes refrigerant quality and will be based on a study of systems in countries that have standards for energy-efficient equipment. This would be accessible to all countries and combined with the capacity building would facilitate the control of equipment imports and the adoption of zero-/low-GWP based energy-efficient equipment. UNEP informed that the expected date for adoption of new or updated MEPS and labelling in all the 12 countries would be 1 January 2028.

38. Given that AC units must be imported from other countries and that there is no testing laboratory in the PICs, the project includes capacity building and the development of detailed procedures and criteria for verifying the performance of RAC equipment through the testing results from an accredited laboratory and for the acceptance of testing results.

39. Noting that the involvement of RAC associations can help in more effective implementation of measures to adopt energy-efficient equipment and to operate them in an energy-efficient manner, UNEP and Australia plan to involve the RAC industry through the RAC association (if there is a RAC Association in the country) and to build capacity on energy-efficient and low-GWP alternatives through training and assessment workshops for RAC trainers and assessors, and will establish a regional RAC professional network that integrates both energy efficiency and refrigerant phase-out/phase-down. In addition, the project also aims to capitalize on the synergies between energy efficiency improvements and faster refrigerant phase-out/phase-down, which involves consultations to obtain feedback and support from the RAC industry and other stakeholders. These consultations will also strengthen the knowledge and awareness of the industry regarding the government strategy and direction on energy efficiency and refrigerant phase-out/phase-down.

HPMP and KIP coordination

40. On the coordination of the HPMP with the regional KIP, also submitted to the present meeting, UNEP explained that the activities under HPMP and the proposed KIP activities have been carefully designed to avoid any overlaps and to maximize complementarity. Specifically, in the case of the RAC sector related activities, air conditioner related training and technical support are covered under the HPMP and training and technical support for refrigeration equipment (e.g., commercial refrigeration equipment, cold storage) and mobile air-conditioning (MAC) equipment are covered under KIP. Awareness and outreach programmes have been designed to maximize complementarity and minimize the adoption of HFC-based equipment.

Gender policy implementation

41. The implementation of stage II of the HPMP has actively promoted gender equity and encouraged the full engagement of women in various aspects of the program. This has included ensuring equitable involvement in planning, policymaking, advisory roles, and the monitoring and evaluation of HPMP activities. Efforts have been made to encourage the participation of women in all events and activities organized under stage II of the HPMP such as meetings, training workshops, capacity-building initiatives, and outreach efforts. Sex-disaggregated data has been collected wherever possible, along with data on gender issues, in order to monitor and report on the gender impacts of HPMP activities. Additionally, training and awareness campaigns have been conducted to build staff competency in gender mainstreaming, and sufficient financial resources have been allocated to ensure gender-related activities are included in project budgets. Gender issues are also discussed during thematic workshops to facilitate the sharing of experiences and lessons learned. In total, 1,069 people, including 331 women (31 per cent), participated in project activities during the first tranche.

Updated Agreement

42. In view of the inclusion of funding for additional activities to maintain energy efficiency in the refrigeration servicing sector and the request for the second tranche in 2024 instead of 2025 to align with the submission of stage I of KIP, the Agreement between the Governments of the PICs and the Executive Committee has been updated. Specifically, Appendix 2-A has been revised and paragraph 17 has been added to indicate that the updated Agreement supersedes that reached at the 86th meeting by decision 86/77, as contained in annex I to the present document. The full updated Agreement will be appended to the final report of the 95th meeting.

Sustainability of the HCFC phase-out and assessment of risks

43. The Governments of the 12 PICs continued their commitment to implementing the Montreal Protocol activities to phase-out consumption of HCFCs. To ensure sustainability of HCFC phase-out the NOUs will undertake the following measures:

- (a) Continue to closely liaise with importers to obtain HCFC import data and cross-check this with the data from the Customs Department; this will minimize the risk of illegal imports of HCFCs;
- (b) Carry out regular surveys of the market to gauge the penetration of alternative technologies in the RAC sector;
- (c) Monitor the implementation of capacity-building activities with relevant agencies;
- (d) With collaboration from relevant ministries, prepare and submit annual reports on the progress of the HPMP implementation to their Government and to the Multilateral Fund Secretariat; this will facilitate overall project monitoring and will take relevant actions to strengthening implementation capacity at the national level; and
- (e) With collaboration from relevant ministries, prepare and submit annual reports on HCFC consumption as per Article 7 of the Montreal Protocol to UNEP Ozone Secretariat and the Country Programme Implementation report to the Multilateral Fund Secretariat.

44. In addition, support from UNEP and Australia will continue to assist the PICs throughout the implementation period. Further, it is expected that alternatives to HCFCs in different equipment used in PICs should become more available and cost-effective. These will be publicized for faster adoption in the countries thus minimising risks of continue dependence on HCFC-based equipment.

Conclusion

45. The project submission includes information on progress in the implementation of the first tranche of stage II of the HPMP. The activities under stage I of the HPMP were completed in December 2022 and the PCR was submitted in April of 2023. With support from a technical expert, UNEP and the Government of Australia have provided assistance in training and capacity building for RAC technicians on good service practices for HCFC-based equipment and safe servicing of equipment using HCFC-alternatives; training for customs and enforcement officers on controlling and monitoring HCFCs; and awareness and outreach activities on alternatives mainly in residential AC units and different commercial refrigeration equipment. The disbursement of the countries in the region is 27 per cent of the total funds approved for the first tranche, noting that the tranche was submitted a year in advance in order to align with the submission of stage I of the KIP. UNEP has planned the implementation of the project under 89/6 over the next 30 months. Through this project, UNEP would support the adoption and/or updating of MEPS and labelling in the PICs by 1 January 2028; facilitate procedures for the import of energy-efficient products through a product

registration system; and provide RAC technicians with training on energy efficiency for maintaining and servicing equipment, as well as for customs and enforcement officers on the new MEPS and labelling system for control and monitoring of imports. UNEP would ensure that activities under KIPs, once approved, would be well integrated with HPMP activities to maximize complementarity.

RECOMMENDATION

46. The Fund Secretariat recommends that the Executive Committee:

(a) Note:

- (i) The progress report on the implementation of the first tranche of stage II of the HCFC phase-out management plan (HPMP) for the Cook Islands, Kiribati, the Marshall Islands, Federated States of Micronesia, Nauru, Niue, Palau, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu (hereinafter referred to as the Pacific Island Countries (PICs);
- (ii) The submission of additional activities to maintain energy efficiency in the refrigeration servicing sector in the amount of US \$1,356,000, consisting of US \$953,000, plus agency support costs of US \$123,890, for UNEP and US \$247,000, plus agency support costs of US \$32,110, for the Government of Australia;
- (iii) That the Fund Secretariat has updated the Agreement between the Governments of the PICs and the Executive Committee, as contained in annex I to the present document, specifically: Appendix 2-A based on the inclusion of funding for additional activities to maintain energy efficiency in the refrigeration servicing sector referred to in subparagraph (a)(ii) above and the advancement of the second tranche of stage II of the HPMP from 2025 to 2024; and paragraph 17, which has been added to indicate that the updated Agreement supersedes that reached at the 86th meeting by decision 86/77;

47. The Fund Secretariat further recommends blanket approval of the second tranche of stage II of the HPMP for the PICs, and the corresponding 2024-2030 tranche implementation plan, at the funding levels shown in the table below.

	Project title	Project funding (US \$)	Support costs (US \$)	Implementing agency
(a)	HCFC phase-out management plan (stage II, second tranche)	2,772,000	348,188	UNEP
(b)	HCFC phase-out management plan (stage II, second tranche)	382,000	44,667	Government of Australia

PROJECT EVALUATION SHEET – MULTI-YEAR PROJECTS

Pacific Island Countries

PROJECT TITLE	AGENCY
Kigali HFC implementation plan (stage I)	UNEP (lead), the Government of Australia

LATEST ARTICLE 7 DATA (Annex F)	Year: 2023	68.30 mt	158,209 CO ₂ -eq tonnes
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SECTORAL HFC CONSUMPTION DATA (CO ₂ -eq tonnes) AND ACTIVITIES									
	Aerosol	Foam	Fire-fighting	AC and refrigeration				Solvent	Other
				Manufacturing			Servicing		
				Refrigeration	AC	Other			
As submitted (2023)							148,427		
Latest CP report (2023)							158,539		
KIP stage I activities as agreed (Y/N)							Y		

AVERAGE 2020-2022 HFC CONSUMPTION IN SERVICING	44.78 mt	99,894 CO ₂ -eq tonnes
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BASELINE CONSUMPTION DATA (CO ₂ -eq tonnes) *	2020	2021	2022	Average 2020-2022
HFC annual consumption	97,445	99,275	102,962	99,894
HCFC baseline (65%)				71,377
HFC baseline				171,271

*See country specific details in annex II to the present document

HFC CONSUMPTION ELIGIBLE FOR FUNDING	
Starting point for sustained aggregate reductions	n/a
Previously approved HFC phase-down investment projects	No
Aggregate reductions from previously approved projects (CO ₂ -eq tonnes)	n/a

PROJECT DATA AS AGREED			2024*	2025	2026	2027	2028	2029	Total
Consumption (CO ₂ -eq tonnes)	Montreal Protocol limits		171,271	171,271	171,271	171,271	171,271	154,143	n/a
	Maximum allowable		171,271	171,271	150,416	150,416	150,416	140,239	n/a
	Maximum allowable (%)		100	100	87.82	87.82	87.82	81.88	n/a
Amounts recommended in principle (US \$)	UNEP	Project costs	683,000	0	0	559,000	0	0	1,242,000
		Support costs	88,790	0	0	72,670	0	0	161,460
	Government of Australia	Project costs	295,000	0	0	93,000	0	0	388,000
		Support costs	38,350	0	0	12,090	0	0	50,440
	Total project costs		978,000	0	0	652,000	0	0	1,630,000
	Total support costs		127,140	0	0	84,760	0	0	211,900
	Total funds		1,105,140	0	0	736,760	0	0	1,841,900

* Recommended for approval at the present meeting

Reduction from remaining consumption eligible for funding stage I in CO ₂ -eq tonnes	n/a
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Secretariat's recommendation:	Individual consideration
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PROJECT DESCRIPTION

48. The present document contains the following sections:
- I. Summary of the proposal as submitted
 - II. Background: Implementation status of the country's HCFC phase-out management plan
 - III. HFC consumption: Overview of the country's HFC consumption levels, trends, and sectoral uses
 - IV. Stage I of the Kigali HFC implementation plan, as submitted: Overarching strategy and plan of implementation for the first tranche
 - V. Secretariat's comments, including the agreed cost of activities
 - VI. Recommendation

I. Summary of the proposal as submitted

49. On behalf of the Governments of the PICs, UNEP as the lead implementing agency has submitted a request for stage I of the KIP, at a total cost of US \$1,858,285, consisting of US \$1,256,500, plus agency support costs of US \$163,345 for UNEP and US \$388,000, plus agency support costs of US \$50,440 for the Government of Australia, as originally submitted.⁸

50. The implementation of stage I of the KIP will assist the Governments of the PICs in reaching, by 1 January 2029, a collective consumption level of 140,239 CO₂-eq tonnes, as originally submitted. This level of consumption corresponds to an 18.12 per cent reduction from an estimated HFC baseline.

51. The first tranche of stage I of the KIP being requested at this meeting amounts to US \$1,113,898, consisting of US \$690,750, plus agency support costs of US \$89,798 for UNEP and US \$295,000, plus agency support costs of US \$38,350 for the Government of Australia, as originally submitted, for the period of December 2024 to December 2027.

II. Background

Status of implementation of the HCFC phase-out management plan

52. Table 1 presents information on the regional HPMPs in the PICs as of November 2024.

Table 1. Regional HPMP implementation status for the Pacific Island Countries

	Stage I	Stage II*
Meeting when HPMP was approved/updated	63 rd /74 th	86 th
Reduction from baseline	35% by 2020	100% by 2030
Total project cost (US \$)	1,696,000	4,788,400
Date of completion (actual/planned)	December 2022	December 2031

* Updated Agreement is being considered at the present meeting to include addition energy efficiency-related activities under decision 89/6.

⁸ As per the letters dated between July and August 2024 from the relevant ministry of the Governments of the Cook Islands, Kiribati, the Marshall Islands, Federated States of Micronesia, Nauru, Niue, Palau, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu to UNEP.

Status of implementation of previous HFC-related activities

53. Table 2 presents an overview of activities implemented in the PICs in the context of the Kigali Amendment that have been funded by the Multilateral Fund.

Table 2. Previously approved HFC-related activities in Pacific Island Countries

Approval meeting	Project title	Implementing agency	Cost (US \$)	Date of completion
74 th	Survey of ODS alternatives	UNEP	480,000	September 2017
80 th	Enabling activities for HFC phase-down	UNEP	645,000	June 2022

III. HFC consumption overview

HFC consumption levels

54. The PICs only import HFCs for use in the servicing sector. The most consumed substances in 2023 were R-404A (39.5 per cent of total HFC consumption in CO₂-equivalent (CO₂-eq) tonnes), R-410A (24.7 per cent), HFC-134a (23.1 per cent), R-507-A (8.3 per cent), and other HFCs 4.4 per cent). Table 3 presents the country's HFC consumption as reported to the Ozone Secretariat under Article 7 of the Montreal Protocol.

Table 3. HFC consumption in all Pacific Island Countries (2019–2023 Article 7 data) *

HFC	GWP	2019	2020	2021	2022	2023
Metric tonnes (mt)						
HFC-134a	1,430	5.46	16.76	16.92	14.70	25.58
R-404A	3,922	10.17	7.47	8.39	7.00	15.92
R-410A	2,088	11.93	16.49	13.07	15.03	18.72
R-507A	3,985	0.20	0.89	1.69	4.48	3.29
Others**		2.02	4.09	4.25	3.12	4.80
Total (mt)		29.77	45.69	44.32	44.32	68.30
CO₂-eq tonnes						
HFC-134a	1,430	7,802	23,969	24,198	21,018	36,578
R-404A	3,922	39,870	29,285	32,896	27,470	62,433
R-410A	2,088	24,896	34,418	27,281	31,373	39,069
R-507A	3,985	797	3,543	6,734	17,836	13,121
Others**		2,845	6,230	8,166	5,265	7,008
Total (CO₂-eq tonnes)		76,210	97,445	99,275	102,962	158,209

* See annex III to the present document for the details of Article 7 consumption by country

** Including HFC-32, HFC-143a, HFC-152a, HFC-23, R-407A, R-407C, R-427A, R-438A, R-507C

Established HFC baseline

55. The Governments of the PICs reported the Article 7 data for 2020-2022. The combined HFC consumption baselines for the PICs were established at total of 171,271 CO₂-eq tonnes by adding 65 per cent of the HCFC baselines (expressed in CO₂-eq tonnes) to the average HFC consumption in 2020-2022 for each country. Table 4 shows the total of average consumption and established baselines for all PICs, country-specific data can be found in annex II to the present document.

Table 4. HFC baseline calculation for Pacific Island Countries (CO₂-eq tonnes)

Baseline calculation components	2020	2021	2022
HFC annual consumption	97,445	99,275	102,962
HFC average consumption in 2020-2022			99,894
HCFC baseline (65%)			71,377
HFC baseline			171,271

Country programme implementation report

56. The sectoral HFC consumption data provided by the PIC Governments in their CP report for 2023 is consistent with the data reported under Article 7 of the Montreal Protocol in 10 countries. The NOU in Nauru inadvertently submitted an incorrect file to the Multilateral Fund Secretariat, and the Solomon Islands CP report mistakenly included R-507C instead of R-507A. In both cases UNEP has requested that the NOUs resubmit their correct file/report as soon as possible to ensure consistency between the CP and A7 data.

HFC consumption trends

57. A7 and CP data did not align with the data obtained from the field survey for 2020 to 2023 in most PIC countries. This was attributed to the very small volume of HFC imports in the PICs compared to countries in other regions. Due to economies of scale, some importers do not import on annual basis but bring in larger shipments to be used in the next years; therefore, use can be higher or lower than imports in some years. The A7 and the CP data report reflect imports, while the sectoral data reflects the use of HFCs by relevant end users in all applications in the particular year.

58. The submitted A7 data and survey data both show an increasing trend in HFC consumption observed across all PICs from 2019 to 2023. In the A7 data, in particular, the consumption increased steeply in 2020 compared to 2019, remained relatively stable from 2020-2022, and showed another steep increase in 2023 (of 54 per cent in terms of mt). Data in 2019 and 2020 may not have captured all HFCs, as there was no HFC licensing system in operation during these two years in Kiribati, Marshall Islands, Nauru, Niue, Tuvalu, and Vanuatu. Thus, the data reported relied on data provided by HFC importers identified by the NOUs. In 2023, the high growth was particularly notable in R-404A followed by HFC-134a. Sectoral data showed growth across the servicing sector; however, the subsectors identified with the highest growth include the commercial air-conditioning (AC) and refrigeration for fishery vessels. The consumption of all PICs with the exception of Niue, have seen growth in overall HFC consumption in 2023 compared to previous years.

59. HFCs are mainly consumed for servicing in the residential AC subsector (32 per cent in mt and 26 per cent in CO₂-eq tonnes), followed by refrigeration in fisheries vessel (16 per cent in mt and 26 per cent in CO₂-eq tonnes), standalone and commercial-sized refrigeration (18 per cent in mt and 20 per cent in CO₂-eq tonnes), mobile air-conditioning (MAC) subsector (21 per cent in mt and 12 per cent in CO₂-eq tonnes), cold storage and industrial refrigeration (5 per cent in mt and 9 per cent in CO₂-eq tonnes) and other subsectors (9 per cent in mt and 7 per cent in CO₂-eq tonnes) as shown in tables 5 and 6.

Table 5. HFC consumption in all Pacific Island Countries in the refrigeration and AC servicing subsectors in mt (2023)

Sector	HFC-32	HFC-134a	R-404A	R-407A	R-407C	R-410A	R-507A	R-513A	Total	Share of total (%)
Refrigeration subsectors										
Domestic	0.00	2.04	0.00	0.00	0.00	0.00	0.00	0.00	2.04	3
Standalone/commercial	0.00	4.98	4.85	0.02	0.87	0.00	0.39	0.00	11.11	18
Cold storage/industrial	0.00	0.00	3.30	0.00	0.00	0.00	0.01	0.00	3.31	5
Transported/refriger container	0.00	0.17	0.44	0.00	0.00	0.00	0.00	0.00	0.61	1
Fisheries vessels	0.00	0.00	5.39	0.00	0.00	0.00	4.51	0.00	9.90	16
Air-conditioning subsectors										
Residential	2.20	0.00	0.00	0.00	0.02	17.53	0.00	0.00	19.75	32
Commercial/chillers	0.46	0.42	0.63	0.00	0.00	1.14	0.00	0.00	2.65	4
Mobile	0.00	12.82	0.00	0.00	0.00	0.00	0.00	0.00	12.82	21
Total	2.66	20.43	14.60	0.02	0.89	18.67	4.91	0.00	62.18	100

Table 6. HFC consumption in all⁹ Pacific Island Countries in the refrigeration and AC servicing subsectors in CO₂-eq tonnes (2023)

Sector	HFC-32	HFC-134a	R-404A	R-407A	R-407C	R-410A	R-507A	R-513A	Total	Share of total (%)
Refrigeration subsectors										
Domestic	0	2,914	0	0	0	0	0	0	2,914	2
Standalone/commercial	0	7,123	19,012	44	1,549	0	1,534	2	29,264	20
Cold storage/industrial	0	0	12,930	0	0	0	32	0	12,961	9
Transported/reefer container	0	246	1,710	0	0	0	0	0	1,956	1
Fisheries vessels	0	0	21,137	0	0	0	17,988	0	39,126	26
Air-conditioning subsectors										
Residential	1,485	0	0	0	34	36,600	0	0	38,119	26
Commercial/chillers	311	595	2,471	0	0	2,380	0	0	5,756	4
Mobile	0	18,331	0	0	0	0	0	0	18,331	12
Total	1,796	29,209	57,259	44	1,582	38,980	19,554	2	148,427	100

Refrigeration and air-conditioning servicing sector

60. There are approximately 281 technicians identified in MAC servicing sector and 541 technicians identified in the RAC servicing sector. In five countries (see table 7 below) national universities, colleges and other educational institutions are involved in providing TVET in RAC servicing and in three countries a TVET certificate is mandatory for RAC technicians. In other countries, consultations to develop and establish a national certification programme for RAC technicians was included as an activity under stage II of the regional HPMP for the PICs.

Table 7. Number of RAC technicians and servicing sector profile by country

Country	MAC technicians	RAC technicians	Have TVET system for RAC	Competency-based certification system
Cook Islands	10	42	No	No
Kiribati	12	25	No	No
Marshall Islands	8	6	No	No
Micronesia (Federated States of)	20	45	Yes	No
Nauru	10	10	No	No
Niue	4	3	No	No
Palau	15	57	No	No
Samoa	54	82	Yes	Yes (mandatory)
Solomon Islands	88	162	Yes	Yes (mandatory)
Tonga	23	35	Yes	No
Tuvalu	13	20	No	No
Vanuatu	24	54	Yes	Yes (mandatory)
Total	281	541	5	3

Domestic, commercial, industrial, transport and fishery refrigeration servicing

61. All PICs identified having a domestic refrigeration servicing subsector with some consumption of HFC-134a; however, a nearly equal quantity of new and installed units using R-600a were also identified, showing an encouraging trend toward this alternative. The HFC consumption in this subsector is relatively low compared to the other servicing subsectors.

⁹ Ibid.

62. HFC consumption in the commercial refrigeration subsector, including standalone commercial refrigeration units and other commercial-sized equipment, is the third highest HFC consuming subsector in CO₂-eq tonnes and consumes the widest range of HFCs (in order of prevalence: R-404A, HFC-134A, R-407C, R-507A, R-407A, and R-513A). The two most used substances in this subsector are HFC-134a and R-404A (at 45 and 44 per cent of the mt consumption in the subsector respectively). R-513A was not reported in the Article 7 data, but a very small quantity (2 CO₂-eq tonnes) was validated in the preparation survey in commercial refrigeration applications. In the survey new and installed standalone refrigeration units relying on R-600a (63 per cent of new and installed equipment) and R-290 (less than 1 per cent) were also identified. Standalone commercial refrigeration units were identified in every PIC country and other commercial-sized refrigeration in nine of the 12 PICs (all except Cook Islands, Marshall Islands and Tonga).

63. HFC consumption in the industrial refrigeration and cold storage subsectors is the fifth highest out of the eight subsectors in both mt and CO₂-eq tonnes. This subsector was identified in all PICs except for Palau, and R-404A (99 per cent of the mt consumption in the subsector) and R-507A were the only substances identified. The survey also identified some ammonia-based equipment (R-717) (22 per cent of the new and installed units identified in this subsector). A small number of R-717-based equipment was also identified in cold storage. Refrigerated transport and reefer container servicing has the smallest consumption of HFCs, among the eight subsectors identified and only five countries reported consumption in this subsector (Kiribati, Nauru, Samoa, Solomon Islands, and Tonga); R-404A (72 per cent of the mt consumption in the subsector) and HFC-134 were the only HFCs identified.

64. In terms of CO₂-eq tonnes, servicing of fishery vessels was tied for the largest consumption of HFCs among the PICs. However, this subsector is only fourth in terms of its HFC consumption in mt and is present in only five countries (Marshall Islands, Federated States of Micronesia, Solomon Islands, Tonga, and Vanuatu). Fishery vessels use both R-404A (54 per cent of the mt consumption in the subsector) and R-507A (46 per cent of the subsector HFC consumption).

65. Due to the high-global-warming potential (GWP), abundance, and projected growth, R-404A, R-507A, and HFC-134a consumption in commercial, industrial, and fishery refrigeration servicing are being prioritized under the proposed stage I of the KIP.

Residential and commercial air-conditioning servicing

66. The residential AC is the highest HFC consuming subsector in the PICs in terms of mt and is tied for highest consumption in CO₂-eq tonnes. Every PIC has reported consumption in this sector, which uses primarily equipment based on R-410A (89 per cent of the mt consumption in this subsector) with some consumption of HFC-32 (11 per cent of HFC consumption in the subsector). Some equipment based on R-407C, and R-290 was also identified but both accounted for less than 1 per cent of new and installed equipment.

67. Consumption in the commercial AC subsector, including chillers, is relatively small throughout the PICs, amounting to only 4 per cent of total HFC consumption in the country in terms of CO₂-eq tonnes. HFC consumption in commercial AC was reported in nine PICs (Marshall Islands, Federated States of Micronesia, Nauru, Niue, Palau, Samoa, Solomon Island, Tuvalu, Vanuatu), while HFC consumption in chillers was reported in eight (Kiribati, Federated States of Micronesia, Nauru, Palau, Samoa, Solomon Islands, Tuvalu, and Vanuatu). The HFCs used in commercial refrigeration are HFC-32 and R-410A while chillers have a wider use of HFCs and blends, including HFC-32, HFC-134a, R-404A, and R-410A. The

R-410A accounts for 43 per cent of the mt consumption in chillers and commercial AC, followed by R-404A (24 per cent), HFC-32 (17 per cent) and HFC-134a (16 per cent).

Mobile air-conditioning servicing

68. All PICs identified consumption in the MAC subsector. Servicing in the MAC subsector has the fourth highest HFC consumption in terms of CO₂-eq tonnes but is second highest in terms of mt. Only HFC-134a has been identified in this subsector and alternatives are not yet in use in the PICs. Due to the quantity of HFCs consumed in this subsector, it is being prioritized under the proposed stage I of the KIP.

IV. Stage I of the Kigali HFC implementation plan as submitted

Institutional, policy and regulatory framework

69. The Governments of all 12 PICs have passed regulations and/or legislation to mandate the control of HFCs and have established legal mechanisms to monitor both ODSs and HFCs through licensing systems. The HFC licensing and quota systems have been operational in all PICs as of July 2024. As with the HCFC licensing and quota systems, license applications for importing or exporting HFCs are processed through the NOUs, which are also responsible for the allocation of HFC quotas. Importers are assigned quotas in CO₂-eq tonnes and have the flexibility to decide the type and quantity of HFCs and HFC-blends to import within their allocated quota. All 12 PICs have provisions in their existing regulations to require a license/permit in handling, storage, and sale of controlled substances under the Montreal Protocol. A summary of regulatory measures, including the modality of implementation of HFC licensing and quota system in each PIC, is summarized in table 8 below.

Table 8: Regulatory and supporting environment for the phase-down of HFCs in the 12 Pacific Island Countries

PICs	Measure/support (status)
Licensing and quota system for HFCs	
All	As of 1 January 2021: Cook Islands, Kiribati, Marshall Islands, Federated States of Micronesia, Niue, Palau, Samoa, Tonga, Tuvalu, Vanuatu As of 23 November: Solomon Islands As of 1 May 2023: Nauru
Operational licensing and quota system	
All – quotas are based on baseline year consumption for all PICs	Paper-based system: Cook Islands, Kiribati, Marshall Islands, Nauru, Niue, Palau, Samoa, Tonga, and Tuvalu Electronic system: Federated States of Micronesia, Solomon Islands and Vanuatu (integrated platform)
RAC associations	
Kiribati, Federated States of Micronesia, Nauru, Palau, Samoa, Solomon Islands and Tonga	Active RAC associations
Tuvalu and Vanuatu	The NOUs are working with the RAC stakeholders to revive the associations
Niue and Marshall Islands	Not practical to have RAC association due to low number of technicians

Phase-down strategy for stage I of the Kigali HFC implementation plan

Overarching strategy

70. The overarching strategy for HFC phase-down up to 2045 will encompass five strategic elements: limiting the supply of HFCs; limiting the new demand for high-GWP HFCs; promoting climate-friendly equipment; reducing the demand for HFCs for servicing; and the safe introduction of lower-GWP

alternatives. Activities will be delivered through a regional approach aimed at addressing challenges common to the region and through national approaches, which will address the unique challenges within each country. Stage I would be implemented simultaneously with the HPMP until 2029 and would reduce consumption by 12.18 per cent of the baseline by 2026 and by 18.12 per cent by 2029. The regional reduction of 12.18 per cent from the baseline proposed is based on a 30 per cent reduction from the baseline in the Solomon Islands by 25 and the regional reduction of 18.12 per cent is based on a 10 per cent reduction from the baseline in the 11 other PICs by 2029. Stage II is expected to cover a period of 15 years from 2030 to 2045.

Proposed reductions

71. The Governments of the PICs and UNEP forecasted consumption in a business-as-usual-scenario (BAU) without interventions. In this BAU scenario, HFC consumption is projected to surpass the compliance commitments by 2026 based on an annual growth of 2.71 per cent. HFCs and application that are dominating current usage of HFCs (e.g., commercial refrigeration, residential AC) are assumed to continue to grow. Specifically, R-404A and HFC-134a are expected to continue to dominate HFC consumption in the PICs. R-404A, R-507A, and HFC-134a are forecasted to slowly increase from 2024 to 2045 due to continued growth forecasted in fishery vessels, commercial refrigeration, and MAC. The use of R-410A is projected to decline from 2031 onwards, but the amount of R-410A would still be relatively high compared to other remaining substances. The trend in table 9 below reveals that starting from 2027, HFC consumption in the 12 PICs is expected to exceed the control level under the BAU scenario, which would pose risks of non-compliance.

Table 9. HFC consumption forecast under unconstrained scenario, Montreal Protocol limits and proposed HFC reductions under stage I (CO₂-eq tonnes)

	2023*	2024	2025	2026	2027	2028	2029
HFC consumption forecast (annual growth rate of 2.71 per cent)	158,209	162,490	166,886	171,401	176,039	180,801	185,693
Montreal Protocol HFC consumption limits	n/a	171,271	171,271	171,271	171,271	171,271	154,143
Proposed HFC consumption under the KIP	n/a	171,271	171,271	150,416	150,416	150,416	140,239
Proposed reduction in HFC consumption from baseline (%)	n/a	0	0	-12.18	-12.18	-12.18	-18.12

* As per Article 7 data.

** Steady growth in HFC consumption that reaches 185,693 CO₂-eq tonnes by 2029 is projected in a BAU scenario, yielding an average annual growth over the six-year period of roughly 2.71 per cent.

Proposed activities

72. The overarching strategies will be implemented through regional and national activities, with specific national activities identified per country, as summarized in tables 10 and 11 below. The regional activities will be led by UNEP as lead implementing agency, and the Government of Australia, as cooperating bilateral agency, will focus on developing tools to facilitate the implementation of national activities. Consumption in commercial, industrial, and fishery refrigeration servicing and in residential and mobile AC are being prioritized under the activities in stage I of the KIP.

Table 10. Main regional and national activities under stage I of the KIP for the Pacific Island Countries

Strategic component	Regional activities	Cost stage (US \$)	National activities (UNEP)	Cost stage (US \$)
Policy and regulation to support HFC phase-down	Three regional thematic workshops for NOOs and other relevant stakeholders from 12 PICs back-to-back with the annual network meetings (UNEP)	262,500	Public consultation workshops to support regulatory updates including: - Banning the import of R-410a-based air-conditioners (all 12 PICs) - Banning the import of HFC-134a-based domestic refrigerators (all 12 PICs) - Exploring the potential to ban new registration of refrigerated fishing vessels based on high-GWP HFCs (Marshall Islands, Federated States of Micronesia, Solomon Islands, Tonga, Vanuatu)	48,000
Strengthening the monitoring and enforcement systems	Expert assessment of the licensing systems for Kiribati, Nauru, Niue, Marshall Islands, Tonga and Tuvalu and a workshop on strengthening the licensing and quota systems and post meeting support to countries (UNEP)	45,500	Development of an electronic database for HFC licensing system and training for importers (Federated States of Micronesia, Palau, Samoa, Solomon Islands, Tonga)	160,000
	One technical workshop on strengthening the licensing and quota system for all 12 PICs (UNEP)	95,000		
Capacity building in the MAC sector	Development of MAC good servicing practices competency-based training and assessment module (Government of Australia)	25,000	Training programme on good servicing practices for MAC technicians (Cook Islands, Kiribati, Federated States of Micronesia, Palau, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu)	72,000
	One five-day regional competency-based train-the-trainers workshop in identified host country for MAC master trainers from 9 PICs in 2026 (Government of Australia)	105,000		
Capacity building in refrigeration and cold storage	One five-day regional train-the-trainers workshop in identified host country for RAC master trainers from 9 PICs in 2025 (Government of Australia)	105,000	Technician training programme on good servicing practices in refrigeration and cold storage (Cook Islands, Kiribati, Federated States of Micronesia, Nauru, Palau, Samoa, Solomon Islands, Tonga, and Vanuatu)	168,000
	Development of competency-based training and assessment module for good servicing practices and safety (Government of Australia)	30,000		
	RAC expert for training on good servicing practices for refrigeration and cold storage for Marshall Islands, Niue, and Tuvalu and Marshall Islands (Government of Australia)	30,000	Technician training programme with RAC expert on good servicing practices in refrigeration and cold storage (Marshall Islands, Niue and Tuvalu)	10,500

Strategic component	Regional activities	Cost stage (US \$)	National activities (UNEP)	Cost stage (US \$)
Capacity building fishery sector	No regional component		Capacity building for NOUs and RAC technicians servicing fishery vessels (Marshall Islands, Federated States of Micronesia, Solomon Islands, Tonga, and Vanuatu)	10,000
Low-GWP alternative technology	One two-day symposium on available and accessible alternative/low GWP technology in identified host country for NOOs and RAC industry representatives of 12 PICs to attend the symposium back-to-back with the PIC network meeting in 2027 (Government of Australia)	93,000	Demonstration project low-GWP technology (Cook Islands, Palau, Samoa, Solomon Islands, Tonga, and Vanuatu)	150,000
Public awareness	Design awareness materials for KIPs with consideration of gender mainstreaming (UNEP)	20,000	Awareness raising and communication to relevant stakeholders (all 12 PICs)	104,000
Project monitoring and support	No regional component		Project monitoring (all 12 PICs) including: - Domestic travel to support implementation (US \$ 42,000); and - Office supplies to support implementation (US \$69,000)	111,000
Total	Regional component	811,000	National component	833,500

Table 11. Cost per activity and per country for national and regional components of stage I of the KIP for the Pacific Island Countries as submitted (US\$)

Country	Policy and regulation to support HFC-phase down	Strengthening the monitoring and enforcement systems	Capacity building in the MAC sector	Capacity building refrigeration, cold storage, and fisheries vessels and demonstration project	Public Awareness	Project Implementation and Monitoring	Total
National activities							
Cook Islands	4,000	0	6,000	37,000	12,000	8,500	67,500
Kiribati	4,000	0	6,000	6,000	4,000	6,000	26,000
Marshall Islands	4,000	0	0	5,500	4,000	6,000	19,500
Micronesia (Federated States of)	4,000	32,000	6,000	20,000	12,000	17,000	91,000
Nauru	4,000	0	0	6,000	4,000	3,000	17,000
Niue	4,000	0	0	3,500	4,000	3,000	14,500
Palau	4,000	32,000	6,000	43,000	12,000	7,000	104,000
Samoa	4,000	32,000	12,000	52,000	12,000	12,000	124,000
Solomon Islands	4,000	32,000	18,000	72,000	12,000	16,750	154,750
Tonga	4,000	32,000	6,000	45,000	12,000	11,500	110,500
Tuvalu	4,000	0	6,000	3,500	4,000	3,000	20,500
Vanuatu	4,000	0	6,000	45,000	12,000	17,250	84,250
<i>Subtotal</i>	<i>48,000</i>	<i>160,000</i>	<i>72,000</i>	<i>338,500</i>	<i>104,000</i>	<i>111,000</i>	<i>833,500</i>
Regional activities							
UNEP	262,500	140,500	0	0	20,000	0	423,000

Country	Policy and regulation to support HFC-phase down	Strengthening the monitoring and enforcement systems	Capacity building in the MAC sector	Capacity building refrigeration, cold storage, and fisheries vessels and demonstration project	Public Awareness	Project Implementation and Monitoring	Total
Government of Australia	0	0	130,000	258,000	0	0	388,000
<i>Subtotal</i>	<i>262,500</i>	<i>140,500</i>	<i>130,000</i>	<i>258,000</i>	<i>20,000</i>	<i>0</i>	<i>811,000</i>
Component total	310,500	300,500	202,000	596,500	124,000	111,000	1,644,500

Project implementation, coordination and monitoring

73. The system established under stages I and II of the HPMP will continue where the regional HPMP component is managed by UNEP and the NOUs of each country continue to be responsible for the coordination, implementation and monitoring of national activities. The cost of monitoring activities amounts to US \$111,000 which will be used for domestic travel and office supplies to support implementation.

Gender policy implementation

74. In line with decisions 84/92(d), 90/48(c) and 92/40(b), gender mainstreaming will be considered throughout the implementation of stage I of the regional KIP. Moreover, an initial gender assessment has been conducted during the project preparation for the regional KIP to analyze how gender could be mainstreamed during project implementation. Project management staff will ensure that human resources, knowledge management, and capacity building will be gender-responsive by including specific indicators for each activity and monitoring and reporting progress. Indicators have been included in regional and national components and will include the number of women and men applicants and recruitments, the percentage of men and women receiving information and participating in activities under the KIP, and the number of gender-responsive assessments.

Coordination of activities in the servicing sector under HCFC phase-out and HFC phase-down plans

75. Stage II of the HPMP is expected to be completed in 2031 and stage I of the KIP implementation will be until 2030. Accordingly, the HPMP and KIP will be jointly implemented between 2024 and 2030. Activities for the phase-down of HFCs were designed to be harmonized with the phase-out of HCFC consumption to the extent possible, by identifying opportunities for complementary efforts and avoiding duplication.

76. The proposed schedule of phase-down commitments and funding tranches under stage I of the regional KIP, the schedule of phase-out commitments and the funding tranches under stage II of the regional HPMP, and the schedule of phase-out commitments and the funding tranches in each PIC are presented in annex IV. Annex V provides an overview of activities of stage II of the HPMP and stage I of the KIP, showing that activities planned under the KIP either avoid duplication of planned activities under the HPMP or are add a new element or focus to complement the HPMP activities.

Total cost of stage I of the Kigali HFC implementation plan

77. The budget for stage I has been proposed at US \$1,644,500. The costs of activities in the refrigeration servicing sector that have been proposed for eleven countries including regional and national components are in line with decision 92/37. For the Solomon Islands the proposed regional and national component is US \$9,750 higher than the maximum funding eligible in decision 92/37. The higher cost is

due to the additional reduction proposed of 30 per cent from the baseline by 2029. Further, while the other 11 countries are well below the maximum eligible funding for individual project under decision 92/37, the regional component of US \$811,000 is included bringing the total project costs to US \$1,644,500 for regional and national activities, which is US \$14,500 higher than the sum of the maximum for individual project to achieve a 18.12 per cent reduction overall from the regional baseline by 2029, as shown below in table 12.

Table 12. Proposed costs of national and regional components and proposed reduction for stage I of the KIP for Pacific Island Countries (US \$)

Country	Average consumption 2020-2022 (mt)	Eligible funding (decision 92/37)	Total proposed	Proposed reduction by 2029 (%)
Cook Islands	1.77	135,000	67,500	10
Kiribati	2.25	135,000	26,000	10
Marshall Islands	3.22	135,000	19,500	10
Micronesia (Federated States of)	3.87	135,000	91,000	10
Nauru	0.46	135,000	17,000	10
Niue	0.02	135,000	14,500	10
Palau	3.15	135,000	104,000	10
Samoa	6.09	135,000	124,000	10
Solomon Islands	16.10	145,000	154,750	30
Tonga	1.71	135,000	110,500	10
Tuvalu	0.13	135,000	20,500	10
Vanuatu	6.00	135,000	84,250	10
Regional activities	n/a	n/a	811,000	n/a
Total	44.78	1,630,000	1,644,500	18

Implementation of the first tranche of stage I of the Kigali HFC implementation plan

78. The first funding tranche of stage I of the KIP, in the total amount of US \$985,750, will be implemented between December 2024 and December 2027 and will include the activities shown in table 13 below.

Table 13. Main regional and national activities under the first tranche of stage I of the KIP

Strategic component	Regional activities	Cost stage (US \$)	National activities (UNEP)	Cost stage (US \$)
Policy and regulation to support HFC-phase down	Two regional thematic workshops for NOOs and other relevant stakeholders from 12 PICs back-to-back with the annual network meetings (UNEP)	175,000	Public consultation workshops in all 12 PICs to support regulatory updates including: - Banning the import of R-410a-based air-conditioners (all 12 PICs) - Banning the import of HFC-134A-based domestic refrigerators (all 12 PICs) - Exploring the potential to ban new registration of refrigerated fishing vessels based on high-GWP HFCs (Marshall Islands, Federated States of Micronesia, Solomon Islands, Tonga, Vanuatu)	48,000

Strategic component	Regional activities	Cost stage (US \$)	National activities (UNEP)	Cost stage (US \$)
Strengthening the monitoring and enforcement systems	Expert assessment of the licensing system for Kiribati, Nauru, Niue, Marshall Islands, Tonga and Tuvalu and a workshop on strengthening licensing and quota systems and post meeting support to countries (UNEP)	53,000	Consultation for the development of an electronic database for HFC licensing system and training for importers; and training of HFC importers on the use of electronic licensing system (Federated States of Micronesia, Palau, Samoa, Solomon Islands, Tonga)	160,000
Capacity building in the MAC sector	Development of MAC good servicing practices competency-based training and assessment module (Government of Australia)	25,000	12 training workshops on good servicing practices for a total of 180 MAC technicians (Cook Islands, Kiribati, Federated States of Micronesia, Palau, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu)	36,000
	One five-day regional competency-based train-the-trainer workshop in identified host country for MAC master trainers from 9 PICs in 2026 (Government of Australia)	105,000		
Capacity building in refrigeration and cold storage	One five-day regional train-the-trainer workshop in identified host country for RAC master trainer from 9 PICs in 2025 (Government of Australia)	105,000	27 training workshops on good servicing practices in refrigeration and cold storage for a total of 405 technicians (Cook Islands, Kiribati, Federated States of Micronesia, Nauru, Palau, Samoa, Solomon Islands, Tonga, and Vanuatu)	81,000
	Development of competency-based training and assessment module for good servicing practices and safety (Government of Australia)	30,000		
	RAC expert on good servicing practice for refrigeration and cold storage for Niue, Tuvalu and Marshall Islands (Government of Australia)	30,000	Three technician training workshops for a total of 15 technicians with a RAC expert on good servicing practices in refrigeration and cold storage (Marshall Islands, Niue and Tuvalu)	5,250
Capacity building fishery sector	No regional component	-	Capacity building of NOUs and RAC technicians servicing fishery vessels (Marshall Islands, Federated States of Micronesia, Solomon Islands, Tonga, and Vanuatu)	5,000
Public awareness	Design awareness materials for KIPs with consideration of gender mainstreaming (UNEP)	20,000	Awareness raising and communication to relevant stakeholders (all 12 PICs)	52,000
Project monitoring and support	No regional component	-	Project monitoring (all 12 PICs) including: - Domestic travel to support implementation (US \$21,000); and - Office supplies to support implementation (US \$34,500)	55,500
Total	Regional component	543,000	National component	442,750

SECRETARIAT'S COMMENTS AND RECOMMENDATION

V. Comments

Issues related to HFC consumption

79. On the revision of baseline data for HFCs, seven countries (namely Cook Islands, Kiribati, Marshall Islands, Nauru, Niue, Tuvalu, and Vanuatu) had requested a revision of baseline data at the 73rd meeting of the Implementation Committee. UNEP had proposed to use Article 7 data as recorded by the Ozone Secretariat (mt and CO₂-eq tonnes) for the project review, while the decision was pending; given that the service sector consumption baselines in these countries are all below 15 mt, the total funding level for the stage I of the KIP would not be affected. At the 73rd meeting, the Implementation Committee decided not to approve the proposed changes to the baselines in these countries; thus, the data provided in annex III to the present document represents the current baseline HFC consumption for each of the countries.

80. UNEP indicated that while all PICs have an enforceable and operational HFC licensing and quota system, discrepancies are difficult to avoid due to the very small HFC consumption levels and due to the adjustment period as the NOUs in monitoring and reporting on a new set of substances. As a result, there were some errors in certain countries in the region in the CP data reporting, which was resubmitted by nine countries (Cook Islands, Kiribati, Marshall Islands, Federated States of Micronesia, Nauru, Niue, Solomon Islands, Tonga, and Vanuatu) for years between 2019 and 2022, varying by country. Additional discrepancies were identified in the 2023 CP report in Nauru and Solomon Islands and in the 2021 resubmitted report for Vanuatu; and these reports were resubmitted as of 14 November 2024, although the Secretariat had not reviewed them prior to the publication of this document. The components to strengthen the institutional and regulatory capacity and the monitoring and enforcement systems, included in stage I of the KIP will help address these issues.

81. Regarding end-of-life management and disposal, UNEP explained that the countries do not have any regulations to control and monitor the safe handling and disposal of refrigerants from equipment reaching the end-of-life. Further, any such regulations would be considered under a project to be submitted under decision 91/66, for which a request for preparatory funding has been submitted to the present meeting.

Institutional, policy and regulatory framework

HFC licensing and quota system

82. In line with decision 87/50(g), UNEP has confirmed that the PICs have established licensing and quotas systems for monitoring imports/exports of HFCs. UNEP explained the methodology proposed to be followed in different countries in the region for the management of HFC quotas to ensure that HFC consumption in each country stays within the compliance targets. The Secretariat noted that even small changes in import quantities of certain substances that have a high GWP could affect the country's national HFC consumption targets. UNEP explained that this would be managed through a careful allocation of HFC quotas along with training and capacity building for NOUs on managing HFC quotas, monitoring and enforcement of quota allocation and imports, and strong coordination and consultation with the importers and customs authorities. The activities relating to strengthening the monitoring and enforcement systems for HFCs and capacity building both under the HPMPs and the KIP, in particular, would ensure compliance.

Regulations to prohibit the import of HFC-based equipment

83. The Secretariat requested additional information on whether the PICs are considering prohibiting the import of HFC-based equipment, particularly domestic refrigerators, HFC-based commercial refrigeration equipment, and R-410A-based air conditioners. UNEP explained that currently, there is no prohibition on any HFC-based equipment in the country. During the KIP implementation, regulatory

interventions, which would reduce the population of HFC-based equipment, will be considered by the PICs. In terms of timelines, UNEP mentioned that the PICs would be able to implement regulations to prohibit the import of HFC-based domestic refrigerators and R-410A-based air conditioners by 1 January 2029. They would also continue consulting relevant technical personnel and national stakeholders on implementing additional controls and/or prohibitions on high-GWP HFC-based commercial refrigeration equipment. UNEP agreed to provide an update on these regulations when submitting the second tranche of stage I of the KIP.

Technical and cost-related issues

84. The Secretariat requested additional information relating to how the capacity building of service technicians under stage I of the regional KIP will be addressed. UNEP explained that the planned capacity building and training programmes, both at the regional and national level, would relate to refrigeration equipment and MAC equipment. The HPMP activities include technician capacity building activities for AC, which would also support HFC phase-down, to avoid duplication of activities. Regarding equipment support to service technicians, UNEP explained that keeping in view the current funding available under stage I of the regional KIP and the national priorities of the countries on demand and supply management of HFCs, no equipment support to training centres and service technicians are planned under stage I of the regional KIP. However, UNEP and the Government of Australia will work with the PICs to utilize equipment acquired under stage II of the HPMP for capacity building of service technicians during the training delivered under stage I of the KIP. Acquisition of equipment for training centres and technicians would be considered based on a technical needs assessment during the preparation of stage II of the KIP.

85. On the certification system for service technicians, UNEP is working with the PICs that have provisions for technician certification for the handling of refrigerants in their ODS regulations to ensure the enforcement of these regulations and is supporting the other countries in assessing possible regulatory measures for the mandatory certification of technicians. During the thematic workshop on the establishment and implementation of competency-based certification in the PICs held in the Cook Islands in February 2024 as part of the HPMP activities, the importance of competency-based certification and a way forward to implement competency-based certification was emphasized. Further, under the second tranche of stage II of the HPMP, UNEP, in collaboration with the Government of Australia, will conduct a regional competency-based assessment workshop to strengthen capacity at the national level. UNEP also explained that during the training programmes related to refrigeration and MAC equipment that would be implemented under stage I of the KIP, the technicians would also undergo a technical assessment after the training and based on this, a certificate of competency would be provided. In the long term, UNEP will also consult different stakeholders to explore the possibility of harmonizing competency-based certification in the PICs and whether there could be a regional certification for service technicians as this would encourage more service technicians to get certified. This would be considered during stage II of the KIP based on progress of implementation at the national level.

86. On the demonstration project proposed to be implemented in six countries to popularize the adoption of low-GWP refrigeration technologies in commercial refrigeration applications (e.g., cold storage, commercial refrigeration), the operations of equipment in different end users and demonstrated safe and efficient performance would help in faster adoption of these technologies. Keeping in view the limited scale of this activity, the Secretariat had a discussion with UNEP on the potential impact of the adoption of this technology in the region. Following this discussion, it was agreed that UNEP would continue to consult with stakeholders on this project component to assess the feasibility taking into account the readiness of countries (e.g., access to technology, capacity of technicians to install and maintain equipment, etc.). In case the plan is not technically or economically viable, when the second tranche is submitted, an alternative plan for using these funds for capacity building in the service sector would be submitted.

87. Further, UNEP clarified that large RAC applications are targeted for demonstration and not residential air conditioners or standalone domestic/commercial refrigerators. The main criteria for choice of equipment will be the energy efficiency performance and the use of low-GWP refrigerants. The criteria for participation in the demonstration project would be (a) ownership of the appliance in commercial refrigeration/cold storage, (b) ability to provide co-financing to cover the expenses not covered by the project funding and (c) agreement by the potential beneficiary to collaborate on the assessment and share the results of the demonstration project. The specific details would be finalised during the implementation. It is proposed that total six types of equipment among cold storage, refrigeration in the fishery sector and commercial refrigeration equipment (not standalone) be acquired under the demonstration. UNEP would also submit a final report on the implementation of this project, including the HFC phase-out and energy efficiency gains achieved, in line with decision 92/36(g).

Support from other regional countries

88. Although Fiji is not part of the regional project, as one of the largest HFC-consuming countries in the region, Fiji will contribute to the implementation of the regional KIP in the PICs. While stage I of the KIP is being prepared and finalized for Fiji, potential activities to be implemented by UNEP will be aligned with activities under stage I of the regional KIP for the PICs to maximize the benefits of a regional approach. For example, NOOs and master trainers from Fiji can provide support in sharing knowledge and experience with other PICs based on identified need as part of the south-south cooperation framework; Fiji has a well-equipped training facility, which has the potential to host the regional training programmes to be implemented under the regional KIP; and Fiji is currently conducting iPIC¹⁰ consultations prior to granting export licenses for controlled substances to other countries, including the PICs. Fiji can play an important role in strengthening the import-export control of HFCs in the PIC region.

Total project cost

89. UNEP explained that the activities (and their associated costs) at the regional and the country levels included in stage I of the regional KIP were carefully considered following the experiences gained through the implementation of the HPMP. Close consultations were held between the PICs, UNEP, and the Government of Australia to discuss the best way to reflect the actual costs of implementing activities in very small countries where their geographic location and scattered nature were important elements to consider. One main challenge during the HPMP implementation, was the insufficient funding that was allocated to travel and training across and within each PIC. During the discussions, UNEP agreed to reduce the funding request for Solomon Islands to US \$140,250, so that the total for all 12 countries and the regional component are equal the sum of the maximum eligible funding for the countries under decision 92/37(b)(ii).

90. At the total cost of US \$1,630,000, stage I of the KIP for Pacific Island Countries will result in a reduction of 31,032 CO₂-eq tonnes from the regions' HFC consumption eligible for funding, as summarized in tables 14 and 15 below with revised costs in bold.

Table 14. Proposed and agreed costs national and regional components and reduction for stage I of the KIP for Pacific Island Countries (US \$)

Country	Average consumption 2020-2022 (mt)	Eligible funding (decision 92/37)	Total originally proposed	Total agreed	Proposed reduction by 2029 (%)
Cook Islands	1.77	135,000	67,500	67,500	10
Kiribati	2.25	135,000	26,000	26,000	10
Marshall Islands	3.22	135,000	19,500	19,500	10

¹⁰ Informal Prior-Informed Consent

Country	Average consumption 2020-2022 (mt)	Eligible funding (decision 92/37)	Total originally proposed	Total agreed	Proposed reduction by 2029 (%)
Micronesia (Federated States of)	3.87	135,000	91,000	91,000	10
Nauru	0.46	135,000	17,000	17,000	10
Niue	0.02	135,000	14,500	14,500	10
Palau	3.15	135,000	104,000	104,000	10
Samoa	6.09	135,000	124,000	124,000	10
Solomon Islands	16.10	145,000	154,750	140,250	30
Tonga	1.71	135,000	110,500	110,500	10
Tuvalu	0.13	135,000	20,500	20,500	10
Vanuatu	6.00	135,000	84,250	84,250	10
Regional activities	n/a	n/a	811,000	811,000	n/a
Total	44.78	1,630,000	1,644,500	1,630,000	18.12

Table 15. Cost per activity and per country for national and regional components of stage I of the KIP for the Pacific Island Countries (US \$)

Country	Policy and regulation to support HFC-phase down	Strengthening the monitoring and enforcement systems	Capacity building in the MAC sector	Capacity building refrigeration, cold storage, and fisheries vessels and demonstration project	Public Awareness	Project Implementation and Monitoring	Total
National activities							
Cook Islands	4,000	0	6,000	37,000	12,000	8,500	67,500
Kiribati	4,000	0	6,000	6,000	4,000	6,000	26,000
Marshall Islands	4,000	0	0	5,500	4,000	6,000	19,500
Micronesia (Federated States of)	4,000	32,000	6,000	20,000	12,000	17,000	91,000
Nauru	4,000	0	0	6,000	4,000	3,000	17,000
Niue	4,000	0	0	3,500	4,000	3,000	14,500
Palau	4,000	32,000	6,000	43,000	12,000	7,000	104,000
Samoa	4,000	32,000	12,000	52,000	12,000	12,000	124,000
Solomon Islands	4,000	32,000	18,000	60,000	12,000	14,250	140,250
Tonga	4,000	32,000	6,000	45,000	12,000	11,500	110,500
Tuvalu	4,000	0	6,000	3,500	4,000	3,000	20,500
Vanuatu	4,000	0	6,000	45,000	12,000	17,250	84,250
<i>Subtotal</i>	<i>48,000</i>	<i>160,000</i>	<i>72,000</i>	<i>326,500</i>	<i>104,000</i>	<i>108,500</i>	<i>819,000</i>
Regional activities							
UNEP	262,500	140,500	0	0	20,000	0	423,000
Government of Australia	0	0	130,000	258,000	0	0	388,000
<i>Subtotal</i>	<i>262,500</i>	<i>140,500</i>	<i>130,000</i>	<i>258,000</i>	<i>20,000</i>	<i>0</i>	<i>811,000</i>
Component total	310,500	300,500	202,000	584,500	124,000	108,500	1,630,000

91. Stage I of the KIP will be implemented in two tranches. Adjustments made to the first tranche, based on the agreed costs for the Solomon Islands, include a reduction in the national-level component on technician training on good servicing practice for refrigerator and cold storage to US \$75,000 (from US \$81,000) and a reduction in the total number of training sessions to 25 sessions for a total of 375 technicians and a change of the amount requested for the project implementation and monitoring to

US \$53,750 (from US \$55,500). The revised total funding request for implementation of the first tranche is US \$978,000. The schedule of HFC phase down and HCFC phase out commitments and of the KIP and HPMP tranches is presented in annex IV to the present document.

Co-financing

92. The co-financing of stage I of the regional KIP will be in the form of in-kind contribution from all PIC Governments including the human resources constituting management and support level officers in the NOUs who oversee and implement stage I of the KIP activities. The contribution will also include office space, telecommunication and administrative procedures for the implementation of KIP activities.

2024-2026 business plan of the Multilateral Fund

93. UNEP and the Government of Australia are requesting US \$1,630,000, plus agency support costs, for the implementation of stage I of the KIP for the PICs. The total value of US \$1,105,140, including agency support costs, requested for the period of 2024–2026, is US \$184,190 above the amount in the business plan.

Sustainability of the HFC phase-down and assessment of risks

94. The activities planned under stage I of the regional KIP for the PICs will help the countries in the region sustain HFC phase-down through the strengthening of the implementation of the national HFC licensing and quota systems and capacity building measures to help the countries control and monitor HFC consumption in a sustained manner. Training and capacity building measures in the service sector are also an important project component that would help reduce emissions and ensure good servicing practices in MAC and RAC equipment, as well as the safe handling of HFC alternatives. Nine PICs without certification systems for technicians are also planning, in consultation with UNEP, to implement certification systems, which would help in continued sustainable use of new alternatives in these applications. To reduce the dependence on HFCs, the PICs would implement a prohibition on the import of HFC-based domestic refrigerators and R-410A-based air conditioners by 1 January 2029 and would also consider implementing restrictions on HFC-based commercial refrigeration equipment in consultation with national stakeholders. Awareness and outreach programmes to accelerate the pace of adoption of low-GWP alternatives in refrigeration applications are also planned. The project also includes periodic consultations and capacity building activities both at the national and regional level during the implementation of stage I and this would mitigate potential risks due to lack of capacity among NOUs significantly. Through a combination of the above-mentioned measures, the PICs would be able to sustainably phase down HFCs in line with their committed targets.

Impact on the climate

95. The activities proposed, including the implementation of training and capacity building of different national stakeholders to encourage the adoption of low-GWP alternatives, the training of technicians, awareness and outreach programmes, and strengthening the control and monitoring of HFCs, indicate that the implementation of stage I of the KIP will reduce refrigerant emissions into the atmosphere, resulting in climate benefits. A calculation of the impact on the climate of the activities in the KIP indicates that by 2029, the PICs will have reduced its emissions by approximately 31,032 CO₂-eq tonnes of HFCs, calculated as the difference between the baseline and the 2029 target, assuming that all consumed HFCs would have eventually been emitted

Draft Agreement

96. A draft Agreement between the Governments of the PICs and the Executive Committee for stage I of the regional KIP has not been prepared as the Agreement template is still under consideration by the Executive Committee.

97. If the Executive Committee so wishes, the funds for stage I of the regional KIP for the PICs could be approved in principle, and funds for the first tranche could be approved on the understanding that the Agreement would be prepared and presented at a future meeting, before the submission of the second tranche, and once the Agreement template has been approved.

VI. Recommendation

98. The Executive Committee may wish to consider:

- (a) Approving, in principle, stage I of the Regional Kigali HFC implementation plan (KIP) for the Cook Islands, Kiribati, the Marshall Islands, Federated States of Micronesia, Nauru, Niue, Palau, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu (the Pacific Island Countries), for the period 2024-2029 to reduce HFC consumption by 18.12 per cent of the regional baseline by 2029, in the amount of US \$1,841,900, consisting of US \$1,242,000, plus agency support costs of US \$161,460, for UNEP and US \$388,000, plus agency support costs of US \$50,440, for the Government of Australia, as reflected in the schedule contained in annex IV to the present document;
- (b) Approving the first tranche of stage I of the KIP for Pacific Island Countries and the corresponding tranche implementation plan, in the amount of US \$1,105,140, consisting of US \$683,000, plus agency support costs of US \$88,790, for UNEP and US \$295,000, plus agency support costs of US \$38,350, for the Government of Australia;
- (c) Noting that upon completion of the end-user demonstration project included in stage I of the KIP, UNEP would submit a final report on the implementation of this project, including the HFC phase-out and energy efficiency gains achieved, in line with decision 92/36(g); and
- (d) Requesting the Governments of the Pacific Island Countries, UNEP, the Government of Australia and the Secretariat to finalize the draft Agreement between the Governments of the Pacific Island Countries and the Executive Committee for the reduction in consumption of HFCs, including the information contained in the annex referred to in subparagraph (a) above, and to submit it to a future meeting once the KIP Agreement template has been approved by the Executive Committee.

Annex I

TEXT TO BE INCLUDED IN THE REVISED AGREEMENT BETWEEN THE GOVERNMENTS OF THE PACIFIC ISLAND COUNTRIES (THE COOK ISLANDS, KIRIBATI, THE MARSHALL ISLANDS, THE FEDERATED STATES OF MICRONESIA, NAURU, NIUE, PALAU, SAMOA, SOLOMON ISLANDS, TONGA, TUVALU, VANUATU) AND THE EXECUTIVE COMMITTEE OF THE MULTILATERAL FUND FOR THE REDUCTION IN CONSUMPTION OF HYDROCHLOROFLUOROCARBONS IN ACCORDANCE WITH STAGE II OF THE HCFC PHASE-OUT MANAGEMENT PLAN

(Relevant changes are in bold font for ease of reference)

17. This updated Agreement supersedes the Agreement reached between the Governments of the Pacific Island Countries and the Executive Committee at the 86th meeting of the Executive Committee.

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2020	2021-2023	2024	2025	2026-2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (metric tonnes)	39.40	39.40	39.40	19.70	19.70	0.00	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (metric tonnes)	39.40	10.32	10.32	5.19	5.19	0.00	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	2,165,400	0	2,772,000	0	0	294,000	5,231,400
2.2	Support costs for Lead IA (US \$)	279,469	0	348,188	0	0	37,675	665,332
2.3	Cooperating IA (Australia) agreed funding (US \$)	375,000	0	382,000	0	0	0	757,000
2.4	Support costs for Cooperating IA (US \$)	48,603	0	44,667	0	0	0	93,270
3.1	Total agreed funding (US \$)	2,540,400	0	3,154,000	0	0	294,000	5,988,400
3.2	Total support cost (US \$)	328,072	0	392,855	0	0	37,675	758,602
3.3	Total agreed costs (US \$)	2,868,472	0	3,546,855	0	0	331,675	6,747,002
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this Agreement (metric tonnes)							39.40
4.1.2	Phase-out of HCFC-22 to be achieved in the previous stage (metric tonnes)							21.22
4.1.3	Remaining eligible consumption for HCFC-22 (metric tonnes)							0.00

THE COOK ISLANDS

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2020	2021-2023	2024	2025	2026-2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (metric tonnes)	0.56	0.56	0.56	0.28	0.28	0.00	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (metric tonnes)	0.56	0.00	0.00	0.00	0.00	0.00	n/a
2.1	Lead IA - UNEP agreed funding (US \$)	165,050	0	141,500	0	0	15,250	321,800
2.2	Support costs for Lead IA - UNEP (US \$)	21,457	0	18,396	0	0	1,982	41,834
2.3	Cooperating IA - Australia agreed funding (US \$)	0	0	0	0	0	0	0
2.4	Support costs for Cooperating IA - Australia (US \$)	0	0	0	0	0	0	0
3.1	Total agreed funding (US \$)	165,050	0	141,500	0	0	15,250	321,800
3.2	Total support cost (US \$)	21,457	0	18,396	0	0	1,982	41,834
3.3	Total agreed costs (US \$)	186,507	0	159,896	0	0	17,232	363,634
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this agreement (metric tonnes)							0.56
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (metric tonnes)							0.30
4.1.3	Remaining eligible consumption for HCFC-22 (metric tonnes)							0.00

KIRIBATI

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2020	2021-2023	2024	2025	2026-2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (metric tonnes)	0.63	0.63	0.63	0.32	0.32	0.00	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (metric tonnes)	0.63	0.45	0.45	0.23	0.23	0.00	n/a
2.1	Lead IA - UNEP agreed funding (US \$)	201,600	0	189,500	0	0	25,250	416,350
2.2	Support costs for Lead IA - UNEP (US \$)	26,208	0	24,635	0	0	3,283	54,126
2.3	Cooperating IA - Australia agreed funding (US \$)	0	0	0	0	0	0	0
2.4	Support costs for Cooperating IA - Australia (US \$)	0	0	0	0	0	0	0
3.1	Total agreed funding (US \$)	201,600	0	189,500	0	0	25,250	416,350
3.2	Total support cost (US \$)	26,208	0	24,635	0	0	3,283	54,126
3.3	Total agreed costs (US \$)	227,808	0	214,135	0	0	28,533	470,476
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this agreement (metric tonnes)							0.63
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (metric tonnes)							0.34
4.1.3	Remaining eligible consumption for HCFC-22 (metric tonnes)							0.00

THE MARSHALL ISLANDS

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2020	2021-2023	2024	2025	2026-2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (metric tonnes)	2.59	2.59	2.59	1.30	1.30	0.00	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (metric tonnes)	2.59	0.00	0.00	0.00	0.00	0.00	n/a
2.1	Lead IA - UNEP agreed funding (US \$)	74,200	0	135,500	0	0	12,250	221,950
2.2	Support costs for Lead IA - UNEP (US \$)	9,646	0	17,615	0	0	1,593	28,854
2.3	Cooperating IA - Australia agreed funding (US \$)	0	0	0	0	0	0	0
2.4	Support costs for Cooperating IA - Australia (US \$)	0	0	0	0	0	0	0
3.1	Total agreed funding (US \$)	74,200	0	135,500	0	0	12,250	221,950
3.2	Total support cost (US \$)	9,646	0	17,615	0	0	1,593	28,854
3.3	Total agreed costs (US \$)	83,846	0	153,115	0	0	13,843	250,804
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this agreement (metric tonnes)							2.59
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (metric tonnes)							1.40
4.1.3	Remaining eligible consumption for HCFC-22 (metric tonnes)							0.00

THE FEDERATED STATES OF MICRONESIA

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2020	2021-2023	2024	2025	2026-2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (metric tonnes)	1.66	1.66	1.66	0.83	0.83	0.00	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (metric tonnes)	1.66	1.66	1.66	0.83	0.83	0.00	n/a
2.1	Lead IA - UNEP agreed funding (US \$)	202,100	0	248,500	0	0	33,250	483,850
2.2	Support costs for Lead IA - UNEP (US \$)	26,273	0	32,305	0	0	4,323	62,901
2.3	Cooperating IA - Australia agreed funding (US \$)	0	0	0	0	0	0	0
2.4	Support costs for Cooperating IA - Australia (US \$)	0	0	0	0	0	0	0
3.1	Total agreed funding (US \$)	202,100	0	248,500	0	0	33,250	483,850
3.2	Total support cost (US \$)	26,273	0	32,305	0	0	4,323	62,901
3.3	Total agreed costs (US \$)	228,373	0	280,805	0	0	37,573	546,751
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this agreement (metric tonnes)							1.66
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (metric tonnes)							0.89
4.1.3	Remaining eligible consumption for HCFC-22 (metric tonnes)							0.00

NAURU

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2020	2021-2023	2024	2025	2026-2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (metric tonnes)	0.12	0.12	0.12	0.06	0.06	0.00	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (metric tonnes)	0.12	0.00	0.00	0.00	0.00	0.00	n/a
2.1	Lead IA - UNEP agreed funding (US \$)	65,450	0	85,500	0	0	5,250	156,200
2.2	Support costs for Lead IA - UNEP (US \$)	8,509	0	11,115	0	0	683	20,306
2.3	Cooperating IA - Australia agreed funding (US \$)	0	0	0	0	0	0	0
2.4	Support costs for Cooperating IA - Australia (US \$)	0	0	0	0	0	0	0
3.1	Total agreed funding (US \$)	65,450	0	85,500	0	0	5,250	156,200
3.2	Total support cost (US \$)	8,509	0	11,115	0	0	683	20,306
3.3	Total agreed costs (US \$)	73,959	0	96,615	0	0	5,933	176,506
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this agreement (metric tonnes)							0.12
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (metric tonnes)							0.06
4.1.3	Remaining eligible consumption for HCFC-22 (metric tonnes)							0.00

NIUE

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2020	2021-2023	2024	2025	2026-2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (metric tonnes)	0.10	0.10	0.10	0.05	0.05	0.00	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (metric tonnes)	0.10	0.00	0.00	0.00	0.00	0.00	n/a
2.1	Lead IA - UNEP agreed funding (US \$)	41,200	0	75,500	0	0	5,250	121,950
2.2	Support costs for Lead IA - UNEP (US \$)	5,356	0	9,815	0	0	683	15,854
2.3	Cooperating IA - Australia agreed funding (US \$)	0	0	0	0	0	0	0
2.4	Support costs for Cooperating IA - Australia (US \$)	0	0	0	0	0	0	0
3.1	Total agreed funding (US \$)	41,200	0	75,500	0	0	5,250	121,950
3.2	Total support cost (US \$)	5,356	0	9,815	0	0	683	15,854
3.3	Total agreed costs (US \$)	46,556	0	85,315	0	0	5,933	137,804
4.1.1								0.10
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (metric tonnes)							0.05
4.1.3	Remaining eligible consumption for HCFC-22 (metric tonnes)							0.00

PALAU

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2020	2021-2023	2024	2025	2026-2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (metric tonnes)	1.93	1.93	1.93	0.97	0.97	0.00	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (metric tonnes)	1.93	1.93	1.93	0.97	0.97	0.00	n/a
2.1	Lead IA - UNEP agreed funding (US \$)	183,000	0	116,500	0	0	13,250	312,750
2.2	Support costs for Lead IA - UNEP (US \$)	23,790	0	15,145	0	0	1,723	40,658
2.3	Cooperating IA - Australia agreed funding (US \$)	0	0	0	0	0	0	0
2.4	Support costs for Cooperating IA - Australia (US \$)	0	0	0	0	0	0	0
3.1	Total agreed funding (US \$)	183,000	0	116,500	0	0	13,250	312,750
3.2	Total support cost (US \$)	23,790	0	15,145	0	0	1,723	40,658
3.3	Total agreed costs (US \$)	206,790	0	131,645	0	0	14,973	353,408
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this agreement (metric tonnes)							1.93
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (metric tonnes)							1.04
4.1.3	Remaining eligible consumption for HCFC-22 (metric tonnes)							0.00

SAMOA

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2020	2021-2023	2024	2025	2026-2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (metric tonnes)	2.99	1.93	1.93	1.50	1.50	0.00	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (metric tonnes)	2.99	1.93	1.93	0.68	0.68	0.00	n/a
2.1	Lead IA - UNEP agreed funding (US \$)	195,950	0	188,500	0	0	20,250	404,700
2.2	Support costs for Lead IA - UNEP (US \$)	25,474	0	24,505	0	0	2,633	52,611
2.3	Cooperating IA - Australia agreed funding (US \$)	0	0	0	0	0	0	0
2.4	Support costs for Cooperating IA - Australia (US \$)	0	0	0	0	0	0	0
3.1	Total agreed funding (US \$)	195,950	0	188,500	0	0	20,250	404,700
3.2	Total support cost (US \$)	25,474	0	24,505	0	0	2,633	52,611
3.3	Total agreed costs (US \$)	221,424	0	213,005	0	0	22,883	457,311
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this agreement (metric tonnes)							2.99
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (metric tonnes)							1.61
4.1.3	Remaining eligible consumption for HCFC-22 (metric tonnes)							0.00

SOLOMON ISLANDS

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2020	2021-2023	2024	2025	2026-2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (metric tonnes)	22.78	22.78	22.78	11.39	11.39	0.00	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (metric tonnes)	22.78	4.29	4.29	2.15	2.15	0.00	n/a
2.1	Lead IA - UNEP agreed funding (US \$)	271,250	0	247,000	0	0	29,250	547,500
2.2	Support costs for Lead IA - UNEP (US \$)	35,263	0	31,160	0	0	3,803	70,225
2.3	Cooperating IA - Australia agreed funding (US \$)	0	0	0	0	0	0	0
2.4	Support costs for Cooperating IA - Australia (US \$)	0	0	0	0	0	0	0
3.1	Total agreed funding (US \$)	271,250	0	247,000	0	0	29,250	547,500
3.2	Total support cost (US \$)	35,263	0	31,160	0	0	3,803	70,225
3.3	Total agreed costs (US \$)	306,513	0	278,160	0	0	33,053	617,725
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this agreement (metric tonnes)							22.78
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (metric tonnes)							12.27
4.1.3	Remaining eligible consumption for HCFC-22 (metric tonnes)							0.00

TONGA

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2020	2021-2023	2024	2025	2026-2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (metric tonnes)	1.66	1.66	1.66	0.83	0.83	0.00	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (metric tonnes)	1.66	0.15	0.15	0.08	0.08	0.00	n/a
2.1	Lead IA - UNEP agreed funding (US \$)	197,050	0	169,500	0	0	22,250	388,800
2.2	Support costs for Lead IA - UNEP (US \$)	25,617	0	22,035	0	0	2,893	50,544
2.3	Cooperating IA - Australia agreed funding (US \$)	0	0	0	0	0	0	0
2.4	Support costs for Cooperating IA - Australia (US \$)	0	0	0	0	0	0	0
3.1	Total agreed funding (US \$)	197,050	0	169,500	0	0	22,250	388,800
3.2	Total support cost (US \$)	25,617	0	22,035	0	0	2,893	50,544
3.3	Total agreed costs (US \$)	222,667	0	191,535	0	0	25,143	439,344
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this agreement (metric tonnes)							1.66
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (metric tonnes)							0.89
4.1.3	Remaining eligible consumption for HCFC-22 (metric tonnes)							0.00

TUVALU

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2020	2021-2023	2024	2025	2026-2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (metric tonnes)	1.07	1.07	1.07	0.53	0.53	0.00	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (metric tonnes)	1.07	0.20	0.20	0.10	0.10	0.00	n/a
2.1	Lead IA - UNEP agreed funding (US \$)	76,450	0	82,500	0	0	10,250	169,200
2.2	Support costs for Lead IA - UNEP (US \$)	9,939	0	10,726	0	0	1,332	21,996
2.3	Cooperating IA - Australia agreed funding (US \$)	0	0	0	0	0	0	0
2.4	Support costs for Cooperating IA - Australia (US \$)	0	0	0	0	0	0	0
3.1	Total agreed funding (US \$)	76,450	0	82,500	0	0	10,250	169,200
3.2	Total support cost (US \$)	9,939	0	10,726	0	0	1,332	21,996
3.3	Total agreed costs (US \$)	86,389	0	93,226	0	0	11,582	191,196
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this agreement (metric tonnes)							1.07
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (metric tonnes)							0.57
4.1.3	Remaining eligible consumption for HCFC-22 (metric tonnes)							0.00

VANUATU

APPENDIX 2-A: THE TARGETS, AND FUNDING

Row	Particulars	2020	2021-2023	2024	2025	2026-2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (metric tonnes)	3.32	3.32	3.32	1.66	1.66	0.00	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (metric tonnes)	3.32	0.29	0.29	0.15	0.15	0.00	n/a
2.1	Lead IA - UNEP agreed funding (US \$)	212,100	0	257,000	0	0	27,250	496,350
2.2	Support costs for Lead IA - UNEP (US \$)	27,573	0	33,410	0	0	3,543	64,526
2.3	Cooperating IA - Australia agreed funding (US \$)	0	0	0	0	0	0	0
2.4	Support costs for Cooperating IA - Australia (US \$)	0	0	0	0	0	0	0
3.1	Total agreed funding (US \$)	212,100	0	257,000	0	0	27,250	496,350
3.2	Total support cost (US \$)	27,573	0	33,410	0	0	3,543	64,526
3.3	Total agreed costs (US \$)	239,673	0	290,410	0	0	30,793	560,876
4.1.1	Total phase-out of HCFC-22 agreed to be achieved under this agreement (metric tonnes)							3.32
4.1.2	Phase-out of HCFC-22 to be achieved in previously approved projects (metric tonnes)							1.79
4.1.3	Remaining eligible consumption for HCFC-22 (metric tonnes)							0.00

Annex II

HFC BASELINE CONSUMPTION DATA BY COUNTRY (CO₂-eq tonnes)

Country	2020	2021	2022	Average	HCFC 65%	Baseline	10% reduction	2029 maximum
Cook Islands	1,521	6,647	8,065	5,411	1,050	6,461	646	5,815
Kiribati	7,063	10,471	3,569	7,034	1,141	8,176	818	7,358
Marshall Islands	7,067	4,380	6,943	6,130	4,694	10,824	1,082	9,742
Micronesia (Federated States of)	8,341	8,582	15,017	10,647	2,953	13,600	1,360	12,240
Nauru	335	1,186	1,456	993	212	1,204	120	1,084
Niue	-	74	-	25	177	201	20	181
Palau	7,676	6,626	6,318	6,874	3,494	10,368	1,037	9,331
Samoa	24,593	9,997	10,845	15,145	5,412	20,557	2,056	18,501
Solomon Islands	24,707	30,525	29,625	28,286	41,230	69,516	6,952	62,564
Tonga	3,930	6,663	3,433	4,675	3,000	7,676	768	6,908
Tuvalu	296	343	178	273	1,934	2,206	221	1,985
Vanuatu	11,915	13,781	17,511	14,402	6,080	20,482	2,048	18,434
Totals	97,445	99,275	102,962	99,894	71,377	171,271	17,128	154,143

As of 10 September 2024

Annex III

ARTICLE 7 DATA BY COUNTRY

	Substance	GWP	Metric tonnes					CO ₂ -eq tonnes				
			2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
Cook Island	HFC-32	675	0.02	0.02	0.09	0.03	0.11	14	10	61	22	71
	HFC-134a	1430	0.42	-	0.54	-	2.00	601	-	778	-	2,859
	HFC-143a	4470	-	0.12	-	0.54	0.00	-	547	-	2,432	-
	R-404A	3922	0.45	0.07	1.05	1.11	1.95	1,765	256	4,133	4,361	7,628
	R-410A	2088	0.66	0.34	0.80	0.60	1.24	1,378	708	1,674	1,250	2,595
	Total		1.55	0.54	2.49	2.29	5.29	3,757	1,521	6,647	8,065	13,152
Kiribati	HFC-32	675	-	0.03	0.10	0.01	0.00	-	20	68	6	2
	HFC-134a	1430	0.83	0.33	1.47	0.07	1.14	1,188	467	2,102	102	1,630
	HFC-23	14800	-	-	0.15	-	-	-	-	2,220	-	-
	R-404A	3922	0.79	1.50	1.21	0.86	0.87	3,098	5,882	4,745	3,384	3,420
	R-410A	2088	0.62	0.33	0.64	0.04	0.28	1,286	694	1,336	77	589
	Total		2.24	2.19	3.57	0.98	2.30	5,572	7,063	10,471	3,569	5,641
Marshall Island	HFC-32	675	-	0.03	0.00	0.00	0.09	-	20	-	-	59
	HFC-134a	1430	0.38	1.37	1.16	1.09	2.27	543	1,958	1,660	1,564	3,249
	R-404A	3922	0.38	0.00	0.24	0.10	4.29	1,490	-	945	400	16,832
	R-407C	1774	0.07	0.00	0.00	0.00	0.03	124	-	-	-	60
	R-410A	2088	2.27	2.44	0.85	2.39	5.47	4,739	5,089	1,774	4,979	11,419
	R-507A	3985	0.05	-	-	-	-	199	-	-	-	-
	Total		3.15	3.84	2.25	3.58	12.16	7,096	7,067	4,380	6,943	31,619
Federated States of Micronesia	HFC-32	675	0.01	0.01	0.08	0.04	0.10	7	7	54	27	66
	HFC-134a	1430	0.61	1.10	1.10	0.67	0.90	868	1,566	1,573	958	1,288
	HFC-152a	124	-	0.00	0.01	0.00	0.00	-	-	1	-	-
	R-404A	3922	2.76	0.26	0.52	0.09	0.24	10,808	1,031	2,039	353	949
	R-407A	2107	-	-	0.27	0.05	0.14	-	-	569	105	287
	R-407C	1774	0.39	0.35	0.52	0.00	0.24	685	623	922	-	426
	R-410A	2088	0.72	1.24	0.59	0.26	0.65	1,499	2,580	1,232	543	1,365
	R-438A	2264	0.07	-	-	-	-	154	-	-	-	-
	R-507A	3985	-	0.64	0.55	3.27	3.27	-	2,534	2,192	13,031	13,031
	Total		4.55	3.59	3.64	4.38	5.54	14,020	8,341	8,582	15,017	17,412
Nauru	HFC-32	675	-	0.06	0.03	0.04	0.15	-	41	20	24	101
	HFC-134a	1430	-	0.15	0.33	-	0.50	-	215	466	-	715
	R-404A	3922	-	-	0.02	0.31	0.34	-	-	86	1,196	1,333
	R-407C	1774	-	0.05	-	-	-	-	80	-	-	-
	R-410A	2088	-	-	0.29	0.11	0.18	-	-	614	236	376
	Total		-	0.26	0.67	0.45	1.17	-	335	1,186	1,456	2,525
Niue	HFC-32	675	-	-	0.03	-	-	-	-	20	-	-
	HFC-134a	1430	-	-	0.01	-	-	-	-	14	-	-
	R-404A	3922	-	-	0.01	-	-	-	-	39	-	-
	R-410A	2088	-	-	-	-	-	-	-	-	-	-
	Total		-	-	0.05	-	-	-	-	74	-	-
Palau	HFC-32	675	-	-	0.05	-	-	-	-	34	-	-
	HFC-134a	1430	-	1.12	-	0.91	0.98	915	1,602	872	1,301	1,401
	R-404A	3922	-	0.81	0.40	0.41	0.39	3,686	3,176	1,569	1,608	1,537
	R-407A	2107	-	-	0.79	0.23	0.23	-	-	1,665	485	478
	R-407C	1774	0.14	0.41	0.39	0.06	0.00	248	727	692	106	-
	R-410A	2088	0.76	1.04	0.86	1.35	1.41	1,587	2,171	1,795	2,818	2,943
	Total		2.48	3.38	3.10	2.96	3.01	6,436	7,676	6,626	6,318	6,360
Samoa	HFC-32	675	0.68	-	-	0.09	0.70	459	-	-	61	475
	HFC-134a	1430	1.07	2.77	1.66	0.54	1.45	1,527	3,965	2,373	778	2,076
	R-404A	3922	3.22	3.32	1.14	1.43	1.87	12,631	13,015	4,480	5,596	7,318
	R-407C	1774	0.10	-	0.20	0.23	-	177	-	349	401	-

	Substance	GWP	Metric tonnes					CO ₂ -eq tonnes				
			2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
	R-410A	2088	4.47	3.65	1.34	1.92	2.25	9,335	7,614	2,794	4,010	4,686
	R-427A	2138	0.30	-	-	-	-	641	-	-	-	-
	R-507A	3985	0.10	-	-	-	-	399	-	-	-	-
	Total		9.94	9.74	4.34	4.21	6.27	25,170	24,593	9,997	10,845	14,555
Soloman Islands	HFC-32	675	-	0.88	0.88	1.24	1.48	-	594	594	837	999
	HFC-134a	1430	-	7.55	8.03	9.34	13.22	-	10,797	11,483	13,356	18,905
	R-404A	3922	-	0.46	0.95	0.54	1.13	-	1,804	3,726	2,118	4,447
	R-407C	1774	-	0.30	0.30	0.29	0.29	-	532	532	514	506
	R-410A	2088	-	5.26	5.83	5.75	4.18	-	10,980	12,170	12,003	8,732
	R-507A	3985	-	0.00	0.51	0.20	0.00	-	-	2,020	797	-
	R-507C	3985	-	-	-	-	0.64	-	-	-	-	2,558
	Total		-	14.45	16.50	17.36	20.94	-	24,707	30,525	29,625	36,147
Tonga	HFC-32	675	0.05	0.04	0.01	0.04	0.07	34	24	6	27	49
	HFC-134a	1430	0.16	0.46	0.64	0.26	0.68	229	659	915	372	974
	R-404A	3922	0.19	0.39	1.40	0.63	1.41	745	1,531	5,490	2,471	5,548
	R-407A	2107	0.04	0.11	0.04	-	-	84	238	84	-	-
	R-407C	1774	-	0.41	-	-	-	-	734	-	-	-
	R-410A	2088	0.34	0.36	0.08	0.27	0.40	710	743	167	564	844
	Total		0.78	1.77	2.17	1.20	2.57	1,802	3,930	6,663	3,433	7,415
Tuvalu	HFC-32	675	-	-	0.003	0.01	0.02	-	-	2	6	13
	HFC-134a	1430	0.36	0.03	0.03	0.04	0.80	515	39	37	58	1,147
	R-404A	3922	-	-	-	0.01	-	-	-	-	43	-
	R-410A	2088	0.14	0.08	0.15	0.03	0.27	292	165	304	71	566
	R-507A	3985	0.05	0.02	-	-	0.02	199	92	-	-	90
	Total		0.55	0.13	0.17	0.09	1.11	1,006	296	343	178	1,816
Vanuatu	HFC-32	675	0.06	0.20	0.26	0.16	0.05	41	135	178	110	35
	HFC-134a	1430	0.99	1.89	1.35	1.77	1.63	1,416	2,703	1,924	2,528	2,334
	R-404A	3922	1.44	0.66	1.44	1.52	3.42	5,647	2,588	5,642	5,942	13,422
	R-407A	2107	-	0.00	0.05	0.00	0.00	-	-	95	-	-
	R-407C	1774	0.10	1.07	0.00	0.06	0.45	177	1,898	-	100	802
	R-410A	2088	1.95	1.76	1.64	2.31	2.37	4,071	3,674	3,420	4,822	4,954
	R-427A	2138	-	-	-	-	0.01	-	-	-	-	21
	R-507A	3985	-	0.23	0.63	1.01	-	-	917	2,522	4,009	-
	Total		4.54	5.81	5.36	6.82	7.94	11,351	11,915	13,781	17,511	21,568

Annex IV

**SCHEDULE OF HFC PHASE-DOWN AND HCFC PHASE-OUT COMMITMENTS AND FUNDING TRANCHES
UNDER THE KIGALI HFC IMPLEMENTATION PLAN AND THE HCFC PHASE-OUT MANAGEMENT PLAN FOR PACIFIC ISLAND
COUNTRIES**

Kigali HFC implementation plan (stage I)

Row	Particulars	2024	2025	2026	2027	2028	2029	Total
1.1	Montreal Protocol reduction schedule of Annex F substances (CO ₂ -eq tonnes)	171,271	171,271	171,271	171,271	171,271	154,143	n/a
1.2	Maximum allowable total consumption of Annex F substances (CO ₂ -eq tonnes)	171,271	171,271	150,146	150,416	150,146	140,239	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	683,000	0	0	559,000	0	0	1,242,000
2.2	Support costs for Lead IA (US \$)	88,790	0	0	72,670	0	0	161,460
2.3	Cooperating IA (the Government of Australia) agreed funding (US \$)	295,000	0	0	93,000	0	0	388,000
2.4	Support costs for Cooperating IA (US \$)	38,350	0	0	12,090	0	0	50,440
3.1	Total agreed funding (US \$)	978,000	0	0	652,000	0	0	1,630,000
3.2	Total support costs (US \$)	127,140	0	0	84,760	0	0	211,900
3.3	Total agreed costs (US \$)	1,105,140	0	0	736,760	0	0	1,841,900

HCFC phase-out management plan (stage II)¹

Row	Particulars	2020	2021-2024	2025	2026-2029	2030	Total
1.1	Montreal Protocol reduction schedule of Annex C, Group I substances (metric tonnes)	39.40	39.40	19.70	19.70	0.00	n/a
1.2	Maximum allowable total consumption of Annex C, Group I substances (metric tonnes)	39.40	10.32	5.19	5.19	0.00	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	2,165,400	0	1,819,000	0	294,000	4,278,400
2.2	Support costs for Lead IA (US \$)	279,469	0	233,348	0	37,675	550,492
2.3	Cooperating IA (Australia) agreed funding (US \$)	375,000	0	135,000	0	0	510,000
2.4	Support costs for Cooperating IA (US \$)	48,603	0	17,497	0	0	66,100
3.1	Total agreed funding (US \$)	2,540,400	0	1,954,000	0	294,000	4,788,400
3.2	Total support cost (US \$)	328,072	0	250,845	0	37,675	616,592
3.3	Total agreed costs (US \$)	2,868,472	0	2,204,845	0	331,675	5,404,992

*Date of completion of stage I as per stage I Agreement: 31 December 2021

¹ Being revised at the present meeting to include energy efficiency-related activities under decision 89/6 and advance the second tranche from 2025 to 2024 (proposed updated Agreement contained in annex I to the present document).

THE COOK ISLANDS

Kigali HFC implementation plan (stage I)

Row	Particulars	2024	2025	2026	2027	2028	2029	Total
1.1	Montreal Protocol reduction schedule of Annex F substances (CO ₂ -eq tonnes)	6,461	6,461	6,461	6,461	6,461	5,814	n/a
1.2	Maximum allowable total consumption of Annex F substances (CO ₂ -eq tonnes)	6,461	6,461	6,461	6,461	6,461	5,814	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	23,250	0	0	44,250	0	0	67,500
2.2	Support costs for Lead IA (US \$)	3,023	0	0	5,752	0	0	8,775
2.3	Cooperating IA (the Government of Australia) agreed funding (US \$)	0	0	0	0	0	0	0
2.4	Support costs for Cooperating IA (US \$)	0	0	0	0	0	0	0
3.1	Total agreed funding (US \$)	23,250	0	0	44,250	0	0	67,500
3.2	Total support costs (US \$)	3,023	0	0	5,752	0	0	8,775
3.3	Total agreed costs (US \$)	26,273	0	0	50,002	0	0	76,275

KIRIBATI

Kigali HFC implementation plan (stage I)

Row	Particulars	2024	2025	2026	2027	2028	2029	Total
1.1	Montreal Protocol reduction schedule of Annex F substances (CO ₂ -eq tonnes)	8,176	8,176	8,176	8,176	8,176	7,358	n/a
1.2	Maximum allowable total consumption of Annex F substances (CO ₂ -eq tonnes)	8,176	8,176	8,176	8,176	8,176	7,358	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	15,000	0	0	11,000	0	0	26,000
2.2	Support costs for Lead IA (US \$)	1,950	0	0	1,430	0	0	3,380
2.3	Cooperating IA (the Government of Australia) agreed funding (US \$)	0	0	0	0	0	0	0
2.4	Support costs for Cooperating IA (US \$)	0	0	0	0	0	0	0
3.1	Total agreed funding (US \$)	15,000	0	0	11,000	0	0	26,000
3.2	Total support costs (US \$)	1,950	0	0	1,430	0	0	3,380
3.3	Total agreed costs (US \$)	16,950	0	0	12,430	0	0	29,380

THE MARSHALL ISLANDS

Kigali HFC implementation plan (stage I)

Row	Particulars	2024	2025	2026	2027	2028	2029	Total
1.1	Montreal Protocol reduction schedule of Annex F substances (CO ₂ -eq tonnes)	10,824	10,824	10,824	10,824	10,824	9,742	n/a
1.2	Maximum allowable total consumption of Annex F substances (CO ₂ -eq tonnes)	10,824	10,824	10,824	10,824	10,824	9,742	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	11,750	0	0	7,750	0	0	19,500
2.2	Support costs for Lead IA (US \$)	1,527	0	0	1,008	0	0	2,535
2.3	Cooperating IA (the Government of Australia) agreed funding (US \$)	0	0	0	0	0	0	0
2.4	Support costs for Cooperating IA (US \$)	0	0	0	0	0	0	0
3.1	Total agreed funding (US \$)	11,750	0	0	7,750	0	0	19,500
3.2	Total support costs (US \$)	1,527	0	0	1,008	0	0	2,535
3.3	Total agreed costs (US \$)	13,277	0	0	8,758	0	0	22,035

THE FEDERATED STATES OF MICRONESIA

Kigali HFC implementation plan (stage I)

Row	Particulars	2024	2025	2026	2027	2028	2029	Total
1.1	Montreal Protocol reduction schedule of Annex F substances (CO ₂ -eq tonnes)	13,600	13,600	13,600	13,600	13,600	12,240	n/a
1.2	Maximum allowable total consumption of Annex F substances (CO ₂ -eq tonnes)	13,600	13,600	13,600	13,600	13,600	12,240	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	63,500	0	0	27,500	0	0	91,000
2.2	Support costs for Lead IA (US \$)	8,255	0	0	3,575	0	0	11,830
2.3	Cooperating IA (the Government of Australia) agreed funding (US \$)	0	0	0	0	0	0	0
2.4	Support costs for Cooperating IA (US \$)	0	0	0	0	0	0	0
3.1	Total agreed funding (US \$)	63,500	0	0	27,500	0	0	91,000
3.2	Total support costs (US \$)	8,255	0	0	3,575	0	0	11,830
3.3	Total agreed costs (US \$)	71,755	0	0	31,075	0	0	102,830

NAURU

Kigali HFC implementation plan (stage I)

Row	Particulars	2024	2025	2026	2027	2028	2029	Total
1.1	Montreal Protocol reduction schedule of Annex F substances (CO ₂ -eq tonnes)	1,204	1,204	1,204	1,204	1,204	1,084	n/a
1.2	Maximum allowable total consumption of Annex F substances (CO ₂ -eq tonnes)	1,204	1,204	1,204	1,204	1,204	1,084	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	10,500	0	0	6,500	0	0	17,000
2.2	Support costs for Lead IA (US \$)	1,365	0	0	845	0	0	2,210
2.3	Cooperating IA (the Government of Australia) agreed funding (US \$)	0	0	0	0	0	0	0
2.4	Support costs for Cooperating IA (US \$)	0	0	0	0	0	0	0
3.1	Total agreed funding (US \$)	10,500	0	0	6,500	0	0	17,000
3.2	Total support costs (US \$)	1,365	0	0	845	0	0	2,210
3.3	Total agreed costs (US \$)	11,865	0	0	7,345	0	0	19,210

NIUE

Kigali HFC implementation plan (stage I)

Row	Particulars	2024	2025	2026	2027	2028	2029	Total
1.1	Montreal Protocol reduction schedule of Annex F substances (CO ₂ -eq tonnes)	201	201	201	201	201	181	n/a
1.2	Maximum allowable total consumption of Annex F substances (CO ₂ -eq tonnes)	201	201	201	201	201	181	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	9,250	0	0	5,250	0	0	14,500
2.2	Support costs for Lead IA (US \$)	1,202	0	0	683	0	0	1,885
2.3	Cooperating IA (the Government of Australia) agreed funding (US \$)	0	0	0	0	0	0	0
2.4	Support costs for Cooperating IA (US \$)	0	0	0	0	0	0	0
3.1	Total agreed funding (US \$)	9,250	0	0	5,250	0	0	14,500
3.2	Total support costs (US \$)	1,202	0	0	683	0	0	1,885
3.3	Total agreed costs (US \$)	10,452	0	0	5,933	0	0	16,385

PALAU

Kigali HFC implementation plan (stage I)

Row	Particulars	2024	2025	2026	2027	2028	2029	Total
1.1	Montreal Protocol reduction schedule of Annex F substances (CO ₂ -eq tonnes)	10,368	10,368	10,368	10,368	10,368	9,331	n/a
1.2	Maximum allowable total consumption of Annex F substances (CO ₂ -eq tonnes)	10,368	10,368	10,368	10,368	10,368	9,331	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	57,500	0	0	46,500	0	0	104,000
2.2	Support costs for Lead IA (US \$)	7,475	0	0	6,045	0	0	13,520
2.3	Cooperating IA (the Government of Australia) agreed funding (US \$)	0	0	0	0	0	0	0
2.4	Support costs for Cooperating IA (US \$)	0	0	0	0	0	0	0
3.1	Total agreed funding (US \$)	57,500	0	0	46,500	0	0	104,000
3.2	Total support costs (US \$)	7,475	0	0	6,045	0	0	13,520
3.3	Total agreed costs (US \$)	64,975	0	0	52,545	0	0	117,520

SAMOA

Kigali HFC implementation plan (stage I)

Row	Particulars	2024	2025	2026	2027	2028	2029	Total
1.1	Montreal Protocol reduction schedule of Annex F substances (CO ₂ -eq tonnes)	20,557	20,557	20,557	20,557	20,557	18,501	n/a
1.2	Maximum allowable total consumption of Annex F substances (CO ₂ -eq tonnes)	20,557	20,557	20,557	20,557	20,557	18,501	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	66,000	0	0	58,000	0	0	124,000
2.2	Support costs for Lead IA (US \$)	8,580	0	0	7,540	0	0	16,120
2.3	Cooperating IA (the Government of Australia) agreed funding (US \$)	0	0	0	0	0	0	0
2.4	Support costs for Cooperating IA (US \$)	0	0	0	0	0	0	0
3.1	Total agreed funding (US \$)	66,000	0	0	58,000	0	0	124,000
3.2	Total support costs (US \$)	8,580	0	0	7,540	0	0	16,120
3.3	Total agreed costs (US \$)	74,580	0	0	65,540	0	0	140,120

SOLOMON ISLANDS**Kigali HFC implementation plan (stage I)**

Row	Particulars	2024	2025	2026	2027	2028	2029	Total
1.1	Montreal Protocol reduction schedule of Annex F substances (CO ₂ -eq tonnes)	69,516	69,516	69,516	69,516	69,516	62,565	n/a
1.2	Maximum allowable total consumption of Annex F substances (CO ₂ -eq tonnes)	69,516	69,516	48,661	48,661	48,661	48,661	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	74,125	0	0	66,125	0	0	140,250
2.2	Support costs for Lead IA (US \$)	9,637	0	0	8,596	0	0	18,233
2.3	Cooperating IA (the Government of Australia) agreed funding (US \$)	0	0	0	0	0	0	0
2.4	Support costs for Cooperating IA (US \$)	0	0	0	0	0	0	0
3.1	Total agreed funding (US \$)	74,125	0	0	66,125	0	0	140,250
3.2	Total support costs (US \$)	9,637	0	0	8,596	0	0	18,233
3.3	Total agreed costs (US \$)	83,762	0	0	74,721	0	0	158,483

TONGA**Kigali HFC implementation plan (stage I)**

Row	Particulars	2024	2025	2026	2027	2028	2029	Total
1.1	Montreal Protocol reduction schedule of Annex F substances (CO ₂ -eq tonnes)	7,676	7,676	7,676	7,676	7,676	6,908	n/a
1.2	Maximum allowable total consumption of Annex F substances (CO ₂ -eq tonnes)	7,676	7,676	7,676	7,676	7,676	6,908	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	60,750	0	0	49,750	0	0	110,500
2.2	Support costs for Lead IA (US \$)	7,898	0	0	6,467	0	0	14,365
2.3	Cooperating IA (the Government of Australia) agreed funding (US \$)	0	0	0	0	0	0	0
2.4	Support costs for Cooperating IA (US \$)	0	0	0	0	0	0	0
3.1	Total agreed funding (US \$)	60,750	0	0	49,750	0	0	110,500
3.2	Total support costs (US \$)	7,898	0	0	6,467	0	0	14,365
3.3	Total agreed costs (US \$)	68,648	0	0	56,217	0	0	124,865

TUVALU

Kigali HFC implementation plan (stage I)

Row	Particulars	2024	2025	2026	2027	2028	2029	Total
1.1	Montreal Protocol reduction schedule of Annex F substances (CO ₂ -eq tonnes)	2,206	2,206	2,206	2,206	2,206	1,985	n/a
1.2	Maximum allowable total consumption of Annex F substances (CO ₂ -eq tonnes)	2,206	2,206	2,206	2,206	2,206	1,985	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	12,250	0	0	8,250	0	0	20,500
2.2	Support costs for Lead IA (US \$)	1,592	0	0	1,073	0	0	2,665
2.3	Cooperating IA (the Government of Australia) agreed funding (US \$)	0	0	0	0	0	0	0
2.4	Support costs for Cooperating IA (US \$)	0	0	0	0	0	0	0
3.1	Total agreed funding (US \$)	12,250	0	0	8,250	0	0	20,500
3.2	Total support costs (US \$)	1,592	0	0	1,073	0	0	2,665
3.3	Total agreed costs (US \$)	13,842	0	0	9,323	0	0	23,165

VANUATU

Kigali HFC implementation plan (stage I)

Row	Particulars	2024	2025	2026	2027	2028	2029	Total
1.1	Montreal Protocol reduction schedule of Annex F substances (CO ₂ -eq tonnes)	20,482	20,482	20,482	20,482	20,482	18,434	n/a
1.2	Maximum allowable total consumption of Annex F substances (CO ₂ -eq tonnes)	20,482	20,482	20,482	20,482	20,482	18,434	n/a
2.1	Lead IA (UNEP) agreed funding (US \$)	31,625	0	0	52,625	0	0	84,250
2.2	Support costs for Lead IA (US \$)	4,112	0	0	6,841	0	0	10,953
2.3	Cooperating IA (the Government of Australia) agreed funding (US \$)	0	0	0	0	0	0	0
2.4	Support costs for Cooperating IA (US \$)	0	0	0	0	0	0	0
3.1	Total agreed funding (US \$)	31,625	0	0	52,625	0	0	84,250
3.2	Total support costs (US \$)	4,112	0	0	6,841	0	0	10,953
3.3	Total agreed costs (US \$)	35,737	0	0	59,466	0	0	95,203

Annex V

**SIMULTANEOUS IMPLEMENTATION OF THE HCFC PHASE-OUT MANAGEMENT PLAN
AND THE KIGALI HFC IMPLEMENTATION PLAN IN PACIFIC ISLAND COUNTRIES**

Category of activity	HPMP – stage II		KIP – stage I		HPMP+KIP combined cost (US \$)
	Activity	Cost (US \$)	Activity	Cost (US \$)	
Institutional capacity and legislation /Policy and regulation to support HFC-phase down	Regional: Eight annual thematic workshops ¹² back-to-back with PIC-network meetings on institutional capacity and legislation to identify, review and update on emerging issues, and discuss concrete actions to support PICs in implementation of their HPMP National: Legislate and/or update regulations to facilitate the establishment of a ban on the import of all HCFC-based equipment including HCFCs sold in canisters, with priority activities (Kiribati, Federated States of Micronesia, Nauru, Samoa, Solomon Islands and Tuvalu); and develop a mandatory labelling requirement for HCFC cylinders (Kiribati, Federated States of Micronesia, Palau, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu)	826,000	Regional: Three regional thematic workshops for national ozone officers (NOOs) and other relevant stakeholders from 12 PICs back-to-back with annual network meeting National: Public consultation workshops to support regulatory updates including: -Banning the import of R-410A-based air-conditioners (all 12 PICs) -Banning the import of HFC-134a-based domestic refrigerators (all 12 PICs) -Exploring the potential to ban new registration of refrigerated fishing vessels based on high GWP HFCs (Marshall Islands, Federated States of Micronesia, Solomon Islands, Tonga, Vanuatu)	310,500	1,136,500

¹² Initial thematic areas include *inter alia* the integrated approach to strengthening monitoring, reporting, verification and enforcement (MRVE) system; how to enforce bans of HCFC-based equipment; permitting/licensing systems for handling refrigerants for RAC technicians; collaboration with Customs departments through memorandum of understanding and standard operating procedures; preparation for the adoption of a HS code through the Pacific Harmonized Commodity Description and Coding System 2022 (PACHS22).

	HPMP – stage II		KIP – stage I		HPMP+KIP combined cost (US \$)
Category of activity	Activity	Cost (US \$)	Activity	Cost (US \$)	
Customs entry and training /Strengthening the monitoring and enforcement systems	Regional: Two three-day train-the-trainer workshops from all 12 PICs (one in 2021 and one in 2026); develop presentation materials and a simplified training manual to be used in the delivery of national training programmes National: Continue training for customs and enforcement officers for all 12 PICs on regulatory measures on control of HCFCs and HCFC-based equipment import at entry points, data collection and reporting requirements and the use of appropriate tools and equipment; develop and implement specific training for customs brokers/importers of HCFCs, other refrigerants and RAC equipment every two years; purchase and distribute 47 refrigerant identifiers based on the number of entry points in each PIC	735,000	Regional: Expert assessment of the licensing system for Kiribati, Nauru, Niue, Marshall Islands, Tonga and Tuvalu technical and workshop on strengthening licensing and quota systems and post meeting support to countries; and one technical workshop on strengthening licensing and quota systems for 12 PICs National: Development of an electronic database for HFC licensing system and training for importers (Micronesia, Palau, Samoa, Solomon Islands, Tonga)	300,500	1,035,500
Capacity building in the MAC sector			Regional: Development of MAC good servicing practices competency-based training and assessment module; and one five-day regional competency-based train-the-trainer workshop in identified host country for MAC master trainers from 9 PICs in 2026 National: Training programme on good servicing practices for MAC technicians (Cook Islands, Kiribati, Federated States of Micronesia, Palau, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu)	202,000	202,000
RAC training and certification /Capacity building on refrigeration, cold storage and fisheries vessels servicing sector	Regional: Support the RAC industry associations through RAC experts from Australia; strengthen the capacity of RAC training centres through upgrading of training courses to include good servicing	1,907,950	Regional: One five-day regional train-the-trainer workshop in identified host country for RAC master trainer from 9 PICs in 2025; Development of competency-based training and assessment module for good	331,500	2,239,450

	HPMP – stage II		KIP – stage I		HPMP+KIP combined cost (US \$)
Category of activity	Activity	Cost (US \$)	Activity	Cost (US \$)	
	practice using best practice examples or case studies in the Pacific region; develop a basic certification process; two training workshops in good servicing practices for master trainers who will in turn coordinate and manage national trainings; study tour to Australia to learn from RAC experts on servicing strategies National: Provide training tools to RAC training centres and conduct training workshops in good servicing practices for RAC technicians (Cook Islands, Kiribati, Federated States of Micronesia, Palau, Samoa, Solomon Islands, Tonga and Vanuatu); overseas training of RAC technicians in good servicing practices for countries with very few technicians (Marshall Islands, Nauru, Niue, Tuvalu); consultations to develop and establish a national certification programme for RAC technicians		servicing practices and safety; and RAC expert on good servicing practice for refrigeration and cold storage for Niue, Tuvalu and Marshall Islands National: Technician training programme on good servicing practices in refrigeration and cold storage (Cook Islands, Kiribati, Federated States of Micronesia, Nauru, Palau, Samoa, Solomon Islands, Tonga, and Vanuatu); and		
Management of the fisheries sector/ Capacity building fishery sector	Regional: Surveys to assess policy and technical options to replace HCFC-22 technologies for the fisheries sector; consultation workshop to discuss policy and technical options for the fisheries sector with relevant stakeholders National: Assist Solomon Islands and Vanuatu to consider options to replace land-based HCFC-22 cold storage rooms for fish processing plants to climate-friendly technology and to provide training on good practices for industrial refrigeration system for technicians involved in the maintenance of fisheries-based cold storage rooms; identify specific	185,000	National: Capacity building of NOU and RAC technicians servicing fishery vessels (Marshall Islands, Federated States of Micronesia, Solomon Islands, Tonga, and Vanuatu)	10,000	195,000

	HPMP – stage II		KIP – stage I		HPMP+KIP combined cost (US \$)
Category of activity	Activity	Cost (US \$)	Activity	Cost (US \$)	
	activities for PICs requiring assistance in this sector (Kiribati, Marshall Islands, Federated States of Micronesia and Tuvalu)				
Low GWP alternative technology			Regional: One two-day symposium on available and accessible alternative/low GWP technology in identified host country for NOOs and RAC industry representatives of 12 PICs to attend the symposium back-to-back with the PIC network meeting in 2027 National: Demonstration project low-GWP technology (Cook Islands, Palau, Samoa, Solomon Islands, Tonga, and Vanuatu)	243,000	243,000
Communications and awareness	Regional: Develop communication strategies and material to be used by each PIC; biennial technology and servicing roadshows to be coordinated with regional events National: Annual media campaigns targeting importers, service workshops, technicians, and end-users; and translate materials into local languages, specifically to support the implementation of stage II	495,000	Regional: Design awareness materials for KIPs with consideration of gender mainstreaming National: Awareness raising and communication to relevant stakeholders	124,000	619,000
Project management	National:	920,000	National:	108,500	1,028,500
Total		5,068,950		1,630,000	6,698,950