

Funding Request for the Preparation of Stage II For Afghanistan HCFC Phase-Out Management Plan

1. Background

The HCFC Phase-out Management Plan (HPMP) for Afghanistan was approved at the 63rd Meeting of the Executive Committee to the Multilateral Fund in April 2011 and revised at the 72nd meeting. Stage I of the HPMP for Afghanistan is approved for the period from 2011 to 2020 at the amount of US\$757,655 for UNEP, as lead agency, and for the Government of Germany, as bilateral partner. The latter part was later transferred to UNIDO. The HPMP aims to apply a staged approach to phase out the consumption (import) of HCFCs by 2030. The 1st Stage of the HPMP is designed to achieve the 35% phase-out target by 2020.

Further details of the HPMP including the funding approved in principle are shown in Table 1.

Table 1: Overview of the HPMP of Afghanistan

Calculated HCFC baseline (2009-2010)	23.80 ODPT
Total level of funding requested (for all the HPMP projects) including PSC	US\$757,655
Amount of funding received for the 1-3 tranches in 2011, 2014 and 2017 including PSC	US\$680,702
Lead Implementing Agency	UNEP
Cooperating Agency	UNIDO

The objective of the project preparation (PRP) proposal is to assist Afghanistan's National Ozone Unit in taking stock of market trends, achievements with the implementation of Montreal Protocol and further needs of stakeholders and in developing HPMP Stage II to meet effectively its national objective for the HCFC use reduction. HPMP Stage II for Afghanistan will be developed with assistance from UNEP as a leading agency and UNIDO, as a cooperating agency.

2. Progress on HPMP Stage I

The HPMP of Afghanistan was officially launched in January 2012. The key phase-out activities of Stage I include:

- HFC Phase-out policies and Enforcement
- Capability Certification System and Good Practice Program for the Servicing Workshops Technicians;
- Enhanced awareness and outreach;
- Plan for Gradual Reduction of HCFCs;
- Technical Assistance Manufacturing,
- National Refrigerant Management Competence Centre (RMCC) on Reclaim, Containment and Best Practice.

2.1 HCFC Consumption

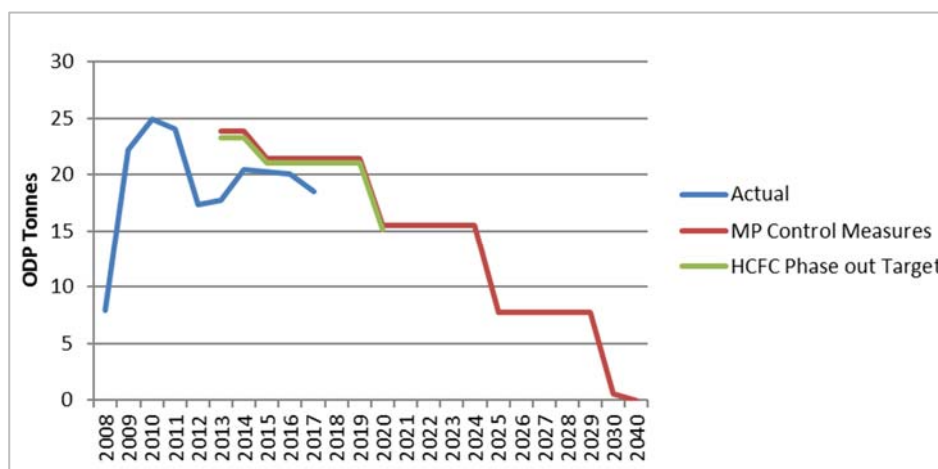
Afghanistan is considered non-low volume consuming country as its consumption is above 360MT. Based on the Country Programme Data submitted to the Secretariat of the Multilateral Fund, the country's

main consumption is in servicing sector as presented in table 2 below. However, according to the recent survey, a small amount of HCFC-22 is used in assembly of large commercial, industrial and transport refrigeration. The main reason behind the large consumption of the country is the import of low standard HCFC based equipment from neighbouring countries and second-hand equipment from developed countries, which require frequent servicing. The country is on track with its reduction schedule as also shown in Graphic 1.

Table 1: Overview of the HPMP of Afghanistan

Year	2012	2013	2014	2015	2016	2017
HCFC-22 consumption in Servicing Sector (ODP)	17.34	17.7	20.46	20.24	20.02	18.54

Graphic 1: Afghanistan scheduled and actual consumption



The results of the recent Ozone Depleting Substances (ODS) Alternative survey conducted in the country show that most of the new RAC equipment imports are dominated by options using high Global Warming Potential (GWP) refrigerants such as HFC-134a, HFC-407c, HFC 410a, and HFC-404a, HFC-227ea, and HFC-236fa. Among low GWP options, there is consumption of HC-600a and R-717.

2.2 HCFC Phase-out Policies and Enforcement

The government of Afghanistan introduced its first Regulation on Controlling Materials Destructive to the Ozone Layer on 6th August 2006 under the Environmental Law of Afghanistan of the same year. The ODS regulation 2006 consists of 3 chapters and 18 articles with a list of 92 controlled substances including HCFCs, annexed to the regulation. In 2018, the amendments in 12 clauses and 22 articles were approved. The purpose behind this amendment was to simplify and facilitate the license and quota systems from one side and further strengthen the control over the allocated quota. One of the amendments makes NOU responsible for inspections on the allocated quota through a coordinated mechanism and engagement of stakeholders. The regulation also includes the ban on HCFC based equipment which will become effective from November 2018.

The country also maintains licensing and quota system for HCFCs which is overseen by the HCFC Quota System Committee established on the 2nd April 2012 and composed of eight members from the key stakeholders for the HPMP implementation namely (1) Ministry of Commerce and Industry; 2)

Afghanistan Custom Department; 3) Afghanistan Investment Support Agency; 4) Ministry of Justice; 5) Afghanistan Chamber of Commerce and Industry; 6) Afghanistan National Craftsmen Union; 7) Border Police, Ministry of Interior Affairs, and 8) Directorate of Policy and legislation, of National Environmental Protection Agency (NEPA). The Committee is facilitated by the NOU and meets three times each year. The National Ozone Unit is established in NEPA.

In order to enforce the control over HCFCs and effectively operate the licensing and quota system, NOU signed and renews each year the Memorandum for Cooperation with Afghan Customs Department (ACD). Using the facilities of the ACD academy, capacity building activities for customs officers were organized taken place. The list of trainings conducted for customs is included below:

Location	Date
One-day workshop for Customs officers (40 participants from 13 provinces), Kabul, ACD Academy	3 March 2012
One-day workshop for Customs officers (50 participants from 12 provinces), Kabul ACD Academy	5 May 2012
Half-day workshop for customs officers (54 participants from 13 provinces), Kabul ACD Academy	9 June 2012
One-day workshop for customs, (40 participants from 14 provinces), Kabul ACD Academy	4 March 2014
Workshop for customs officer and related stakeholders, Nangarhar province	20 September 2016
Training for customs officers (30 participants), Jalalabad province	14 May 2017
Training for Customs Officers (48 participants from 14 provinces), Kabul ACD Academy	18 May 2017
One-day Workshop for Enforcement Authorities, in Balkh province	22 April 2017
ToT for customs officers including on Green Customs Initiative, Kabul (40 participants), Kabul ACD Academy	23-25 July 2017
One day training workshop for Customs Officers, (30 Participants), Hairatan Custom Port, Balkh province	26 December 2017
One day Green Customs Workshop for Customs Officers, (40 participants from 6 provinces), Kabul ACD Academy	6 May 2018
One day Enforcement Authorities Workshop, (35 participants), Balkh Province	24 July 2018
One day Green Customs Workshop organized for Customs officers, (30 participants) Balkh Province	25 July 2018
One day Enforcement Authorities Workshop, (30 participants), Kandahar Province	29 July 2018
One day Green Customs Workshop organized for Customs officers, (25 participants), Kandahar Province	30 July 2018

The NOU obtained 6 units of portable refrigerants identifiers in November 2015 for Afghanistan Custom Department. The NOU allocated and re-distributed the identifiers to 3 of total 19 official custom ports where ODS trade are concentrated, i.e. Herat (trade with Iran), Kandahar and Jalalabad (trade with Pakistan).

2.3 Capability Certification System and Good Practice Programme for Servicing Workshop Technicians

To monitor the market, NOU in coordination with the Environmental Inspection Department of NEPA regularly has been conducting market surveys in key provinces of the country since April 2013. Since the start of the programme, the NOU and NEPA carried out nine joint inspections. Altogether 400 RAC servicing shops were inspected. The objective of this market surveillance programme is to find and trace fake or contaminated HFCs, illegal trade of ODS as well to monitor HCFCs consumption.

For the development of national certification system consultations started with the Ministry of Labour, Social Affairs, Martyrs and Disabled. Currently the Terms of Reference for the development of the certification system were prepared and with the support from UNEP CAP team in Bangkok a regional expert will be selected to help to set up the certification system for servicing technicians

2.4 Enhanced Awareness and Outreach

The regular outreach and communication activities are conducted by the NOU in cooperation and targeting key stakeholders. Communication and outreach strategy was developed covering the period until 2020. Customs training manuals, booklets and other communication and outreach material are regularly printed and distributed to public, customs officers and other stakeholders during the trainings and consultation meetings. These include: ODS identification quick tool for custom officers, Book on Ten Questions and 10 Answers about the Ozone Layer, Ozone Story book, Custom officers training manual, Ozone regulation booklet, 20 Qs 20 As about Ozone Layer, guidebook on “alternative to HCFC in the refrigeration and air-conditioning sector”. The issues of the Ozone layer protection and Montreal Protocol implementation in Afghanistan are regularly highlighted in the celebrations of the World Environment Day at the high-level meetings for senior governmental and non-governmental officials and public outreach. The media announcement regularly made on the quota for HCFC, milestones in achieving the reduction, e.g. 10% in 2015. An extensive communication programme is annually conducted on the World Ozone Day.

2.5 Plan for Gradual Reduction of HCFCs

The training activities under this component are conducted using the facilities of the Afghan Korean Training Centre.

Location	Date
ToT, (30 participants), Afghan-Korea Vocational Training Centre, Kabul Province, Afghanistan	29 May – 1 June 2012
One-day training, (35 participants from 4 provinces), Kabul Afghanistan	16 February 2016
ToT (30 participants from 5 provinces), Afghan-Korea Institute, Kabul Province, Afghanistan	22-24 October 2016
Training for technicians (30 participants) on safety of flammable refrigerants, Balkh Province, Afghanistan	23-24 April 2017
Training for technicians (30 participants) on safety of flammable refrigerants, Herat Province, Afghanistan	19-20 September 2017
Training Workshop for R/AC Technicians on Good Practices and Alternatives to the HCFCs in Kandahar province	31 July – 1 st August 2018

2.6 Project Coordination and Management

Strengthening of the project management unit was done to better coordinate the HCFC Phase-out programme. With additional person on board, coordination within NEPA and other stakeholders and focal points has been strengthened.

2.7 Technical Assistance Manufacturing

Two companies in Herat, Khorasan Service and Shirpour, were visited in 2017 to assess their technical capacities and eligibility for the MLF support. Both function more as servicing workshops and therefore cannot be considered as manufacturers. They deal with mobile air conditioners in automobiles, domestic and commercial refrigerators including compressor failure and leaking, etc. The types of refrigerants used in the equipment brought to the workshops include R134a, R22, R404, and occasionally R600a etc. The companies founded their businesses after 2007, and it was concluded that they are not eligible for the MLF support in the current stage. Other potential companies were surveyed including those in Kabul. None of them were found eligible for the MLF support. The resources allocated for this component has been shifted to the servicing sector component, 2.8, as anticipated and described in the last tranche request.

2.8 National Refrigerant Management Competence Centre (RMCC) on Reclaim, Containment and Best Practice

In consultation with the government, UNIDO surveyed the companies to update the list of beneficiary companies to maximize the reduction of ODS. The Afghan Korean Institute (AKI) has been selected as the suitable facility to provide further training for technicians on good practice, new technologies and refrigerants. An MoU draft was agreed between both the parties (AKI and NEPA/NOU) and sent to the Ministry of Labour, Social Affairs, Martyrs and Disabled which has been forwarded to the vocational and technical department of the MoL and is currently with the policy department for the final stage of review. This MOU designates AKI as the training centre and articulate the responsibilities of both parties to implement the HCFC management plan while promoting the safe use and handling of refrigerants in AKI. Some equipment that had been purchased by GIZ before UNIDO took over this component but kept in a storage of the National Environmental Protection Agency have now been delivered to AKI. Once the MOU enters into effect, the facility modification will be articulated and new equipment will be delivered for the training including safe handling of natural refrigerants. The list of the equipment requested by AKI has been received.

1. Overarching Strategy and Activities for the Stage II Preparation Project

The overarching strategy for Afghanistan is to implement an integrated plan for HCFC reductions to facilitate the market transition to HCFC alternatives while achieving climate benefits through the adoption of energy efficient HVRAC technologies based on low global warming potential refrigerants. It will target the reduction by 67.5% in HCFC consumption from the baseline of 23.80 ODPT for the period from 2020 to 2025.

The strategy for Stage II HPMP will build on the achievements and results of Stage I, taking the lessons learned into account especially market needs and demand, gaps in implementation and enforcement of policies, capacity development needs of key stakeholders and constraints in access to information by key market players including public at large as consumers of HVRAC technologies. The strategy will also aim to maximize the HCFC phase-out as much as possible by identifying additional manufacturing facilities in the dynamic market of the country and additional sectors such building and construction and cold chain where through policy interventions such public procurement and regulations/codes/standards further potential reductions can be achieved.

The results of the recent ODS Alternatives survey highlighted consumption trends of non-HCFC refrigerants and their distribution by sectors and subsectors. It showed there is certain scale of HFC-based technologies penetration however they are mostly high-mid GWP options. These findings will be incorporated into the preparation of HPMP Stage 2. However, additional data needs to be collected concerning possible manufacturing facilities and changes in servicing sector recognizing the fast-changing market and growing economy in Afghanistan compounded by the volatile political situation.

The full funding of US\$ 60,000 is requested for the PRP of HPMP Stage II for both implementing agencies: US\$ 40,000 for UNEP as the lead agency and US\$20,000 for UNIDO as cooperating agency for the investment component. The description of activities needed to prepare HPMP Stage II is presented below:

(1) Data collection: a detailed survey will be organized and conducted to:

- Assess the HCFC quantities currently consumed by HVRAC sector, inventory of HCFC-based equipment especially residential and commercial refrigerators and air conditioners;
- Assess the needs of servicing sector including developing an updated national database of service technicians and understand their capacity needs to handle ODS alternatives and/or flammable ODS alternatives;
- Determine the market profile of HCFC-based equipment and equipment depending on the alternatives especially low GWP and ozone-friendly technologies;
- Identify manufacturing facilities suitable for conversion projects;
- Review information on policy initiatives regarding the phase-out of HCFCs such as certification process of technicians, existing codes of practice and their enforcement with the aim of institutionalizing capacity building efforts under Stage II. The policy review will also aim to identify additional policy instruments such as standards and labelling and public procurement to be deployed in Stage II; and
- Understand potential user and consumer segments of the HVRAC technologies to expand phase-out efforts.

Activities will include mobilizing and training the survey team, local travels to key provinces, data collection through bottom-up approach and interviews, top down approach from the key institutional stakeholders, consolidation of data. The survey will be split into two parts for UNEP and UNIDO components.

(2) Stakeholder coordination and consultation: During the data collection, a number of joint and targeted consultations including interviews will be organized and conducted with a range of stakeholders such as customs and enforcement agencies, relevant line ministries, servicing sector associations and individual entrepreneurs, importers/traders, large end-users, and experts. To formulate Stage II strategy and implementation plan, stakeholder consultation workshops will be held to collect the feedback and revise accordingly the final document. The consultations on the final document will be conducted jointly for UNEP and UNIDO components.

(3) Preparation of HPMP Stage II: Based on information collected and analysis conducted including with the feedback from stakeholders, the proposal for HPMP Stage II will be prepared. UNEP will take lead in assisting the NOU to put together the final document with inputs from UNIDO colleagues. The HPMP proposal for Stage II will outline the overarching strategy and implementation plan with detailed activities and funding requirement for: policies & regulations, sector based ODS policies, refrigeration service sector training, service sector certification system, customs & enforcement capacity building, large end-user HCFC phase-out strategy & activities, and awareness & outreach activities. The draft proposal for HPMP Stage II will be circulated by NOU among implementation agencies and national stakeholders for comments. The overarching HPMP Stage II will be revised based on the comments collected and the final proposal will be submitted to the first meeting of ExCom in 2020.

2. Budget

The break-down for an overall budget for PRP proposal is given in the table below:

Activities	Cost estimation	UNEP	UNIDO
Data collection (local staff, regional expert, interviews, and local and regional travel)	30,000	15,000	15,000
Stakeholder coordination and consultation (meetings venue and catering, at least 5 meetings)	15,000	10,000	5,000
Preparation of Stage II (expert cost)	15,000	15,000	-
Total (USD) without PSC	60,000	40,000	20,000

**the funding level of each activity is indicative and subject to changes based on the further discussion between the NOU, implementing agency and the national stakeholders during the Stage-II preparation.*

Annex-I: Endorsement Letter from Government of Afghanistan

Appended

Funding Request for the Preparation of Stage-II HCFC Phase-out Management Plan for BELIZE

Background

The first stage of the HCFC Phase-out Management Plan (HPMP) for Belize was approved at the 62nd Meeting of the Executive Committee with a total funding of US\$280,000 (excluding agency support costs) for the period 2010 to 2020 to reduce HCFC consumption by 35% of the baseline. The overarching strategy has the main goal to provide ozone and climate benefits through the integrated plan for ozone depleting substances (ODS) reductions for the refrigeration sector, promotion and adoption of energy efficiency alternative technologies. The first stage sought to phase out the consumption of HCFCs in the country as required by the Montreal Protocol. Its focus was on the following components: (a) Training of technicians in good practice, recovery and reuse, handling of non-HCFC refrigerants, safety practice and Licensing of Technicians; (b) Training of customs and enforcement personnel in the Monitoring and Control of Trade in ODS (c) Awareness and Information Dissemination; (d) Improving the policy and legal framework to support the HCFC Phase out; Project monitoring, coordination and evaluation (including reporting); and Procurement of tools and Equipment to support the Phase out of HCFCs.

The project has been implemented with support from UN Environment as a lead agency and UNDP as a cooperating agency.

The Government of Belize committed to the following control measures with the support of funding and technical assistance from the Multilateral Fund and implementing agencies:

- (i) Freeze the consumption of HCFCs in 2013 to the agreed baseline figure.
- (ii) Reduce consumption of HCFCs by 10% from 2015.
- (iii) Reduce consumption of HCFCs by 35% from 2020.

In 2010 the Government of Belize agreed its starting point for sustained aggregate reduction in HCFC consumption of 2.94 ODP tonnes as a baseline, calculated using actual consumption reported in 2009 and estimated consumption for 2010. This was then revised by 79th ExCom in July 2017 to 2.80 ODP tonnes based on the actual consumption of 2.51 ODP tonnes and 3.09 ODP tonnes reported for 2009 and 2010, respectively, under Article 7 of the Montreal Protocol, reported by the Government of Belize under Article 7. Therefore, its revised phase-out schedule, the relevant paragraphs of the Agreement have been updated accordingly.

Belize has progressed with implementation of Stage 1 of its HPMP. Notable achievements include meeting the 2013 HCFC freeze and 10 percent reduction targets in 2015 and building the capacity of refrigeration technicians in good refrigeration practices, recovery and recycling. Further, Belize has transitioned to an Online Application and Licensing System (OPAL) and has trained a number of Customs and enforcement officers including those posted at its borders. Additionally, a number of public awareness activities were undertaken to promote the transition to low GWP, energy efficient technologies.

The approved HPMP Stage I preparation funds have been fully used, and it is confirmed that there is no balance remaining.

The endorsement from the Government for the request of the Stage-II HPMP preparation has been received.

Progress in the implementation of HPMP Stage-I

	Activity	Progress In Implementation
Component I	Training – UN Environment	
Tranche 1	Technical Assistance	The Government of Belize undertook a number of technical assistance activities during the tranche including: technicians trained on Best Practices on Refrigeration and Air Conditioning (RAC); a demonstration and sensitization workshop on HC refrigerant as an alternative in domestic air conditioners (ACs) reaching 25 technicians; training 91 technicians trained in alternative refrigerants to HCFC's with emphasis on HC technologies and R-407A and 410 A systems. In addition, ARACT collaborated in the delivery of training sessions and ensured administration of the licensing system for technicians.
	Assistance for the Use of Flammable Refrigerant Equipment	This co-financing component of the HPMP was not implemented as an agreement between the Government of Belize and the Government of Switzerland was not done.
	RAC Excellence Centre and Development of National Expertise Capacity	Under this activity, the following was done: <ol style="list-style-type: none"> 1. Sourcing of information for Excellence Center, Expert trials and visiting of enterprises 2. Handing over equipment to 3 Institutes for Technical and Vocational Schools (ITVETS) that are undertaking trials with HC based AC's and refrigerators. The schools received recovery tanks, suction pumps, hoses and gauges among other equipment. 3. Development of internet website for the ARACT 4. In collaboration with the CAYO Center for Employment Training a Demonstration and Sensitization on HC Refrigerant as an alternative in domestic RAC held.
	High Efficiency-HCFC Phase out synergy in the Tourism and Hotel Sector	One meeting held with the Belize Hotel Association to seek partnership to sensitize the sector on the benefits and potential challenges during the HCFC phase out and the transition non ODS alternatives. Also 2 Brochures were developed to facilitate information dissemination in the sector and encourage the phase out of HCFCs and transition to low GWP, energy efficient alternatives in the hotel sector.
	Capacity building for enhanced control of trade of HCFC-based substances and equipment expertise capacity	A Train the Trainers Refresher Course, training over 40 Customs and Enforcement Officers was held (monitoring and control of trade and prevention of illegal trade of ODSs and legislation). Also 75 Customs Officers were trained on monitoring and control of trade and prevention of illegal trade of ODSs and the legislation Over 48 Customs Officers were trained at border points and included the Customs enforcement unit in Orange Walk, Belize.
Component II	Awareness Campaign – UN Environment	
Tranche 1	Public Awareness	In commemoration of World Ozone Day public awareness materials were acquired. Brochures were developed regarding the importance of the Ozone layer, NOU roles and refrigerant quota system and was disseminated to the general public, schools and universities. Expo, Agricultural and Trade Show, Ozone Day collaborating

	Activity	Progress In Implementation
		with Department of the Environment (DOE) in public presentation at schools regarding ozone.
Component III	Policy – UN Environment	
Tranche 1	Improved Policy and Legal Framework to support HCFC Phase out	A Policy directive to amend the current legislation approved by cabinet (inclusion of accelerated HCFC phase out, licensing and quota system (LQS) for HCFC based equipment) was given. The current legislation to incorporate HCFCs and HCFC based equipment was drafted and submitted to Cabinet for approval.
Component IV	Project Coordination and management – UN Environment	
Tranche 1	Monitoring, Evaluation and Reporting (MER)	To ensure effectiveness implementation of all projects within the HPMP, the NOU contracted a national consultant under the project with responsibility for continuous monitoring of implementation of project activities. The consultant also provided support in the preparation of all reports and Tranche Requests required under the Project and identified solutions to challenges encountered.
	Implementation of Licensing and Quota System	The LQS in Belize was upgraded to an online based system known as the Online Application and Licensing System (OPAL) which is linked to the ASYCUDA system which is more effective and efficient. In addition, it allows for improved data reports.
Tranche 2	Monitoring, Evaluation and Reporting (MER)	To ensure effectiveness implementation of all projects within the HPMP, the NOU continued the continuous monitoring of implementation of project activities through the national consultant.
Component V	Investment - UNDP	
Tranche 1 and 2	Procurement of Tools and Equipment	The funds from tranche 1 were combined with tranche 2 (as committed) in order to achieve economies of scale. The recovery tools purchase by the UNDP on February 2014 and delivered on April 2014. The equipment procured included: 20 Portable refrigerant recovery machines for HCs; 160 refrigerant recovery cylinders for HCs; 3 portable multi-refrigerant analyzers; 100 dry filters; and assorted spare parts for the refrigerant analyzers. The NOU distributed equipment to qualified licensed RAC technicians through established criteria and site visits. Major findings were also compiled in a report, presenting volumes of imported gas by type. Some equipment was reserved for training sessions

Overarching Strategy

The overarching strategy for Belize is to implement an integrated plan for HCFC reductions in the RAC servicing sector (RSS) through the promotion and adoption of low GWP, energy efficient alternative technologies to achieve climate benefits. The strategy will be based on strengthening the implementation of the existing policies and capacity development of refrigeration experts to support the adoption of appropriate ozone and climate friendly alternative technologies.

Belize implemented a staged approach strategy of HCFC Phase-out Management Plan (HPMP). Stage two will seek to implement activities to phase out remaining HCFC consumption based on the promotion of natural refrigerant use. The Government of Belize conducted a National Survey on consumption of ODS alternatives in line with Decision

XXXVI/9 of the Montreal Protocol on the protection of ozone layer. The main objective of the survey was to enable Belize to better understand its consumption trends of ODS alternatives and their distribution by sectors and subsectors. Furthermore, the survey also focused on opportunities and challenges for adoption of the alternatives. The results of the survey will be incorporated into the HPMP stage 2.

The HPMP Stage II for Belize is aiming to support the country to achieve complete phase-out of HCFCs under the Montreal Protocol by 2025.

HCFC Consumption

The HCFC consumption for Belize in 2017 is 2.03 ODP tonnes and the estimated consumption for 2018 is 1.19 ODP tonnes.

Information to be collected

Information to be collected during the Stage-II HPMP preparation would include:

- Conduct surveys to collect information on the HCFC quantities currently consumed by RAC sector, inventory of remaining HCFC-based equipment especially air conditioning and commercial HCFC-based equipment;
- Information on policy initiatives regarding the phase-out of HCFCs such as certification process of technicians, existing codes of practice and their enforcement;
- Identify and discuss with the relevant stakeholders, possible ways of reducing the current consumption of HCFCs in the country.
- Determine the market profile of HCFC-based equipment and equipment depending on the alternatives especially low GWP technologies which are ozone friendly. Incorporate results of the survey into the HPMP stage 2.

Activities proposed for Stage II Preparation

The HPMP stage II for Belize will be developed with assistance from UN Environment as a leading agency and UNDP, as a cooperating agency. The proposed activities and budget are provided in the table below:

Activities	Proposed cost	UNEP	UNDP
Conduct surveys to determine HCFC quantities currently consumed by servicing workshops; and to establish inventory of existing HCFC-based equipment both domestic and commercial.	10,000		10,000
National review, discussion and consultation meetings on the draft of Stage II HPMP	10,000	10,000	
Recruitment of international / national experts to assist in the development of stage II HPMP	10,000	10,000	
Total (USD) without PSC	30,000	20,000	10,000

Note: The funding level of each activity is indicative and subject to changes based on the further discussion between the NOU, implementing agency and the national stakeholders during the Stage-II preparation.

Funding Request for the Preparation of Stage II of HCFC Phase-out Management Plan of Brunei Darussalam

Jointly developed by Brunei Darussalam, UN Environment and UNDP

1. Background

The HCFC Phase-out Management Plan (HPMP) Stage I for Brunei Darussalam was developed by the Department of Environment, Parks and Recreation (DEPR), the Ministry of Development (MOD) with the assistance of the United Nations Environment Programme (UN Environment) as the lead implementing agency and the United Nations Development Programme (UNDP) as the co-operating implementing agency. The HPMP Stage I for Brunei Darussalam was approved by the 66th meeting of the Executive Committee (ExCom) in April 2012.

The overall objective of the HPMP Stage I for Brunei Darussalam is to enable the country to comply HCFC phase-out obligations under the Montreal Protocol; freeze at baseline consumption in 2013, 10% reduction in 2015 and 35% reduction in 2020. The HPMP Stage I for Brunei Darussalam has been implemented since 2012 and will be completed by 2020. According to the agreement between Brunei Darussalam and the ExCom, the funding level of US \$315,000, excluding programme support cost, has been approved in principle to Brunei Darussalam to implement the proposed strategies and actions under the approved HPMP Stage I. Of which, US \$183,000 was approved for UN Environment and US \$132,000 for UNDP. The above funding is scheduled to be released in four tranches: the first tranche upon approval of the project, the second tranche in 2015, the third tranche in 2017 and the fourth tranche in 2020.

Since the approval of HPMP Stage I, Brunei Darussalam has received two tranches as follows:

- The first tranche was approved at the 66th ExCom meeting in conjunction with the approval of the HPMP, Stage I by the ExCom. The total funding of US\$ 175,800 (excluding programme support cost) was approved for Brunei Darussalam to implement the activities during 2012-2015. Of which, US\$ 123,000 was through UN Environment and US\$ 52,800 was approved through UNDP.
- The second tranche was approved at the 74th ExCom meeting in May 2015. The total funding of US\$ 67,100 (excluding programme support cost) was approved for Brunei Darussalam to implement the activities during 2015-2016. Of which, US\$ 27,500 was through UN Environment and US\$ 39,600 was approved through UNDP.
- The third tranche is planned for submission to the 82nd ExCom meeting at the total amount of \$US 40,000 (excluding support cost); US\$ 7,000 through UN Environment and US\$ 33,000 through UNDP. Brunei Darussalam is a low-volume-consuming (LVC) country, and was selected to submit an independent verification report along with the third tranche request (decision 74/22). Due to the government rules that do not allow private company to audit the government document, therefore, significant time was spent to identify a government agency that is independent from the NOU to conduct verification. Following long internal discussion, the Attorney General Office advised that two potential Departments should not be conducting the verification as this is not their mandate. Finally, there was agreement that UN Environment could use private company/individual auditor registered with the government to conduct the verification on an exceptional basis. With the delay in submission of independent verification report, the third tranche could not be submitted to the ExCom meeting in 2017 as planned.

The approved HPMP Stage I preparation funds have been fully used, and it is confirmed that there is no balance left to be returned to the Multilateral Fund.

The endorsement from the Government of Brunei Darussalam for the request of the Stage-II HPMP preparation has been received.

2. Progress in the implementation of the stage I (brief information)

The HPMP Stage I for Brunei Darussalam elaborates the three-pronged approaches: 1) limit the supply of HCFCs, 2) reduce demand of HCFCs for servicing existing equipment and 3) limit new demand of HCFCs, which have been implemented through a number of activities on policy and enforcement, non-investment and investment. Progress of implementation of these activities by tranche is elaborated below.

Table 2: Progress in the implementation of first and second tranche of the HPMP Stage I for Brunei Darussalam

Component	Progress in the implementation	
	First Tranche	Second Tranche
Policy, regulations and enforcement		
Policy review and amendments of regulations	<ul style="list-style-type: none"> ○ Brunei Darussalam implemented the licensing and quota system of HCFC through an Application Permit (AP) System, which has been regulated under the Customs Act-Prohibition and Restriction on Imports and Exports (Amendment) Order 2006. ○ Brunei Darussalam banned import of all other types of HCFCs except HCFC-22. ○ The quota system for HCFCs has also been implemented since 2013 and quota is allocated on an annual basis. ○ In 2014, the Royal Customs and Excise Department has introduced and used the E-permit system under Brunei Darussalam National Single Window for application of import and export of HCFCs on a trial basis. ○ The mandatory labelling requirement for HCFC containers prior to being released to the domestic market has been implemented since January 2013. Each cylinder will be attached with a sticker with different running number to facilitate DEPR to track down source of cylinder. ○ ODS-free for all RAC equipment installation has been included as requirement in tender issued by the government. 	<ul style="list-style-type: none"> ○ Licensing, quota and mandatory labelling requirement are continued under the second tranche. ○ The E-permit system under Brunei Darussalam National Single Window for application of import and export of HCFCs has been fully operated since 2017. All applications and approval are undertaken via electronic system, which can be assessed by DEPR, customs and importers (with different level of assessment to information). ○ Initiating dialogue with the Department of Mechanical and Electrical as well as the Ministry of Energy Manpower and Industry (MEI) on the ban of HCFC based equipment. The meeting concluded that the ban on equipment would fall under the purview of the MEI under their Energy, Efficiency and Conservation Act (EEC), which has been pending on approval. ○ DEPR is still consulting with ○ Royal Customs and Excise Department on the establishment of on-site joint inspection team to survey the market to have better picture on situation of refrigerants supply and availability in the country.
Training of enforcement officers	<ul style="list-style-type: none"> ○ With assistance of UN Environment, organizing an Enforcement Training Workshop during 18-20 September 2012 (13 participants). ○ Training manuals and materials used for train- have been translated into local language and distributed to the customs officers. 	<ul style="list-style-type: none"> ○ With assistance of UN Environment, organizing the updated training workshop for Customs and enforcement officers during 5-6 March 2018 (23 participants). ○ DEPR is discussing with the Customs to explore how to integrate the training on Montreal

Component	Progress in the implementation	
	First Tranche	Second Tranche
		Protocol and licensing system in the training curriculum of the new customs officers
Refrigeration and air-conditioning servicing (non-investment)		
Training of technician on good practice	<ul style="list-style-type: none"> ○ Organizing a Train-the-Trainer Workshop for Good Practices in RAC Servicing during 8-11 October 2012 in Vientiane Capital (13 participants). ○ DEPR assigned Jefri Bolkih Vocational School as training center under HPMP. Training materials were translated by the trainers to be the local language. ○ Organizing 15 sessions of RAC technicians training workshop (191 participants). 	<ul style="list-style-type: none"> ○ Organizing additional 4 sessions of RAC technicians training workshop (56 participants). The 20th session will be conducted by first week of September 2018. ○ DEPR is discussing with the Fire and Rescue Department and the Department of Mechanical and Electrical on integrating the safe introduction of low GWP alternatives technologies in the RAC sector through the Fire Safety Order.
Certification of refrigeration technician	<p>Certification system was implemented in conjunction with the training workshops of RAC technicians on code of good practice. Training center in close collaboration with DEPR developed standard examination and certification procedures. Evaluation for the certification was based on question developed by the national trainer.</p>	<ul style="list-style-type: none"> ○ Department of Mechanical and Electrical implements the technician certification for the government project. However, there is no training provided to the RAC technicians (only theoretical examination is required). ○ Department of Mechanical and Electrical agrees that a single harmonized system would be a good option especially in tackling freelance technicians. DEPR is working with Department of Mechanical and Electrical to harmonize the qualification of RAC technicians that can be made as mandatory requirement. ○ One of the approaches is to have an independent training centre or institution that will conduct the training. The Government's role in this approach is to be the authority that certifies and issue the certificates. Any technicians that undergo the training from the selected institution and are certified will be accredited by the Government.
Investment component for refrigeration and air-conditioning servicing		
Refrigerant recovery and reclamation program	<ul style="list-style-type: none"> ○ A unit of mini reclamation machine and 11 sets of recovery package (recovery equipment, tools and accessories) as part of the initial phase of recovery and reclamation program) were procured as part of the initial phase of the programme. ○ A training workshop on recovery and reclamation was conducted on 25-26 February 2015 with participation of 25 trainees from selected RAC servicing workshops, training center and DEPR. 	<ul style="list-style-type: none"> ○ A reclamation centre has been selected and set up. The center will be in operation by the end of 2018. ○ A unit of mini-reclamation centre and 11 sets of recovery package procured under the first tranche was distributed to beneficiary enterprises. ○ A further procurement of 10 sets of recovery package has been initiated in 2018 and will be distributed to additional companies.
Pilot replacement incentive support project for end-users	<p>This component was not implemented during the first tranche of HPMP due to technological constraints associated with retrofit of equipment using HCFCs and non-availability of reliable technology or low GWP refrigerant.</p>	<ul style="list-style-type: none"> ○ It was decided by the government and implementing agency that the retrofitting will be changed to the replacement of residential air-conditioners with up to 25-30% of subsidy from the HPMP. Brunei Darussalam plans to introduce HFC-32 as alternative in the room air-conditioning sector in 2018 to allow the implementation of this activity.

Component	Progress in the implementation	
	First Tranche	Second Tranche
		<ul style="list-style-type: none"> Due to the safety concern by the safety related authorities, the safety assessment will be conducted to evaluate safety and efficiency on the use of HFC-32 in the room air-conditioning sector prior to the implementation.
Information, education, and communication		
Information, education and Communication (IEC)	<ul style="list-style-type: none"> Producing video documentary on non-HCFC based equipment and disseminating to RAC technicians aiming to encourage them to attend the RAC technician workshop and also to the public. Developing posters on non-HCFC based air-conditioner to emphasize the use of non-HCFC based air conditioners Participating, on a request basis, to the schools to give information on the importance of ozone and the current activities undertaken under the HPMP. Dedicating a section of DEPR event with information on the HPMP targets and activities being carried out under the HPMP. 	<ul style="list-style-type: none"> DEPR continued to organize awareness activities through activities held during local events and world events such as the World Ozone Day and World Environment Day etc. Moreover, DEPR is liaising with relevant agencies on RAC industry to develop and compile awareness programs that is to be used and given to the relevant target audience.
Project Management & Monitoring		
Project Management	DEPR was responsible for planning, implementation and monitoring of all activities during the first tranche of HPMP as described above. As a result, the first tranche is completed.	DEPR continued to be responsible for planning, implementation and monitoring of all activities during the second of HPMP as described above.

3. The overarching strategy

The overarching strategy of the HPMP Stage II for Brunei Darussalam will be built from the achievement received from HPMP Stage I e.g. strengthening the implementation of the existing quota and licensing system through the e-system, capacity of the customs authority in enforcing the licensing system including the onsite inspection of refrigerant traded in the domestic market, sustaining the capacity building of customs and enforcement officers and RAC servicing sector, harmonizing certification of RAC with Department of Mechanical and Electrical and capacity building for enforcement of RAC servicing sector given the penetration of flammable (A2L and A3) refrigerants. This is to take into account the Kigali Amendment in the implementation of HPMP Stage II to the possible extend.

The HPMP Stage II for Brunei Darussalam is aiming to support the country to achieve complete phase-out of HCFCs under the Montreal Protocol by 2030.

3.1. HCFC consumption

Since 2013, there is only one type of HCFC commonly used which is HCFC-22 as the government has banned the import of all other types of HCFCs (except HCFC-22). Brunei Darussalam is ODS import-dependent country. The exporting country is China, Malaysia and Singapore. HCFC consumption during 2013-2017 as per Ozone Secretariat is shown in Table below.

Table 2: HCFCs consumption in Brunei Darussalam during 2013-2017

Substances	HCFC Consumption (ODP Tonnes)				
	2013	2014	2015	2016	2017
HCFC-22 ¹	4.27	4.00	3.57	3.75	3.45

3.2. Information to be collected

The preparation of HPMP Stage I for Brunei Darussalam was based on the information collected in 2010-2011. The strategies and approach in the implementation of HPMP Stage I was based on the given situation during that period. Therefore, in the preparation of HPMP Stage II for Brunei Darussalam, it is essential to understand the change in situation and contexts of HCFC phase-out in the country. The updated information would have to be collected, analysed with the Government of Brunei Darussalam to enable country to jointly determine, based on the updated circumstance, the period of the HPMP Stage II should be covered, until the complete phase-out HCFC consumption and what should be appropriate timeline that would not jeopardize the needs of the countries. This would also include the strategies and approaches to address emerging need of the country.

Information to be collected during the preparation of HPMP Stage II for Brunei Darussalam would include:

- The current HCFC quantities consumed by servicing workshop/end users (update of Stage I survey);
- Inventory of HCFC-based equipment especially for room air-conditioners and commercial HCFC-based equipment and the forecast on the future inventory to understand the demand of HCFC for servicing / installation in each country in the future;
- Analysis of the current situation of HCFC-based equipment and recent development trends of alternative technologies in the domestic market taking into account the fact that Brunei Darussalam is equipment import-dependent countries;
- Feedbacks from relevant national stakeholders e.g. the Customs Department, vocational training schools, RAC servicing sector and importers etc. on
 - Experiences, challenges and lessons learned from the implementation of HPMP Stage I that are to be taken into account the implementation of HPMP Stage II e.g. the licensing system of HCFC and HCFC-based equipment and other related regulatory frameworks, RAC servicing sector.
 - Strategies to be proposed under HPMP Stage II in the country context e.g. consideration of the need for additional actions for introduction of low-GWP alternatives to HCFCs into the country (standards, training, incentives) or possibility to set-up and enforce a robust refrigeration servicing technicians certificate system, as well as other policy initiatives and technical interventions.
 - The number of technicians, servicing workshop, national standards framework, alternatives in the market and development trends,
- The reports of National Survey on Ozone Depleting Substance (ODS) Alternatives in line with Decision XXXVI/9 of the Montreal Protocol on Substance that Deplete the Ozone Layer. The main objective of the survey was to enable Brunei Darussalam to better understand its consumption trends of ODS alternatives and their distribution by sectors and subsectors. Furthermore, the survey also focused on opportunities and challenges for adoption of the alternatives. The results of the survey will be incorporated into the HPMP Stage II.

¹ Official consumption based on Article 7.

3.3. Activities proposed under preparation request

This document aims to request the funds for the preparation of the HPMP Stage II for Brunei Darussalam. As requested by the Government, UN Environment is the lead implementing agency and UNDP is the cooperating implementing agency of the HPMP Stage II for Brunei Darussalam. All activities proposed under this preparation request will be undertaken by UN Environment and with support from the country and UNDP during the data collection and analysis as well as development and finalization of overarching strategy and national implementation plan.

Activities will include (i) conducting nation-wide survey, (ii) analyzing data and preparation of national strategies and project document of HPMP Stage II, (iii) conducting national consultation workshops to obtain feedback from the stakeholders and (iv) finalizing the national strategies and project document of HPMP Stage II. Two national consultation workshops will be organized at least:

- The first workshop is to be organized prior to the commence of national data collection to inform concerned stakeholders on the scope and methodology of the survey, finalization of questionnaire as well as expected data from the survey.
- The second workshop is to be organized with the objective to brainstorm on components of HPMP Stage II project document with the national stakeholders and to obtain their feedback according to the specific country context.
- In between, national consultations with stakeholders will also be organized on the data verification, phaseout strategy, policy coordination, activities, monitoring and implementation, etc.

International consultant will be hired to work closely with Brunei Darussalam and UN Environment for data collection and analysis, drafting and finalization of national strategy and country's action plan as input to the HPMP stage II development. The consultant will also support the development of the overarching HPMP Stage II project document. The consultant needs to conduct travel to the country to provide specific assistance during the preparation process.

With the above activities, the total funding is being requested from the Multilateral Fund for the preparation of HPMP Stage II for Brunei Darussalam to be implemented by UN Environment is 30,000 US\$ as follows:

Activities	Proposed cost for UN Environment (\$US)
Survey of HCFC servicing workshops, as well as HCFC importers for the HCFC consumption	15,000
Survey of end users, importers of the HCFC-based equipment to update the inventory of the HCFC equipment	
Analysis of data and development of national strategies as inputs to HPMP Stage II	
Two national consultation workshops and consultation meetings during the preparation of Stage II HPMP	5,000
International consultant for guiding data collection and analysis, drafting and finalizing Stage II HPMP (including travel costs)	10,000
Total (\$US) without PSC	30,000

Note: The funding level of each activity is indicative and subject to changes based on the further discussion between the NOU, implementing agency and the national stakeholders during the Stage-II preparation.

**Funding Request for the Preparation of
Stage-II HCFC Phase-out Management Plan of
The Republic of Chad
By: UNEP & UNIDO**

Background

The HPMP for Chad was approved at the 62 Executive Committee meeting. The HPMP Stage I was approved to achieve the 35% reduction in HCFC consumption by 2020 at an estimated cost of US\$630,000 (US\$370,000 for UNEP and US\$260,000 for UNIDO). The agency support costs were estimated as follows: US\$48,100 for UNEP and US\$19,600 for UNIDO.

The first implementation plan for 2011-2013 and the first tranche of stage I of the HPMP was approved at the amount of US\$100,000 plus agency support costs of US\$13,500 for UNEP and US\$135,000 plus agency support costs of US\$ 10,125 for UNIDO.

The implementation plan for 2013-2016 of second tranche of stage I of the HPMP was approved at ExCom 70, at the amount of US\$70,000 plus agency support costs of US\$9,100 for UNEP.

The implementation plan for 2016-2018 of third tranche of stage I of the HPMP was approved at ExCom 76, at the amount of US\$45,000 plus agency support costs of US\$5,850 for UNEP and US\$ 100,000 plus agency support costs of US\$ 7,500 for UNIDO.

The Agreement was updated based on the established HCFC baseline for compliance and the revised funding level, that the revised starting point for sustained aggregate reduction in HCFC consumption was 16.1 ODP tonnes, calculated using consumption of 26.0 ODP tonnes and 6.2 ODP tonnes reported for 2009 and 2010, respectively, under Article 7 of the Montreal Protocol, and that the revised funding level for stage I of the HPMP was US\$560,000, in accordance with decision 60/44(f)(xii).

The Government of Chad committed to the following control measures with the support of funding and technical assistance from the Multilateral Fund and implementing agency:

- (i) Freeze the consumption of HCFCs in 2013 to the agreed baseline figure.
- (ii) Reduce consumption of HCFCs by 10% from 2015
- (iii) Reduce consumption of HCFC by 35% from 2020.

The HPMP for the Republic of Chad was approved based on the estimated baseline at the time of submission (16.1 ODP tonnes of HCFC-22).

The approved HPMP Stage I preparation funds have been fully used, and it is confirmed that there is no balance remaining.

The endorsement from the Government for the request of the Stage-II HPMP preparation has been received.

Progress in the implementation of the Stage-I (brief information)

	Activity	Progress In Implementation
1	<i>Legislation</i>	
	ODS import and Quota and licensing system;	Chad has in place an enforceable system of licensing and quotas for HCFC imports and that this system can ensure the country's compliance with the HCFC phase-out schedule. The HCFC licensing system is operating

	Activity	Progress In Implementation
		effectively and as of January 2013 the quota system became operational.
2	<i>Capacity Building</i>	
Tranche 1	Customs officers training programme to enhance the surveillance of import of HCFCs and HCFC based equipment;	<p>A total of 50 Customs officers, 10 Civil servants from the Ministry of Environment, 15 officers of the Mobile Brigade and 05 economic operators were trained.</p> <p>The trainings were about control and identification of ODS and ODS based equipment including HCFCs and HCFCs based equipment. These trainings were conducted by the already trained customs trainers.</p>
Tranche 2	Continuation of training programme for customs and enforcement officers	<p>Ten (10) workshops for enforcement officers have been organised in from January 2014 to December 2015 .</p> <p>A total of One hundred fifty (150) customs officers, Fifty (50) environment inspectors, and Twenty (20) trade agents of the commerce department have been trained.</p> <p>The trainings were about control and identification of ODS and ODS based equipment including HCFCs and HCFCs based equipment. These trainings were conducted by the already trained customs trainers.</p>
Tranche 3	Strengthening national capacities (Customs, Environment Inspectors) for monitoring and controlling the import and distribution of HCFCs	<p>Ten (10) workshops for enforcement officers have been organised in from January 2017 to September 2018.</p> <p>A total of One hundred eighty two (182) customs officers, environment inspectors, and trade agents of the commerce department have been trained.</p> <p>The trainings were about control and identification of ODS and ODS based equipment including HCFCs and HCFCs based equipment. These trainings were conducted by the already trained customs trainers.</p>
Tranche 1	Training of service technicians in good refrigeration practices including the use of hydrocarbon technologies.	<p>A total of 25 trainers and 450 refrigeration technicians have been trained in good refrigeration practices including the use of hydrocarbon technologies from May 2011 to April 2012. The Refrigeration Associating of Chad is assisting in conducting further trainings and implementing certification program for technicians.</p> <p>Students and teachers of the Lycée Technique Industriel of N'Djamena (70 students and 10 teachers) were also trained on good practices in the field of refrigeration and air conditioning.</p> <p>Also, 80 refrigeration Technicians exercising in the refrigeration industrial sector received practical courses on the new materials and highly efficient refrigeration equipment.</p>
Tranche 2	Continuation of the training of service technicians in good refrigeration practices including the use of hydrocarbon technologies in close cooperation with the refrigeration association in the country.	<p>Twelve (12) workshops for Refrigeration technicians have been organised in from January 2014 to December 2015.</p> <p>A total of two hundred eight five (285) refrigeration technicians have been trained from January 2014 to December 2015.</p>

	Activity	Progress In Implementation
		The trainings were in good practices in refrigeration, safe handling of Hydrocarbon and servicing of HCFC Air conditioning equipment
Tranche 3	Strengthening technical capacity of refrigeration expert in good practices in refrigeration	Seven (07) workshops for Refrigeration technicians have been organised in from January 2017 to September 2018. A total of One hundred seventy (170) refrigeration technicians have been trained from January 2017 to September 2018. The trainings were in good practices in refrigeration, safe handling of Hydrocarbon and servicing of HCFC Air conditioning equipment.
3	<i>Investment project</i>	
Tranche 1	UNIDO	Activities completed. Equipment was procured and distributed to the Centers of Excellence. A workshop was held for the training of trainers on the usage of the newly acquired equipment in 2013 Additional equipment was procured in 2014 for the Center located in N'Djamena The equipment is regularly used for the training of technicians
Tranche 3	UNIDO	Activities completed. Equipment was procured and distributed to the Centers of Excellence. A workshop was held for the training of trainers on the usage of the newly acquired equipment in 2017 The equipment is regularly used for the training of technicians
4	<i>Monitoring, evaluation of implementation of the HPMP</i>	
Tranches 1, 2 and 3	Monitoring and evaluation	The NOU recruited two consultants (1 refrigeration expert and 1 customs expert) in addition to the existing NOU team to assist in the monitoring of the effective implementation of all the HPMP activities and collect accurate data for both tranches. Consultants provided to the NOU reports on the implementation of the HPMP.

Overarching Strategy

The overarching strategy that Chad expects to implement assumes that new commercially viable refrigeration and air-conditioning technologies that use zero-ODP and low-GWP refrigerants in energy efficient equipment will become available in the coming decade.

The overarching strategy will be based on strengthening the implementation of the existing quota and licensing system and technical capacity building of trainers and technicians, to support appropriate technology choices that align with the Kigali Amendment.

The HPMP Stage II for Chad is aiming to support the country to achieve complete phase-out of HCFCs under the Montreal Protocol by 2030.

HCFC Consumption

The Republic of Chad has reported HCFC consumption for 2017 as 11.91 ODP Tonnes .

Information to be collected

Information to be collected during the Stage-II HPMP preparation would include:

- The current HCFC quantities consumed by servicing workshop/end users and legally imported HCFCs under the licensing/quota system (update of Stage I survey);
- Analysis of the current situation and development trends;
- Inventory of the HCFC-based equipment especially for room air conditioners and commercial HCFC-based equipment;
- Feedbacks from national stakeholders on the possible set-up and enforcement method of a refrigeration servicing technicians certificate system, as well as other policy initiatives and technical interventions;
- Consideration of the need for additional actions for introduction of low-GWP alternatives to HCFCs into the country (standards, training, incentives);
- Estimate of market share of the HCFC-based equipment vs various alternative technologies to get a better understanding of how the ozone- and climate-friendly alternative technologies are received.

Activities proposed for Stage II Preparation

As requested by the Government, the HPMP stage II would be developed with assistance of UNEP, as leading agency, and UNIDO, as cooperating agency. The proposed activities and budget are as per following:

Activities	Proposed cost	UNEP	UNIDO
Survey of the HCFC servicing workshops, as well as HCFC importers for the HCFC consumption	20,000	20,000	
Survey of end users, importers of the HCFC-based equipment to update the inventory of the HCFC equipment	5,000		5,000
National review, discussion and consultation meetings on the draft of Stage II HPMP	10,000	10,000	
Consultant for the draft and finalization of stage II HPMP	25,000	10,000	15,000
Total (USD) without PSC	60,000	40,000	20,000

Note: All the preparation activities including the stakeholder consultations and finalization of the Stage-II HPMP will be conducted in an integrated manner for both UNEP- and UNIDO-led components. Thus, the funding level of each activity is indicative and subject to changes based on the further discussion between the NOU, implementing agencies and the national stakeholders during the Stage-II preparation.

FUNDING REQUEST FOR THE PREPARATION OF STAGE-II HCFC PHASE-OUT MANAGEMENT PLAN FOR GAMBIA

Background

The first stage of the HCFC Phase-out Management Plan (HPMP) for the Gambia was approved at the 65th Meeting of the Executive Committee with a total funding of US\$ \$233,300 for the period 2011 to 2020 to reduce HCFC consumption by 35% of the baseline. The overarching strategy has the main goal to provide Ozone and climate benefits through the integrated plan for ODS reductions for the refrigeration and air conditioning sector, promotion and adoption of energy efficiency alternative technologies. The first stage was aimed at phasing out the consumption of HCFCs in the country as required by the Montreal Protocol. The focus was at (a) ODS policy and regulation; (b) further training of customs and other law enforcement agents and strengthening of customs training schools; (c) strengthening of the Refrigeration Association of the Gambia, technical institutions and additional training of Refrigeration and Air Conditioning (RAC) technicians; (d) strengthening of Regional R/R Centers and incentive programmes for commercial and industrial refrigeration end-users; (e) development of a comprehensive programme for reduction of HCFCs and carbon emissions in the refrigeration and air conditioning sector.

The project has been implemented with support from UNEP as a lead agency and UNIDO as a cooperating agency.

The Government of the Gambia committed to the following control measures with the support of funding and technical assistance from the Multilateral Fund and implementing agencies:

- (i) Freeze the consumption of HCFCs in 2013 to the agreed baseline figure.
- (ii) Reduce consumption of HCFCs by 10% from 2015.
- (iii) Reduce consumption of HCFCs by 35% from 2020.

At ExCom-71, the Agreement between the Government of Gambia and the Executive Committee was updated in relation to the paragraph 1, Appendices 1-A and 2-A based on the established HCFC baseline for compliance, and a new paragraph 16 had been added to indicate that the updated Agreement superseded the Agreement that was reached at the 65th meeting. The revised starting point for sustained aggregate reduction in HCFC consumption instead of 0.92 ODP tones becomes 1.50 ODP tones.

The Gambia has made tremendous progress in the implementation of stage 1 of its HPMP. Notable achievements include meeting the 2013 HCFC freeze and 10 percent reduction targets in 2015. Furthermore, the Gambia has built the capacity of refrigeration technicians on good refrigeration practices and has trained enforcement officers from various public and private agencies on monitoring trade in ODS.

The Executive Committee approved the verification report to be carried out in the Gambia for stage I of the HPMP. The verification report was carried out and confirmed that the Government is implementing a licensing and quota system for HCFC imports and exports and that the total consumption of HCFCs for 2015 was 0.72 ODP tones. The verification concluded that the Gambia was in compliance with the Montreal Protocol HCFC reduction schedule and with its Agreement with the Executive Committee.

The approved HPMP Stage I preparation funds have been fully used, and it is confirmed that there is no balance remaining.

The endorsement from the Government for the request of the Stage-II HPMP preparation has been received.

Progress in the implementation of HPMP Stage-I

	Activity	Progress In Implementation
1	<i>Legislation</i>	
	Dissemination of ODS policy and regulations.	<p>The Government of the Gambia has established a licensing and quota system that supports the Country's HCFC phase-out activities. This included the control of the import of HCFC-based equipment, as well as the registration of importers. The quotas for importers are determined by the National Ozone Committee and implemented by the Customs Department in consultation with the National Ozone Unit (NOU).</p> <p>Five awareness meetings on the revised ODS regulations were conducted to key stakeholders including importers, distributors, technicians, district council members and policy makers. Posters with key messages from the regulations were produced and distributed to the public. In addition, the NOU has trained and oriented staff in 2 regions councils namely Upper River and Kanifing Municipality on the existing policies and legislations regarding the protection of the ozone layer. A total of 50 participants drawn from different government departments, the private sector and community representatives participated at such important meetings. These officers are playing a pivotal role on raising awareness of HCFC phase-out to the local communities.</p>
2	<i>Capacity Building</i>	
Tranche 1	Training of Customs and other law enforcement officers and strengthening of customs training schools.	One training sessions for customs and other law enforcement officers on monitoring and enforcement of ODS policy and regulations were conducted. A total of twenty (20) enforcement officers were trained. Four refrigerant identifiers were procured and distributed to key entry points in the country. The training contributed to the reduction in cases of illegal trade and better control on imports of ODS and ODS-dependent equipment.
Tranche 2	Continuation of training programme	Three training sessions were conducted and a

	Activity	Progress In Implementation
	for customs and other enforcement officers	total of 60 officers were trained on control and enforcement of the legislations governing ODS in the country. The participants were drawn from Customs Department, Police, Clearing Agents and the Gambia Bureau of Standards across the country. The officers acquired skills and knowledge on ODS identification procedures and were also oriented on the control measures in place for the importation of HCFCs and other refrigerants. Furthermore, the NOU in collaboration with the Customs Department, the Gambia Bureau of Standards and the Police conducted three joint monitoring inspections to suppliers of refrigerants in the country. The NOU and reviewed and updated the Customs training curriculum to include issues related to the Montreal Protocol and the implementation of the quota system.
Tranche 3	Further training of customs and other enforcement officers.	Meeting with Customs and other enforcement officers on component's implementation activities under tranche 3 was held on 16th to the 17th of December 2016 at Jokor Brikama West coast Region. A total of 20 customs and enforcement officers were trained at the said workshop. In addition Two training workshops for customs and other law enforcement officers on enforcement of ODS policy, illegal trade of refrigerants, how to use the refrigerant identifier and regulations were conducted on: 6th to the 7th of February 2017 at the Farafenni Senior Secondary School Conference Centre, 6th to the 9th of May 10th 2017 at the Agricultural Conference Hall . A total of 40 customs and enforcement officers were trained during those two workshops.
Tranche 1	Training of service technicians in good refrigeration practices and strengthening of the Refrigeration Association and technical institutes.	The capacity of refrigeration technicians was strengthened through training and provision of necessary tool kits. A total of eighty (80) technicians were trained in good refrigeration practices including the use of hydrocarbon technologies and 10 super national trainers were also trained. Conducted a meeting with the Refrigeration association where code of conduct of the technicians was adopted for implementation. Conducted a meeting with the Refrigeration association were a code of conduct of the technicians was adopted for implementation.

	Activity	Progress In Implementation
		Developed a National Refrigeration Training Manual which is being used by training institutions in the country.
Tranche 2	Continuation of the training of service technicians in good refrigeration practices.	<p>Three regional refrigeration training sessions on implementation of good refrigeration practices including use of hydrocarbons were conducted in the reporting period. In total, 60 RAC technicians were trained.</p> <p>The technicians have played a complimentary critical role in the dissemination of HCFCs phase-out information to the consumers, advising them on the type of refrigeration equipment and refrigerants that are legally accepted and the phase-out plan in the country. There is regular collaboration and sharing of information between the NOU and the refrigeration technicians in the country.</p> <p>Three monitoring inspections have been conducted to major refrigeration workshops in the country, one in each administrative region in the country (Southern, Central and Northern regions). The monitoring inspections were aimed at checking whether the technicians are following good refrigeration practices as advised during the trainings. The inspections established that the technicians are implementing good practices and are encouraging their clients to buy ozone friendly technologies including hydrocarbon technologies for ozone and climate benefits.</p> <p>The NOU also facilitated two meetings of the Refrigeration Association of the Gambia (RAM) which were held in GTTI and Brikama West Coast Region. The RAM meetings centered on the role of technicians on the HCFC phase-out process and enforcement of best practices in the refrigeration sector.</p>
Tranche 3	Further Training of Refrigeration Technicians.	Three training sessions on implementation of good refrigeration practices were conducted in the third tranche of stage 1 HPMP whereby a total of 50 technicians were trained. The technicians have played a complimentary critical role in the dissemination of HCFCs phase-out information to the consumers, advising them on the type of refrigeration equipment and refrigerants that are legally accepted and the phase-out plan in the country. There is regular collaboration and sharing of information between

	Activity	Progress In Implementation
		the NOU and the refrigeration technicians in the country.
3	<i>Investment project UNIDO</i>	
Tranche 1	Provision of equipment and strengthening regional Centres of Excellence	A workshop was also held to launch the HPMP implementation. Awareness raising activities were conducted for policy makers, customs officers, refrigerant importers, suppliers, technicians and the general public. Equipment and tools were purchased and delivered to the R/R centers. Training was provided to 25 refrigeration experts on safe handling and working with hydrocarbon refrigerants. As part of the UNIDO component, 10 sets of tools and equipment (e.g., recovery cylinders, scales, filters, manifold gauges, and recovery kits) were provided to the Gambia Technical Training Institute as the main training centre, as well as to service technicians.
Tranche 3	Provision of equipment and strengthening regional Centres of Excellence	Additional refrigeration service equipment procured and to be distributed to the 2 centres of excellence
4	<i>Monitoring, evaluation of implementation of the HPMP</i>	
Tranches 1, 2 and 3	Monitoring and evaluation	To ensure effectiveness implementation of all projects within the HPMP, the NOU recruited national experts under the project to have continues monitoring of implementation of project activities.

Overarching Strategy

The overarching strategy for the Gambia is to implement an integrated plan for HCFC reductions in the RAC sector through promotion and adoption of energy efficiency alternative technologies to achieve climate benefits. The strategy will be based on strengthening the implementation of the existing policies and capacity development of refrigeration experts to support the adoption of appropriate ozone and climate friendly alternative technologies.

The Gambia implemented a staged approach strategy of HCFC Phase-out Management Plan (HPMP). Stage two will aim at implementing activities to phase out remaining HCFC consumption based on the promotion of the safe use of natural refrigerants. The Government of The Gambia conducted a National Survey on consumption of Ozone Depleting Substance (ODS) alternatives in line with Decision XXXVI/9 of the Montreal Protocol on the protection of ozone layer. The main objective of the survey was to enable The Gambia better understand its consumption trends of ODS alternatives and their distribution by sectors and subsectors. Furthermore, the survey also focused on opportunities and challenges for adoption of the alternatives. The results of the survey will be incorporated into the HPMP stage 2.

The HPMP Stage II for The Gambia is aiming to support the country to achieve the 2020 HCFC phase-out target under the Montreal Protocol.

HCFC Consumption

The HCFC consumption for the Gambia in 2016 was 0.5 ODP Tons and the consumption in 2017 was 0.82 ODP tons

Information to be collected

Information to be collected during the Stage-II HPMP preparation would include:

- Conduct surveys to collect information on the HCFC quantities currently consumed by RAC sector, inventory of HCFC-based equipment especially air conditioners and commercial HCFC-based equipment;
- Information on policy initiatives regarding the phase-out of HCFCs such as certification process of technicians, existing codes of practice and their enforcement;
- Identify and discuss with the relevant stakeholders, possible ways of reducing the current consumption of HCFCs in the country.
- Determine the market profile of HCFC-based equipment and equipment depending on the alternatives especially low GWP technologies which are ozone friendly. Incorporate results of the survey into the HPMP stage 2.

Activities proposed for Stage II Preparation

The HPMP stage II for the Gambia will be developed with assistance from UNEP as a leading agency and UNIDO, as a cooperating agency. The proposed activities and budget are provided in the table below:

Activities	Proposed cost	UNEP	UNIDO
Conduct surveys to determine HCFC quantities currently consumed by servicing workshops; and to establish inventory of existing HCFC-based equipment both domestic and commercial.	10,000	5,000	5,000
National review, discussion and consultation meetings on the draft of Stage II HPMP	5,000	5,000	
Recruitment of international / national experts to assist in the development of stage II HPMP	15,000	10,000	5,000
Total (USD) without PSC	30,000	20,000	10,000

**The funding level of each activity is indicative and subject to changes based on the further discussion between the NOU, implementing agency and the national stakeholders during the Stage-II preparation.*

Funding Request for the Preparation of Stage-II HCFC Phase-out Management Plan for GRENADA

Background

The first stage of the HCFC Phase-out Management Plan (HPMP) for Grenada was approved at the 62nd Meeting of the Executive Committee with a total funding of US\$210,000 (excluding agency support costs) for the period 2010 to 2020 to reduce HCFC consumption by 35% of the baseline. The overarching strategy has the main goal to provide ozone and climate benefits through the integrated plan for ozone depleting substances (ODS) reductions for the refrigeration sector, promotion and adoption of energy efficiency alternative technologies. The first stage sought to phase out the consumption of HCFCs in the country as required by the Montreal Protocol. Its focus was on the following components: (a) Training of technicians in good practice, recovery and reuse, handling of non-HCFC refrigerants and Certification of Technicians and Importers; (b) Training of customs and enforcement personnel and Customs Brokers and Importers in the Monitoring and Control of Trade in ODS (c) Awareness and Information Dissemination and; (d) Project monitoring, coordination and evaluation (including reporting).

The project has been implemented with support from UNEP as a lead agency and UNIDO as a cooperating agency. At the time of approval of Grenada's HPMP in 2010, the country had not selected a cooperating Agency and so there was no allocation for a Cooperating Agency. However, the country did select a UNIDO as cooperating agency at the time of implementing Tranche 2, which is still being implemented.

The Government of Grenada committed to the following control measures with the support of funding and technical assistance from the Multilateral Fund and implementing agencies:

- (i) Freeze the consumption of HCFCs in 2013 to the agreed baseline figure.
- (ii) Reduce consumption of HCFCs by 10% from 2015.
- (iii) Reduce consumption of HCFCs by 35% from 2020.

In 2010 the Government of Grenada agreed its starting point for sustained aggregate reduction in HCFC consumption of 0.87 ODP tonnes as a baseline, calculated using actual consumption reported in 2009 and estimated consumption for 2010. This was then revised by 77th ExCom in December 2016 to 0.83 ODP tonnes based on the actual data reported by the Government of Grenada under Article 7 and the starting point for aggregated reduction was also revised to 0.58 ODP tonnes. Therefore, its revised phase-out schedule, the relevant paragraphs of the Agreement have been updated accordingly.

Grenada has progressed with implementation of Stage 1 of its HPMP. Notable achievements include meeting the 2013 HCFC freeze and 10 percent reduction targets in 2015 and building the capacity of refrigeration technicians in good refrigeration practices, recovery and recycling. Further, Grenada has transitioned to an electronic licensing and quota system (LQS) and has trained a number of Customs and enforcement officers. Additionally a number of public awareness activities were undertaken to promote the transition to low GWP, energy efficient technologies.

In 2017, the Multilateral Fund undertook a Field Mission for the Evaluation of HCFCs Phase-out in the Refrigeration Servicing Sector (RSS) in Grenada. The Mission concluded a number of key recommendations and lessons learnt.

The approved HPMP Stage I preparation funds have been fully used, and it is confirmed that there is no balance remaining.

The endorsement from the Government for the request of the Stage-II HPMP preparation has been received.

Progress in the implementation of HPMP Stage-I

	Activity	Progress In Implementation
Component I	Policy Implementation – UN Environment	
Tranche 1	Review and update ODS legislation to ensure the implementation of a Licensing and Quota System (LQS).	The NOU reviewed and updated the LQS.
	Implement mandatory reporting system by importers.	The Government of Grenada developed and implemented an Online LQS. Quotas issued in the year prior to the year of importation. Importers were required to submit annual consumption data to the NOU. A Certification System was developed and implemented. Importers were certified and registered and this requirement also applies to New importers.
	Develop and implement a certification system for importers through training.	
	Establish import restrictions to prohibit the importation of very small HCFC based equipment.	Discussions commenced and is ongoing to determine the most suitable approach to be taken to implement this measure.
	Develop labelling and environmental safety standards for the Industry	Standards for Labelling of Refrigerant Containers, No. GDS 135:2016, was established in June 2016 and become effective. Additionally, standards related to the safe handling, storage and transportation of refrigerants including flammable refrigerants will be developed under Tranche 2 (see Tranche 2 for update).
	Establishment of fiscal incentives and dis-incentives	Initial discussions held with Department of trade and tax officers.
Tranche 2	Development of environmental safety standards for the RAC Industry	Standards related to the safe handling, storage and transportation of refrigerants including flammable refrigerants was established – “Code of Practice for the safe use, handling, storage and transportation of refrigerants, including flammable refrigerants”.
	Review and update ODS legislation to ensure the implementation of a LQS.	The NOU commenced a review and update of the ODS legislation which will be continued during the Tranche.
Component II	Training and Certification – UN Environment	
Tranche 1	Review of training standards: Update training module to include new and emerging technologies and training methodologies.	The training module was revised to include safety in the use of flammable and toxic refrigerants.
	Deliver training in recovery and reuse including developing appropriate	76 technicians trained in over four groups during the period. Also, 2 technicians trained as Assessors and instructors for the Caribbean Vocational Qualification (CVQ).

	Activity	Progress In Implementation
	training modules, selection of technicians, assessment of individual training workshops and certification	
	Upgrade training modules for both Customs officers and Customs brokers Training	The training modules for both Customs officers and Customs brokers upgraded to include the new, HS codes, smuggling techniques, customs quick-tool and case studies among other inclusions.
	Conduct Customs Officers and Brokers training in Monitoring and Controlling Trade in ODS	58 Customs officers, 1 trade official and 22 customs brokers were trained in Monitoring and Controlling Trade in ODS. Strong emphasis was placed on proper HS classification of refrigerants, Reporting and record keeping and practical ODS identification.
	Establish additional R&R Centres in areas lacking centres to allow for wider access to equipment	3 new R&R Centres established bringing the total to 20.
Tranche 2	Deliver training in recovery and reuse including developing appropriate training modules, selection of technicians, assessment of individual training workshops and certification	40 RAC Technicians were trained in Natural Refrigerants. Counterpart training with GIZ in Natural refrigerants for 6 trainers
	Conduct Customs Officers and Brokers training in Monitoring and Controlling Trade in ODS	16 Customs officers were trained in Monitoring and Controlling Trade in ODS.
	Establish additional R&R Centres in areas lacking centres to allow for wider access to equipment	Three (3) new centres were established. Tools were either replaced or upgraded in some of the R&R Centres.
Component II	Procurement of Equipment – UNIDO	
Tranche 2	Procurement of Equipment	Through UNIDO, the following Tools and Equipment was procured under Tranche 2 (See Attachment).
	Distribution of Tools and Equipment	Two (2) secondary schools were fully equipped with tools and equipment for training. 1 tertiary institution was fully equipped with equipment and another tertiary institution was upgraded with tools and equipment. Provision of toolkits with tools to ten (10) women who are involved in RAC
	Training of RAC Technicians	Training under the EU F-GAS regulation and Natural Refrigeration Technology was delivered to 4 RAC Trainers as part of a Train the Trainers Programme. Support for international consultant to participate in WOD celebrations 2018
Component III	Awareness and Information Dissemination	
Tranche 1	Organization of technical seminars to promote alternative HCFC technologies	A Technology Update Seminar for the RAC Sector was held. The Grenada Refrigeration, Air Conditioning and Ventilation Association (GRAVA) was also relaunched in October 2016 to provide technical information on ODS alternatives.
	Promote RR&R market for HCFCs, educational	Several presentations were made to schools, groups, organizations and camps, reaching over 500 persons. Printed

	Activity	Progress In Implementation
	campaigns for schools, social groups, and other stakeholders. Energy efficiency of RAC equipment has been a key factor in promoting new and alternative technology	materials in the form of brochures, book marks, and factsheets were distributed. Also, Infomercials were developed on topics including: ozone layer protection, technology choices, Alternatives, linkages between ozone and climate.
Tranche 2	Organization of technical seminars to promote alternative HCFC technologies	The NOU participated in 2 energy efficiency exhibitions to promote energy efficiency in the cooling sector.
	Promote RR&R market for HCFCs, educational campaigns for schools, social groups, and other stakeholders. Energy efficiency of RAC equipment has been a key factor in promoting new and alternative technology	The NOU developed a further 200 brochures (on 2 different topics) and a number of posters on 14 various topics were distributed to target groups.
Component IV	Monitoring and Evaluation	
Tranche 1	Monitoring, Evaluation and Reporting (MER)	To ensure effectiveness implementation of all projects within the HPMP, the NOU contracted a national consultant under the project with responsibility for continuous monitoring of implementation of project activities. The consultant also provided support in the preparation of all reports and Tranche Requests required under the Project and identified solutions to challenges encountered.
	Monitoring implementation of LQ System	Monitoring conducted through the LQ System. Collaboration is maintained between the NOU, Department of Trade and the Customs Department. Grenada has achieved 73% phase out of HCFCs and is ahead of the phase out targets according to the HCFC phase-out schedule.
Tranche 2	Monitoring, Evaluation and Reporting (MER)	To ensure effectiveness implementation of all projects within the HPMP, the NOU contracted a national consultant under the project and with additional support from GIZ, with responsibility for continuous monitoring of implementation of project activities. The consultant also provided support in the preparation of all reports and Tranche Requests required under the Project and identified solutions to challenges encountered.
	Monitoring implementation of LQ System	Collaboration with stakeholders (importers, Customs and Trade) for verification of imports. Additionally, the NOU provides support for a Technical Consultant (Office Space and communication) to assist with monitoring and evaluation of the HPMP.

Overarching Strategy

The overarching strategy for Grenada is to implement an integrated plan for HCFC reductions in the RAC servicing sector (RSS) through the promotion and adoption of low GWP, energy efficient alternative technologies to achieve climate benefits. The strategy will be based on strengthening the implementation of the existing policies and capacity development of refrigeration experts to support the adoption of appropriate ozone and climate friendly alternative technologies.

Grenada implemented a staged approach strategy of HCFC Phase-out Management Plan (HPMP). Stage two will seek to implement activities to phase out remaining HCFC consumption based on the promotion of natural refrigerant use. The Government of Grenada conducted a National Survey on consumption of ODS alternatives in line with Decision XXXVI/9 of the Montreal Protocol on the protection of ozone layer. The main objective of the survey was to enable Grenada to better understand its consumption trends of ODS alternatives and their distribution by sectors and subsectors. Furthermore, the survey also focused on opportunities and challenges for adoption of the alternatives. The results of the survey will be incorporated into the HPMP stage 2.

The HPMP Stage II for Grenada is aiming to support the country to achieve complete phase-out of HCFCs under the Montreal Protocol by 2025.

HCFC Consumption

The HCFC consumption for Grenada in 2017 is 0.22 ODP tonnes and the estimated consumption for 2018 is 0.22 ODP tonnes

Information to be collected

Information to be collected during the Stage-II HPMP preparation would include:

- Conduct surveys to collect information on the HCFC quantities currently consumed by RAC sector, inventory of remaining HCFC-based equipment especially air conditioning and commercial HCFC-based equipment;
- Information on policy initiatives regarding the phase-out of HCFCs such as certification process of technicians, existing codes of practice and their enforcement;
- Identify and discuss with the relevant stakeholders, possible ways of reducing the current consumption of HCFCs in the country.
- Determine the market profile of HCFC-based equipment and equipment depending on the alternatives especially low GWP technologies which are ozone friendly. Incorporate results of the survey into the HPMP stage 2.

Activities proposed for Stage II Preparation

The HPMP stage II for Grenada will be developed with assistance from UN Environment as a leading agency. The proposed activities and budget are provided in the table below:

Activities	Proposed cost	UNEP
Review and update national surveys undertaken to verify HCFC quantities currently consumed by servicing workshops; and to confirm inventories of existing HCFC-based equipment both domestic and commercial.	10,000	10,000
National review, discussion and consultation meetings on the draft of Stage II HPMP	10,000	10,000
Recruitment of international / national experts to assist in the development of stage II HPMP	10,000	10,000
Total (USD) without PSC	30,000	30,000

Note: The funding level of each activity is indicative and subject to changes based on the further discussion between the NOU, implementing agency and the national stakeholders during the Stage-II preparation.

Funding Request for the Preparation of Stage II of HCFC Phase-out Management Plan of Lao People's Democratic Republic

Jointly developed by Lao PDR and UN Environment

1. Background

The HCFC Phase-out Management Plan (HPMP) Stage I for Lao PDR was developed by the Pollution Control Department (PCD), the Ministry of Natural Resources and Environment (MONRE) with the assistance of the United Nations Environment Programme (UN Environment) as the lead implementing agency and the Government of France as the co-operating implementing agency. The HPMP Stage I for Lao PDR was approved by the 63rd meeting of the Executive Committee (ExCom) in April 2011.

The overall objective of the HPMP Stage I for Lao PDR is to enable the country to comply HCFC phase-out obligations under the Montreal Protocol; freeze at baseline consumption in 2013, 10% reduction in 2015 and 35% reduction in 2020. The HPMP Stage I for Lao PDR has been implemented since 2011 and will be completed by 2020.

According to the agreement between Lao PDR and the ExCom, the funding level of US \$210,000, excluding programme support cost, has been approved in principle to Lao PDR based on the previous HCFC baseline consumption of 1.77 ODP tonnes and excludes funds for the foam sector plan. As per Decision of the 23rd Meeting of the Parties (Decision XXIII/29), the Parties has approved the change of HCFC baseline consumption in 2009 from 22.03 MT to 39.09 MT so that the baseline consumption was changed to 2.03 ODP tonnes. The change in HCFC baseline consumption increased the funding level to US\$ 280,000, which was approved by the 74th ExCom meeting in May 2015.

The above funding is scheduled to be released in three tranches: the first tranche upon approval of the project, the second tranche in 2015 and the third tranche in 2020. Since the approval of HPMP Stage I, Lao PDR has received two tranches as follows:

- The first tranche was approved at the 63rd ExCom meeting in conjunction with the approval of the HPMP, Stage I by the ExCom. The first tranche of US \$ 113,625 (excluding programme support cost) was approved to Lao PDR through UN Environment to implement the first tranche implementation plan for 2011-2015.
- The second tranche was approved at the 74th ExCom meeting in May 2015. The total funding of US\$ 138,375 (excluding programme support cost) was approved for Lao PDR to implement the activities during 2015-2019. Of which, US\$ 97,875 was through UN Environment and US\$ 41,000 was approved through France.
- With the above approved tranches, the final tranche will be requested in 2020 at the total amount of \$US 28,000 (excluding support cost); US\$ 23,500 through UN Environment and US\$ 4,500 through France.

The Lao People's Democratic Republic is a low-volume-consuming (LVC) country, and was selected to submit an independent verification report along with the second tranche request (decision 70/15). The verification concluded that the Government of Lao has met the consumption targets specified in the Agreement between the Country and the Executive Committee.

The approved HPMP Stage I preparation funds have been fully used, and it is confirmed that there is no balance left to be returned to the Multilateral Fund.

The endorsement from the Government of Lao PDR for the request of the Stage-II HPMP preparation has been received.

2. Progress in the implementation of the stage I (brief information)

The HPMP Stage I for Lao PDR elaborates the three-pronged approaches: 1) limit the supply of HCFCs, 2) reduce demand of HCFCs for servicing existing equipment and 3) limit new demand of HCFCs, which have been implemented through a number of activities on policy and enforcement, non-investment and investment. Progress of implementation of these activities by tranche is elaborated below.

Table 2: Progress in the implementation of first and second tranche of the HPMP Stage I for Lao PDR

Component	Progress in the implementation	
	First Tranche	Second Tranche
Policy, regulations and enforcement		
Policy review and amendments of regulations	<ul style="list-style-type: none"> ○ Lao PDR revised the licensing system to control the import, export and transit of ODS through the Minister Decision on ODS Control dated November 9, 2012 (No. 7858/MoNRE), which mandates the Pollution Control Department (PCD) as the sole licensing authority of ODS import, export and transit in Lao PDR. The update phase-out schedule of HCFCs was also included in the Minister Decision on ODS Control. ○ The quota system for HCFCs has also been implemented since 2013 and quota is allocated on an annual basis. ○ The mandatory labelling requirement for HCFC containers prior to being released to the domestic market has been implemented since January 2014. Each cylinder will be attached with a sticker with different running number to facilitate PCD to track down source of cylinder. 	<ul style="list-style-type: none"> ○ Licensing, quota and mandatory labelling requirement are continued under the second tranche. ○ In 2016, the National Parliament has endorsed the Chemical Management Law, which controls the productions, import, export, having in possession and use of controlled chemicals in Lao PDR. PCD has discussed with the Ministry of Industry and Commerce to include all other types of HCFCs (except HCFC-22) and HCFC-141b in pre-blended polyol under import and usage ban in Lao PDR. ○ PCD is still consulting with <ul style="list-style-type: none"> ○ The Steering Committee on the legal framework to ban the import of HCFC-based residential air-conditioner and ban the installation of HCFC-22 chillers and large commercial split-type air-conditioning units with cooling capacity above 20 RT. ○ Department of Enterprise Registration and Management and RAC Association and refrigerant importers to seek for ways to put in place the regulation to restrict the sale of refrigerant only to the certified technicians.
Training of enforcement officers	<ul style="list-style-type: none"> ○ With assistance of UN Environment, organizing an Enforcement Training Workshop during 14-16 January 2013 in Vientiane Capital (58 participants). ○ Organizing 10 refreshment training for the border customs officers at their border check points in the north, Vientiane Capital and the south. About 35 customs officers who has been assigned as the focal point of ODS control at the border check points were trained. 	<ul style="list-style-type: none"> ○ With assistance of UN Environment, organizing the updated training workshop for Customs and enforcement officers in Vientiane on 18-19 September 2017 (25 participants). ○ Organizing one customs and enforcement training workshop during 8-9 January 2018 in Savannakhet (40 participants). ○ PCD has set up a joint inspection team consisting of Department of Domestic Trade, Environment Police Department, Department of Natural Resources and Environment to monitor domestic market for illegal ODS trade. The Minister of Natural Resources and

Component	Progress in the implementation	
	First Tranche	Second Tranche
	<ul style="list-style-type: none"> 5 units of refrigerant identifiers were handed over to four Department of Natural Resources and Environment who jointly used refrigerant identifier with the Customs check points. The remaining one refrigerant identifier was kept at NOU for monitoring of refrigerant traded in the domestic market. 	Environment has signed the Establishment Order. The inspection team is working on the inspection plan.
Refrigeration and air-conditioning servicing		
Training of technician on good practice	<ul style="list-style-type: none"> Organizing a Train-the-Trainer Workshop for Good Practices in RAC Servicing during 27-30 November 2012 in Vientiane Capital (28 participants). Organizing a RAC technicians training workshop during 17-19 December 2014 in Champasack Province (27 participants). 3 sets of RAC servicing tools delivered to Lao PDR in March 2013 and have been already hand-over to three technical institutes. 	<ul style="list-style-type: none"> With assistance of UN Environment organizing an updated Train-the-Trainer Workshop that includes flammable refrigerant during 20 – 23 December 2016 in Khammouane province (42 participants). Organizing 2 RAC technicians training workshop during 19-20 December 2017 and 2-3 August 2018 in Vientiane (105 participants). NOU met Fire Prevention and Protection Police Department to discuss about emergency response to fire hazard in relation to flammable refrigerant.
Certification of refrigeration technician	PCD consulted key stakeholders comprising of training centers, RAC Association and the Ministry of Labour and Social Welfare regarding actions required for the certification of RAC technicians.	NOU had regular meetings with the Lao-Korea (South) Skill Development Institute to discuss the existing mechanism for certification of RAC technicians and the possible cooperation with the Institute to integrate the certification into the existing framework. The Lao-Korea Skill Development Institute has agreed to work with the NOU and RAC Association to implement the programme. It was agreed in principle that the Institute will conduct assessment and issue Certificate for RAC technicians. Detail discussion is on-going on the way forward.
Recovery and reuse initiative	Not applicable under first tranche.	PCD is coordinating with France to seek the possibility for reallocating budget that has been approved for acquiring recovery and reclamation equipment to be the servicing tools for training centers, which will be hand-over to the Lao-Korea Skill Development Institute.
Foam manufacturing sector		
Conversion to ODS-free alternative technology	Not applicable under first tranche.	PCD confirmed that two enterprises stopped the production of foam products, and the third enterprise converted to alternative technology in the manufacture of foam. Therefore, there is no financial support to be requested for the foam conversion projects.
Information, education, and communication		
Information, education and Communication (IEC)	<ul style="list-style-type: none"> The poster giving tips for the customs officers to identify HCFC cylinders has been finalized. The poster will be produced and distributed to all the customs check points. NOU organized a RAC industry awareness workshop on 19 April 2013 in Vientiane Capital to inform the government policy to phase-out HCFC, new licensing system to 	<ul style="list-style-type: none"> PCD organized media meeting in October 2015 to discuss the implementation of awareness activities in Lao PDR. PCD has developed the facebook page that disseminate the Montreal Protocol activities to the public e.g. the labelling requirement to increase awareness of the public to pay attention to the cylinder with the government stickers.

Component	Progress in the implementation	
	First Tranche	Second Tranche
	control import and export of HCFC, training programme under HPMP. There were 65 attendances in the workshop.	
Project Management & Monitoring		
Project Management	PCD was responsible for planning, implementation and monitoring of all activities during the first tranche of HPMP as described above. As a result, the first tranche is completed.	PCD continued to be responsible for planning, implementation and monitoring of all activities during the second of HPMP as described above.

3. The overarching strategy

The overarching strategy of the HPMP Stage II for Lao PDR will be built from the achievement received from HPMP Stage I e.g. strengthening the implementation of the existing quota and licensing system by improving the tracking mechanism of HCFC import, capacity of the customs authority in enforcing the licensing system including the onsite inspection of refrigerant traded in the domestic market, sustaining the capacity building of customs and enforcement officers and RAC servicing sector, integrating certification of RAC technicians into the existing framework and capacity building for enforcement of RAC servicing sector given the penetration of flammable refrigerants. This is to take into account the Kigali Amendment in the implementation of HPMP Stage II to the possible extend.

The HPMP Stage II for Lao PDR is aiming to support the country to achieve complete phase-out of HCFCs under the Montreal Protocol by 2030.

3.1. HCFC consumption

At the moment, there is only one type of HCFC commonly used which is HCFC-22. Lao PDR is ODS import-dependent country. The exporting country is China via Thailand. HCFC consumption during 2013-2017 as per Ozone Secretariat is shown in Table below.

Table 2: HCFCs consumption in Lao PDR during 2013-2017

Substances	HCFC Consumption (ODP Tonnes)				
	2013	2014	2015	2016	2017
HCFC-22 ¹	1.6	2.28	2.00	2.03	0.59
HCFC-141b in pre-blended polyol ²	3.46	0	0	0	0

* From 2014 onwards, Lao PDR no longer reported HCFC-141b in imported pre-blended polyol in Country Programme Implementation Report. PCD confirmed that two enterprises stopped the production of foam products, and the third enterprise converted to alternative technology in the manufacture of foam. Therefore, there is no financial support to be requested for the foam conversion projects.

¹ Official consumption based on Article 7.

² Figure of HCFC-141b in pre-blended polyol is based on Country Programme Implementation Report.

3.2. Information to be collected

The preparation of HPMP Stage I for Lao PDR was based on the information collected in 2009-2010. The strategies and approach in the implementation of HPMP Stage I was based on the given situation during that period. Therefore, in the preparation of HPMP Stage II for Lao PDR, it is essential to understand the change in situation and contexts of HCFC phase-out in the country. The updated information would have to be collected, analysed with the Government of Lao PDR to enable country to jointly determine, based on the updated circumstance, the period of the HPMP Stage II should be covered, until the completely phase-out HCFC consumption and what should be appropriate timeline that would not jeopardize the needs of the countries. This would also include the strategies and approaches to address emerging need of the country.

Information to be collected during the preparation of HPMP Stage II for Lao PDR would include:

- The current HCFC quantities consumed by servicing workshop/end users (update of Stage I survey);
- Inventory of HCFC-based equipment especially for room air-conditioners and commercial HCFC-based equipment and the forecast on the future inventory to understand the demand of HCFC for servicing / installation in each country in the future;
- Analysis of the current situation of HCFC-based equipment and recent development trends of alternative technologies in the domestic market taking into account the fact that Lao PDR is equipment import-dependent countries;
- Feedbacks from relevant national stakeholders e.g. the Customs Department, vocational training schools, RAC Association, RAC servicing sector and importers etc. on
 - Experiences, challenges and lessons learned from the implementation of HPMP Stage I that are to be taken into account the implementation of HPMP Stage II e.g. the licensing system of HCFC and HCFC-based equipment and other related regulatory frameworks, RAC servicing sector.
 - Strategies to be proposed under HPMP Stage II in the country context e.g. consideration of the need for additional actions for introduction of low-GWP alternatives to HCFCs into the country (standards, training, incentives) or possibility to set-up and enforce a robust refrigeration servicing technicians certificate system, as well as other policy initiatives and technical interventions.
 - The number of technicians, servicing workshop, national standards framework, alternatives in the market and development trends,
- The reports of National Survey on Ozone Depleting Substance (ODS) Alternatives in line with Decision XXXVI/9 of the Montreal Protocol on Substance that Deplete the Ozone Layer. The main objective of the survey was to enable Lao PDR to better understand its consumption trends of ODS alternatives and their distribution by sectors and subsectors. Furthermore, the survey also focused on opportunities and challenges for adoption of the alternatives. The results of the survey will be incorporated into the HPMP Stage II.

3.3. Activities proposed under preparation request

This document aims to request the funds for the preparation of the HPMP Stage II for Lao PDR. As requested by the Government, UN Environment is the lead implementing agency of the HPMP Stage II for Lao PDR. All activities proposed under this preparation request will be undertaken by UN Environment

and with support from the country during the data collection and analysis as well as development and finalization of overarching strategy and national implementation plan.

Activities will include (i) conducting nation-wide survey, (ii) analyzing data and preparation of national strategies and project document of HPMP Stage II, (iii) conducting national consultation workshops to obtain feedback from the stakeholders and (iv) finalizing the national strategies and project document of HPMP Stage II. Two national consultation workshops will be organized at least:

- The first workshop is to be organized prior to the commence of national data collection to inform concerned stakeholders on the scope and methodology of the survey, finalization of questionnaire as well as expected data from the survey.
- The second workshop is to be organized with the objective to brainstorm on components of HPMP Stage II project document with the national stakeholders and to obtain their feedback according to the specific country context.
- In between, national consultations with stakeholders will also be organized on the data verification, phaseout strategy, policy coordination, activities, monitoring and implementation, etc.

International consultant will be hired to work closely with Lao PDR and UN Environment for data collection and analysis, drafting and finalization of national strategy and country’s action plan as input to the HPMP stage II development. The consultant will also support the development of the overarching HPMP Stage II project document. The consultant needs to conduct travel to the country to provide specific assistance during the preparation process.

With the above activities, the total funding is being requested from the Multilateral Fund for the preparation of HPMP Stage II for Lao PDR to be implemented by UN Environment is 30,000 US\$ as follows:

Activities	Proposed cost for UN Environment (\$US)
Survey of HCFC servicing workshops, as well as HCFC importers for the HCFC consumption	14,000
Survey of end users, importers of the HCFC-based equipment to update the inventory of the HCFC equipment	
Analysis of data and development of national strategies as inputs to HPMP Stage II	
Two national consultation workshops and consultation meetings during the preparation of Stage II HPMP	8,000
International consultant for guiding data collection and analysis, drafting and finalizing Stage II HPMP (including travel costs)	8,000
Total (\$US) without PSC	30,000

Note: The funding level of each activity is indicative and subject to changes based on the further discussion between the NOU, implementing agency and the national stakeholders during the Stage-II preparation.

Funding Request for the Preparation of Stage II For Mongolia HCFC Phase-Out Management Plan

1. Background

The HCFC Phase-out Management Plan (HPMP) for Mongolia was approved at the 63rd Meeting of the Executive Committee to the Multilateral Fund (ExCom) in April 2011 with UNEP as lead implementing Agency and the Government of Japan as bilateral cooperating partner. The second tranche was approved at the 71st ExCom Meeting (Decision 71/64) while the third tranche was approved at the 77th ExCom Meeting (Decision 77/36). The HPMP is based on a staged approach to phase out the consumption (import) of HCFCs by 2030. The 1st Stage aims to reduce by 35% from the baseline of 1.4ODPT. The table below provides an overview of HPMP:

Table 1: HPMP Mongolia

Calculated HCFC baseline (2009-2010)	1.4 ODP tonnes
Total level of funding requested (for all the HPMP projects) including PSC	US\$413,580
Level of funding received for the first 3 tranches including PSC	US\$371,770
Lead Implementing Agency	UNEP
Cooperating Agency	Japan

The objective of the project preparation proposal is to assist Mongolia National Ozone Authority (NOU) in taking stock of market trends, achievements and lessons learned from the implementation of Montreal Protocol and further needs of stakeholders and in developing HPMP Stage II that meets effectively the national objectives for the HCFC use reduction and sustainable development. The requested funding for Stage II preparation is US\$30,000 in line with ExCom Decision 71/42 and MLF/IACM.2018/1/14 Guide given that the remaining consumption for Stage II is 0.9 ODP tonnes. HPMP stage II for Mongolia will be developed with assistance from UNEP as a leading agency in cooperation with the Government of Japan.

2. Progress on HPMP Stage I

2.1 HCFC Consumption

In view of its HCFC baseline consumption, Mongolia is considered as a low-volume consuming country. There is no production of HCFCs in the country and all HCFC needed in the market is imported. Mongolia has been using HCFCs for servicing of refrigeration and air-conditioning (RAC) equipment and in manufacturing of extruded polystyrene (XPS) insulation foam. The HCFCs consumption from 2011-2017 is shown in Table 3:

Table 2: HCFCs consumption trend

	2011	2012	2013	2014	2015	2016	2017
HCFC-22 (MT)	21.09	52.17	16.995	6.851	11.56	8.18	10.71
HCFC-142b in pre-blended polyol (MT)	-	-	0.064	0.004	0.015	-	-
Total (ODPt)	1.16	2.87	0.94	0.38	0.64	0.45	0.59

Source: Article 7 data report

Graphic 1: Mongolia scheduled and actual consumption

In 2016, the NOU conducted the ODS Alternatives survey and HFC Inventory to understand the consumption trend of alternatives to HCFC and identify opportunities for the introduction of low global warming potential (GWP) technologies in Mongolia. The studies showed that from 2012-2015 there was at least 21 types of HFC used of which the highest consumption was of HFC-134a and R-410A. Low-GWP options include R-744 (carbon dioxide) and R-704 (helium). There is an increasing trend of imports of new types of equipment such as vending machine, refrigerated milk tank, printing paper transformer, gas bag and skating equipment that depend on HFCs.

2.2 Phase-out activities in the XPS foam sector

Two foam manufacturing companies were selected under the investment component coordinated through bilateral assistance from the Government of Japan. Based on the agreements signed between the companies' management and the Government of Mongolia the companies agreed to stop using HCFC-22 for XPS foam production as of 30 June 2013. Companies made significant investment for the equipment conversion in addition to the support provided through the Multilateral Fund. The consumption of HCFCs by companies has been ceased which was verified by an independent verifier during HCFC consumption verification. An inspection by NOU was conducted to verify the disposal of obsolete equipment and safety procedures before the disbursement of a final instalment to both XPS manufacturing companies in 2017.

2.3 Strengthening of HCFC control policies and regulations

The country has a well-functioning quota and licensing system and NOU maintains a good collaboration with Customs Department for the control of imports. Mongolian Refrigeration Association (MRA) allocates the quota and sends the recommendation to the NOA housed at the Ministry of Environment and Tourism. In 2018 there were 15 importers including for HFCs. The recent changes in the licensing system made possible to remove inactive importers from the quota list. The license for imports is also required for HFCs and related equipment, but HFC are not yet controlled through the quota system.

The List of Toxic Chemicals Banned or Severely Restricted in Mongolia had been updated to include some 34 types of HCFCs including HCFC-141b, and the import of these substances has been subject to the license and quota system. The new format for quota application, reporting of the imported, sold,

charged in equipment with HCFCs, alternatives to HCFCs and relevant equipment was approved by a decree of the Minister of Environment and Tourism in March 2016.

An inventory of large HCFC-based equipment to establish a national database was conducted during the verification of the HCFC phase out management plan in 2015. It was updated to incorporate HFC and other ODS alternative technologies based on the results of the two afore-mentioned surveys.

NOU led active consultations with Mongolian Agency for Standardization and Metrology which led to setting up a Technical Committee to review ISO and EN standards and develop standard for the certification of the refrigeration and air-conditioning servicing technicians. A handbook "International Standards in Refrigeration and Air-Conditioning" and National Certification Schemes for Refrigeration and Air Conditioning Service Technicians provided to the MRA, Standardization and Technical Regulation Department of Mongolian Agency of Standardization and Metrology and National Expert of Standardization for purpose of further collaboration.

The Decree of State Secretariat of MoET of 2015 urged the NOU and other concerned parties to explore feasible ways to introduce the certification system for the refrigeration and air-conditioning servicing technicians. As the result of the working group on standards, the following standards have been reviewed, translated and considered for adoption ISO 817: 2014, ISO 5149:2014, ISO IES-17024:2012, EN 13313:2010 refrigeration systems and heat pumps-Competence of Personnel and EN 378: 2008 Refrigeration systems and heat pumps-Safety and environmental requirement. Standard EN 13313: 2010 was adopted in April 2017. This will provide the basis for setting up the national certification system for technicians. National stakeholder consultation took place in June 2018 to agree on the plan of action for the creation of an education/occupational standard for good practice in servicing the RAC equipment and integration into the national technical and vocational qualification system.

2.4 Capacity Building for Customs and Enforcement Officers

NOU maintains a good collaboration with the Customs Department in cooperation with which regular customs training workshops are conducted. The list of trainings delivered under Stage I provided below:

Table 3: List of Training Delivered under Stage I

Training	Location	Date	Numbers trained
1 Montreal Protocol Enforcement Training of Trainer	Ulaanbaatar	June 2012	25
3 training for customs officers	Provinces of Dornod and Selenge	July - December 2012	38
4 training for the State Environmental Inspectors	Customs stations in the Provinces of Zamin-Uud and Darkhan-Uul, and in Ulaanbaatar	July 2012 to January 2013	94
1 training for State Customs Inspectors	Ulaanbaatar	March 2013	45
2 training for customs officers	Ulaangom, Uvs and in Bayan-Ulgi province	June 2013	55
1 Training for customs officers	Zamin-Uud customs boarder	8-9 September 2014	61
1 Training for customs officers	Ulaanbaatar customs	15-17 June 2015	57
1 Training for customs officers	Ulaanbaatar customs	14-15 June 2017	48
Total			423

Total 3 refrigerant identifiers were received from UNEP and handed over to the Customs. The Mongolian NOU uses online iPIC and regularly updates the iPIC sheet. NOU has been exploring

options to establish an on-line licensing system and connecting with the internal Customs computerized system.

2.5 Good Practices Training Programme for Technicians

The good practices training programme on HCFCs and alternatives have been carried out as planned at the National Training Centre ‘Master Potentials’ of the Mongolian Refrigeration Association (MRA). The centre was established under the Montreal Protocol implementation framework. The centre is regularly involved in HPMP activities by conducting a series of technicians training and awareness-raising activities targeting the member companies of the MRA and also in the national celebrations of the World Ozone Day. Altogether 24 trainings on good practice for servicing technicians have been conducted under HPMP targeting 213 technicians including master trainers.

The staff of the Centre translated two following handbooks into Mongolian: “Good Practice in Refrigeration” by Proklima International and “Good Servicing Practices: Phasing out HCFCs in the Refrigeration and Air-Conditioning Servicing Sector” by UNEP.

The NOU also made effort to integrate the ozone protection and Montreal Protocol issues into the curriculum of key technical education institutions. Two credits – on the ozone layer protection and on handling of ODS and alternative refrigerants – have been included into the curriculum of the School of Food Engineering and Biotechnology at the Mongolian University of Science and Technology in April 2015 and two credits- Standard of Refrigerants have been included into the curriculum of Master’s Degree at Mongolian University of Science and Technology in April 2016.

2.6 Awareness-Raising and Outreach

The HPMP activities also focus extensively on communication, awareness-raising and outreach targeting various key stakeholders. On 19 June 2015, the official letter with the recommendations on public procurement of Ozone and Climate friendly Refrigeration and Air-Conditioning equipment and technology was distributed to two Government implementation agencies and 15 following Ministries: Ministry of Foreign Affairs, Finance, Justice, Construction and Urban Development, Health, Energy, Economic Development, Population Development and Social Protection, Labour, Mining, Defence, Education and Science, Roads and Transportation, Culture, Sports and Tourism, Industry and Agriculture with signature of Minister of MEGD. In addition, the NOA sent a formal letter with recommendations for procurement to the Head of the "New Ulaanbaatar International Airport Construction" and a follow-up recommendation letter to the Project Implementation Unit not to procure RAC systems with HCFCs or their blends. Also, a similar letter with Guideline on "Ozone and Climate friendly public procurement of Refrigeration and Air-Conditioning equipment and technology" was distributed to 26 entities from the private sector, registered importers and members of MRA

Outreach activities also targeted building and construction stakeholders including the Ministry of Construction and Urban Development. NOU sent recommendations on the use of ODS and Montreal Protocol implications for the sector to include into the National Strategy for Construction Sector for 2018-2028.

Various awareness materials to achieve HCFC phase-out were developed, published (print) and distributed.

3. Overarching Strategy and Activities for the Stage II Preparation Project

The overarching strategy Stage II for Mongolia is to achieve a full phase-out of HCFC by 97.5% from the baseline of 1.4 ODP tonnes by 2030 by implementing an integrated management plan in consultation and cooperation with key national stakeholders. The overall objective is to facilitate the

market transition to HCFC alternatives while achieving climate benefits through the adoption of energy efficient HVRAC technologies based on climate-friendly refrigerants.

The strategy for Stage II HPMP will build on the achievements and results of Stage I and take into account market needs and demand, gaps in implementation and enforcement of policies, capacity development needs of key stakeholders and constraints in access to information by key market players including public at large as individual consumers. The strategy will also aim to maximize the HCFC phase-out as much as possible by targeting sectors using HVRAC technologies such as building and construction, hospitality and tourism, retail and cold chain. Various policy options such public procurement and regulations/codes/standards will be considered to further potential reductions in ODS consumption in these sectors. These findings of the recent ODS Alternatives Survey and HFC Inventory will be incorporated into the preparation of HPMP Stage II. There is an indication of growing inflow of HFC-based technologies in the market which are high-mid GWP options.

The full funding of US\$ 30,000 is requested for the preparation project for HPMP Stage II for Mongolia. UNEP will be the implementing agency with inputs and cooperation from the Government of Japan. The description of activities needed to prepare HPMP Stage II is presented below:

(1) Data collection: a detailed survey will be organized and conducted to:

- Assess the HCFC quantities currently consumed by HVRAC sector, inventory of HCFC-based equipment especially residential and commercial refrigerators and air conditioners;
- Assess the needs of servicing sector including developing an updated national database of service technicians and understand their capacity needs to handle ODS alternatives and/or flammable ODS alternatives;
- Determine the market profile of HCFC-based equipment and equipment depending on the alternatives especially low GWP and ozone-friendly technologies;
- Review information on policy initiatives about the phase-out of HCFCs such as certification process of technicians, existing codes of practice and their enforcement with the aim of institutionalizing capacity building efforts under Stage II. The policy review will also aim to identify additional policy instruments such as standards and labelling and public procurement to be deployed in Stage II; and
- Understand potential user and consumer segments of the HVRAC technologies to expand phase-out efforts.

Activities will include mobilizing and training the survey team, local travels to key locations, data collection through bottom-up approach and interviews, top-down approach from the key institutional stakeholders, consolidation of data.

(2) Stakeholder coordination and consultation: During the data collection, several joint and targeted consultations including interviews will be organized and conducted with a range of stakeholders such as customs and enforcement agencies, relevant line ministries, servicing sector associations and individual entrepreneurs, importers/traders, large end-users, and experts. To formulate the final strategy and implementation plan for Stage II, stakeholder consultation workshops will be held to collect the feedback and revise accordingly the final document. The consultations on the final document will be conducted jointly for UNEP and Government of Japan.

(3) Preparation of HPMP Stage II: Based on information collected and analysis conducted including with the feedback from stakeholders, the proposal for HPMP Stage II will be prepared. The HPMP proposal for Stage II will outline the overarching strategy and implementation plan with detailed activities and funding requirement for policies & regulations, sector based ODS policies, refrigeration service sector training, service sector certification system, customs and enforcement capacity building, large end-user HCFC phase-out strategy and activities, and awareness and outreach activities. The draft proposal for HPMP Stage II will be circulated by NOU among national stakeholders for comments. The

overarching HPMP Stage II will be revised based on feedback collected, and the final proposal will be submitted to the first meeting of ExCom in 2020.

4. Budget

The break-down for an overall budget for PRP proposal is given in the table below:

Table 5: Proposed Budget for Stage II Preparation

Activities	Proposed cost
Data collection (local staff, regional expert, interviews, and local and regional travel)	15,000
Stakeholder coordination and consultation (meetings venue and catering, at least 5 meetings)	6,000
Preparation of Stage II (expert cost)	9,000
Total (USD) without PSC	30,000

**The funding level of each activity is indicative and subject to changes based on the further discussion between the NOU, implementing agency and the national stakeholders during the Stage-II preparation.*

Funding Request for the Preparation of Stage II for Nepal HCFC Phase-Out Management Plan

1. Background

The first stage of HCFC Phase-out Management Plan (HPMP) for Nepal was approved at the 62nd Meeting of the Executive Committee to the Multilateral Fund (ExCom) to reduce HCFC consumption by 35% of the baseline which is 23 MT (1.27 ODPT). Stage I covers the period of 2010-2020 with the total funding of US\$210,000 without PSC. This includes US\$126,000 for UN Environment as the lead agency for the implementation of non-investment activities, and US\$84,000 for UNDP as cooperating agency for the implementation of investment-related activities. The funding for Stage I has been provided in the following order:

Tranches	Amount	UNEP	UNDP	Approved
The first tranche	US\$105,000	US\$63,000	US\$42,000	66 th ExCom upon the ratification of the Copenhagen Amendment
The second tranche	US\$ 84,000	US\$50,400	US\$33,600	75 th ExCom
The third/final tranche	US\$ 21,000	US\$12,600	US\$8,400	to be requested in 2020

The Government of Nepal follows an accelerated HCFC phase-out schedule aiming to reduce 97.5% of HCFC consumption from the baseline by 2025 with a servicing tail of 2.5% until 2030. The objective of the project preparation (PRP) proposal is to assist Nepal's National Ozone Unit in taking stock of market trends, achievements with the implementation of Montreal Protocol and further needs of stakeholders and developing HPMP Stage II to meet effectively its national objective for the reduction of HCFC use. Considering that Nepal's remaining eligible consumption after the implementation of Stage I is 0.64ODP, the funding request is for US\$30,000 in line with the ExCom decision 71/42 and MLF/IACM.2018/1/14 Guide.

2. Progress on HPMP Stage I

2.1 HCFC Consumption profile

The country has in place a fully operational HCFC licensing and quota. The country does not have manufacturing of Heating, Ventilation and Refrigeration and Air-Conditioning (HVAC) and its registered importers bring in mainly HCFC-22 for the use in HVAC servicing sector. The use of HVAC equipment has been increasing in the country in the past decade due to the growth in tourism and hospitality sector, post-earthquake boom in building and construction and increasing consumer spending power. In addition, in recent years the country has also seen an increase in cold storages with the growth in the agri-food industry.

The Country Programme data submitted by the Government of Nepal illustrates a decrease in the consumption of the HCFC-22 as documented in the table below.

Year	2012	2013	2014	2015	2016	2017
HCFC-22 consumption in Service Sector (MT)	13.5	12	15	10	14.48	11.59

The result of the recent ODS Alternative survey conducted in the country indicate that most of the new RAC equipment imports are high GWP HFC options such as R-134a, R-410A, R-407c and R-404a.

Substantial number of R-600a based refrigerators is being imported into the country, and very small number of R-32 based ACs has penetrated into the market.

2.2 Policies & Regulations

The Government of Nepal has ratified all the amendments to the Montreal Protocol except for the Kigali Amendment. Nepal's National Ozone Unit (NOU) is housed in the Nepal Bureau of Standards and Metrology (NBSM) under the Ministry of Industry, Commerce & Supply. The NOU works through National Ozone Officer as per guidelines received from Ministry of Industry, Commerce & Supply and Ministry of Forest & Environment. Policy guidelines are developed by a Steering Committee as and when necessary and National Ozone Officer is the Member Secretary of the Implementation Committee.

The Government of Nepal has been successful in implementing its HPMP activities meeting the reduction targets despite various challenges including a 2015 earthquake. The earthquake caused structural damage to the NOU office which slowed the implementation of some activities of the HPMP. In addition, the earthquake also affected the capacity of the national partners to implement the HPMP activities within agreed timelines. For instance, the procurement and distribution of equipment and tools under service technicians' equipment support scheme had to be postponed due to trade limitations.

The Government of Nepal is implementing a licensing and quota system for HCFCs through the Ozone Depleting Substance Consumption Control Rules enacted in 2001. The regulations require all HCFC importers to comply with the reporting requirements. The import quota is regulated by the Ministry of Forest & Environment. At present, the NOU allocates 85% of maximum annual allowable consumption as the annual quota with the balance set aside as a buffer. Since January 2017, the Government has enforced a ban on the import of HCFC-based equipment.

Jointly with UNDP and UNEP, the NOU has also developed a HCFC equipment replacement rebate scheme in which financial incentive is provided to interested end-users to replace their present HCFC based equipment to non-ODP, low-GWP and energy efficient HVRAC technologies. The scheme is limited in scale aiming to demonstrate and promote Ozone Depleting Substances (ODS) alternatives.

2.3 Customs & Enforcement

The NOU has been closely collaborating with Nepal Customs Authority for the implementation of the Montreal Protocol in trade control of ODS. Under HPMP stage I, 4 enforcement training sessions including on Training of Trainers were organized for a total of 110 customs officers and other enforcement personnel. A manual on the national regulations, ODS import and exporting licensing system was published in 2013 and amended in 2015. Furthermore, the Customs and NOU representatives participated in 2 regional border dialogues with neighbouring countries (India, Bhutan, China, Bangladesh) meetings with neighbouring countries of which the first one in December 2016 was hosted by NOU in Kathmandu. The second border dialogue was held in May 2018 in Dhaka and included also representatives from Myanmar.

The issue of licenses for HCFC imports has been halted in Nepal for the year of 2018 with the idea of offsetting the total illegal stock of HCFC-22 seized in 2004 and 2016 in the amount of 17 MT (amount equivalent to 2018 quota) through auctioning to the market. Nepal Customs will oversee the auction in coordination with NOU.

2.4 Refrigeration Service Sector

There is an increase in the requirement of service technicians in Nepal due to the growth in the use of RAC equipment in the residential and commercial sector. It is estimated that there about 1,200 RAC service technicians in Nepal and majority of the RAC technicians have informal education and training background. Under HPMP stage I, one of the main objectives of the capacity building activities for refrigeration service sector was to reduce HCFC emissions during installation, maintenance and disposal for RAC equipment,

therefore, good servicing practices were the focus of the training of technicians and trainers. Up to now, 9 training workshops were organized training about 300 technicians.

Nepal Refrigeration and Electro-Mechanical Association (NREMA) is the primary association that represents the interests of the RAC servicing sector technicians in the country. The NOU has partnered with NREMA to carry out training activities and outreach to NREMA members. Trainers nominated by NREMA were trained in the Training of Trainers including on flammable refrigerants with the support from South-South cooperation of UNEP CAP at their training centre in Guangzhou, China. The NOU has also partnered with Technical Colleges under the Council for Technical and Vocational Education & Training (CTEVT) to train upcoming RAC technicians.

UNDP under investment component has two components: a) pilot replacement incentive programme and b) recovery and reclamation (R&R) programme. The NOU with the support of UNDP and UNEP organized stakeholders workshops for the organization of pilot replacement incentive programme to seek the interest of end users. Under R&R component, the following tools were procured and distributed: 50 vacuum pumps, 50 gauge manifold, 4 recovery machines, 6 tools kits, 1 electronic leak detector, and 8 recovery cylinders. The tools and equipment were handed over to 8 provincial units of Nepal Refrigeration and Electro Mechanical Engineers to be utilized by all the technicians of that province apart from the individual RAC technicians and technical training institutes. The hands-on training was provided to all the beneficiaries of tools and equipment on maintenance and proper use. The NREMA, CTEVT, and RAC technicians have requested to continue this support in future also.

2.5 Awareness & Outreach

The NOU regularly conducts awareness and outreach activities targeting industry and general public. Relevant awareness materials like posters, brochures and range of relevant international information on new alternative technologies and flammable refrigerants were distributed to the industry stakeholders. Key stakeholders are appraised of the development in new technologies in the market. Awareness workshop on Kigali Amendment was also organized for key public and private sector stakeholders in September 2017. On the annual World Ozone Day celebrations, a range of activities rolled out in the country targeting stakeholders from public, private sectors, students and public at large, e.g. a rally to march around the centre of Kathmandu, speech context, local media including TV coverage. Media awareness workshop are regularly organized on the eve of the World Ozone Day.

3. Overarching Strategy and Activities for the Stage II Preparation Project

The overarching strategy for Nepal is to implement an integrated plan for HCFC reductions in the RAC sector for the market transition to HCFC alternatives while achieving climate benefits through the adoption of energy efficient HVRAC technologies. The strategy will be based on capitalizing on the achievements and results of Stage I, taking into account the lessons learned in terms of the stakeholders and market needs and strengthening the implementation of policies, capacity development of key stakeholders and information access for key market players including public at large as consumers of HVRAC technologies to support their decision and choices towards the alternatives. The strategy will also aim to maximize the HCFC phase out by looking at additional sectors for potential reductions and leveraging additional policy instruments for effective phase-out and meeting the accelerate reduction objectives of the Government of Nepal.

The NOU of Nepal conducted a national Survey on consumption of ODS alternatives which main objective was to better understand consumption trends of ODS alternatives and their distribution by sectors and subsectors. It also focused on opportunities and challenges for adoption of the ODS alternatives. The results of the survey will be incorporated into the preparation of HPMP Stage 2. There is a clear indication that evolving technology trends in Nepal which is at the receiving side of the technology development would require the HPMP activities such as refrigeration service sector training workshops, customs and

enforcement capacity building activities and general awareness campaigns to be adjusted to match these market dynamics.

The full funding of US\$ 30,000 is requested for the PRP of HPMP Stage-II including on behalf of UNDP. The implementation of PRP project and preparation of the overarching strategy for HPMP Stage II will be undertaken by NOU with the assistance from UN Environment. UNDP will provide technical advisory as part of the PRP advisory team of the NOU. The description of activities that need to be undertaken to prepare HPMP Stage II is presented below:

(1) Data collection: a detailed survey will be organized and conducted to:

- Assess the HCFC quantities currently consumed by HVRAC sector, inventory of HCFC-based equipment especially residential and commercial refrigerators and air conditioners;
- Assess the needs of servicing sector including developing an updated national database of service technicians and understand their capacity needs to handle ODS alternatives and/or flammable ODS alternatives;
- Determine the market profile of HCFC-based equipment and equipment depending on the alternatives especially low GWP and ozone-friendly technologies;
- Review information on policy initiatives regarding the phase-out of HCFCs such as certification process of technicians, existing codes of practice and their enforcement with the aim of institutionalizing capacity building efforts under Stage II. The policy review will also aim to identify additional policy instruments such as standards and labelling and public procurement to be deployed in Stage II; and
- Understand potential user and consumer segments of the HVRAC technologies such as retail and cold chain, tourism and hospitality, building and construction and health care to expand phase-out efforts;

(2) Stakeholder coordination and consultation: The NOU will establish a PRP team/committee that would guide the Stage II PRP implementation process. During the data collection, a number of joint and targeted consultations including interviews will be organized and conducted with a range of stakeholders such as customs and enforcement agencies, relevant line ministries, servicing sector associations and individual entrepreneurs, importers/traders, large end-users, and experts. To formulate Stage II strategy and implementation plan, stakeholder consultation workshops will be held to collect the feedback and revise accordingly the final document.

(3) Preparation of HPMP Stage II: Based on information collected and analysis conducted including with the feedback from stakeholders, the proposal for HPMP Stage II will be prepared. It will outline the overarching strategy and implementation plan with detailed activities and funding requirement for: policies & regulations, sector based ODS policies, refrigeration service sector training, service sector certification system, customs & enforcement capacity building, large end-user HCFC phase-out strategy & activities, procurement of equipment for RAC technicians and three vocational institutions, and awareness & outreach activities. The draft proposal for HPMP Stage II will be circulated by NOU among implementation agencies and national stakeholders for comments. The overarching HPMP Stage II will be revised based on the comments collected and the final proposal will be submitted to the first meeting of ExCom in 2020.

4. Timelines for preparation

The timeline for preparation of the overarching HPMP Stage II is as following:

Activities	2019				2020
	Q1	Q2	Q3	Q4	Q1
Inception/Planning meeting	X				
Expert Engagement/Survey Planning	X				
Market Survey & Report		X			

Policy Review	X	X			
Data Analysis		X			
HPMP Stage-II Project preparation		X	X		
Stakeholder consultations	X	X	X	X	X
Project document finalization				X	X

5. Budget

The Nepal Stage-II PRP budget break-down is given in the table below:

Component	Budget* (US\$)
Data collection (local staff, regional expert, interviews and local and regional travel)	10,000
Stakeholder coordination and consultation (meetings venue and catering, at least 5 meetings)	7,000
Preparation of Stage II (expert cost)	13,000
Total	30,000

**the funding level of each activity is indicative and subject to changes based on the further discussion between the NOU, implementing agency and the national stakeholders during the Stage-II preparation.*

Annex-I: Endorsement Letter from Government of Nepal

PARAGUAY

HCFC PHASE-OUT MANAGEMENT PLAN

REQUEST FOR PRP FOR

THE SECOND STAGE

From 2020 – 2025

September 28th, 2018

**PREPARED JOINTLY BY
UNEP, UNDP & NOO**

1. Description

The Stage I HPMP for the Paraguay was approved at the 63th meeting of the ExCom in May 2011 for the period 2011 to 2020, at the amount of US \$695,400, comprising US \$330,000, plus agency support costs of US \$42,900 for UNEP, and US \$300,000, plus agency support costs of US \$22,500 for UNDP.

2 out of 3 tranches with a total value of 624,210 US\$ has been approved and the third tranche request, with a total value of 71,190US\$, will be submitted for consideration at the 83rd meeting of the Executive Committee.

Of the already HPMP approved funds (tranches 1 and 2), about US\$ 414.854,31 has been disbursed and committed as of today, which represents more than 66% of the total funds approved.

This request is for preparing the second stage of HPMP in order to Paraguay is able to meet the 67.5% HCFC baseline reduction by 2025 according to its country commitments under the Montreal Protocol.

2. Description of the current progress in implementation of the overall stage I of the HPMP

The Government of Republic of Paraguay is currently implementing the Second tranche of Stage 1 of its HCFCs Phase-out Management Plan (HPMP). The HCTC license and quota system is fully operational true an on-line system, the imports of R-22 air conditioning units is banned, and several technical standards for RAC sector were approved or revised. Furthermore, the NOU has successfully trained Customs and Enforcement Officers, refrigeration technicians, provided training equipment to vocational schools, gained stakeholders support through steering committee and consultation meetings and raised the public awareness on ozone layer protection.

3. Overall Strategy

3.1 Brief overview of the current HCFC consumption by substance.

The consumption of HCFC in Paraguay for the last 3 years is shown in the table below (in ODP tons).

HCFC	ODP	Baseline (ODP tonnes)	2015	2016	2017
HCFC-22	0.055	16.3	15.824	12.140	12.654
HCFC-123	0.02	0.2	0.057	0.014	0.084
HCFC-124	0.022	0.1	0.000	0.021	0.000
HCFC-141b	0.11	0.1	0.110	0.743	0.000
HCFC-142b	0.065	1.3	0.000	0.037	0.000
<i>Subtotal</i>		<i>18.0</i>	<i>15.991</i>	<i>12.954</i>	<i>12.737</i>

HCFC	ODP	Baseline (ODP tonnes)	2015	2016	2017
HCFC-141b imported in fully formulated polyols		1.4	3.16	3.61	1.34
Total					

As can be seen in the table above, Paraguay's consumption of HCFCs has experienced a progressive decrease in the consumption of HCFC-22, which has allowed the country to easily remain in compliance with its Montreal Protocol obligations as regards HCFCs. Consumption in the foam sector, as HCFC-141b in fully formulated polyols, probably has increased due its increasing use in the construction sector.

3.2 Description of the information that needs to be gathered and updated

Paraguay will only have HCFC consumption in its servicing sector, and HCFC-22 will be the main HCFC consumed. The national survey for stage 2 will thus focus on further analyzing the consumption and trends in the servicing sector and the main actors involved. It will review the status of ODS regulations and the need to adapt them. It will review the HPMP strategy and amend it based on the outcome of Stage 1. An analysis of the specific phase-out targets by substance and/or subsector will be conducted, in order to meet upcoming obligations.

3.3 Indication of the activities that need to be undertaken for PRP

The planned activities in this PRP are included in the table below, indicating the estimated costs.

Activity	Indicative funding (in USD)		
	UNEP	UNDP	TOTAL
Assessment of current situation and needs of stakeholders (Survey update, Data analysis, Institutional coordination, etc.)	25,000		25,000
Technical support and updating of overall strategy for Stage 2, as well as specific strategy for the Servicing sector (International Consultant).		20,000	20,000
Stakeholders' meetings (2)	10,000		10,000
Reporting and monitoring	5,000		5,000
Total	40,000	20,000	60,000

All the activities listed in the table above are standard preparatory activities and are normally not included in the implementation phase of a project.

As per Decision 71/42(d), Paraguay is eligible to USD 60,000 for PRP of the overall strategy for Stage II, as remaining eligible HCFC consumption is approximately 11.7 ODP tonnes

3.4 Implementing Agencies

The Government of Paraguay designated UNEP as Lead Agency and UNDP as Cooperating Agency for this project preparation. Consequently, UNEP is requesting US\$ 40,000 and UNDP is requesting US\$ 20,000

Funding Request for the Preparation of Stage-II HCFC Phase-out Management Plan for SAINT LUCIA

Background

The first stage of the HCFC Phase-out Management Plan (HPMP) for Saint Lucia was approved at the 64th Meeting of the Executive Committee with a total funding of US\$210,000 (excluding agency support costs) for the period 2011 to 2020 to reduce HCFC consumption by 35% of the baseline. The overarching strategy has the main goal to provide ozone and climate benefits through the integrated plan for ozone depleting substances (ODS) reductions for the refrigeration sector, promotion and adoption of energy efficiency alternative technologies. The first stage sought to phase out the consumption of HCFCs in the country as required by the Montreal Protocol. Its focus was on the following components: (a) Training of customs officers and enforcement personnel, policy and procedures for labelling container and controls measures for HCFC containing equipment; (b) Training of technicians on good practice, recovery and reuse, handling of non-HCFC refrigerants, safety practice; (c) Provision of equipment and tools, including refrigerant recovery machine, recovery cylinder, sealing tools; (d) Public education and awareness programme and; (e) Project monitoring, coordination and reporting .

The project has been implemented with support from UNEP as a lead agency and UNIDO as a cooperating agency.

The Government of Saint Lucia committed to the following control measures with the support of funding and technical assistance from the Multilateral Fund and implementing agencies:

- (i) Freeze the consumption of HCFCs in 2013 to the agreed baseline figure.
- (ii) Reduce consumption of HCFCs by 10% from 2015.
- (iii) Reduce consumption of HCFCs by 35% from 2020.

In 2011 the Government of Saint Lucia agreed its starting point for sustained aggregate reduction in HCFC consumption of 0.92 ODP tones as a baseline. This is based on the actual consumption reported under Article 7 of the Montreal Protocol for 2009 and 2010. This was then revised at the 76th ExCom in May 2016 to 1.09 ODP based on the data reported by the Government of Saint Lucia under Article 7. Therefore its revised phase-out schedule, the relevant paragraphs of the Agreement were updated accordingly.

Saint Lucia has made commendable progress in the implementation of stage 1 of its HPMP. Notable achievements include meeting the 2013 HCFC freeze and 10 percent reduction targets in 2015 and building the capacity of refrigeration technicians in good refrigeration practices, recovery and recycling. Further, Saint Lucia has updated its legislation to include all refrigerants and has restricted the sale of refrigerants to only Certified Technicians. Customs and enforcement officers were trained and a number of public awareness activities were undertaken to promotion low GWP, energy efficient technologies.

The Executive Committee approved the verification report to be carried out in Saint Lucia for stage I of the HPMP at its 71th Meeting. The verification report was carried out for the years 2013, 2014 and 2015 and confirmed that the Government is implementing a licensing and quota system for HCFC imports and exports and that the consumption of HCFC for those years were lower than the established baseline. The verification concluded that Saint Lucia

was in compliance with the Montreal Protocol HCFC reduction schedule and with its Agreement with the Executive Committee.

The approved HPMP Stage I preparation funds have been fully used, and it is confirmed that there is no balance remaining.

The endorsement from the Government for the request of the Stage-II HPMP preparation has been received.

Progress in the implementation of HPMP Stage-I

	Activity	Progress In Implementation
Component I	Certification of Technicians – UN Environment	
Tranche 1	Tranche 1 had no activity under this component	
Tranche 2	<p>Train technicians in good refrigeration management practices as well as recovery and recycling of refrigerants</p> <p>Certify technicians that have successfully completed the course and comply with national standards set by the Government of Saint Lucia through the NOU.</p>	3 workshops on Good Refrigeration Management Practices Recovery, Recycling, and Alternative Technologies were held training a total of 59 technicians. 46 of those attained Certification and issued with “Certified Technician” ID Cards.
Tranche 3	Certification of Technicians in Good Refrigeration Management Practices, Recovery, Recycling Alternative Technologies	4 workshops on Good Refrigeration Management Practices, Recovery, Recycling and Alternative Technologies held training a total of 40 Technicians.
Component II	Policy and Institutional Framework	
Tranche 1	Implementation of revised Act and Regulation	<p>An import/export licensing and quota system (LQS) that supports the country’s HCFC phase-out activities was established. This included the prohibition of the import of HCFC-based equipment, as well as the registration of importers and the restriction of sale of refrigerants to certified RAC Technicians. The quotas for importers are determined by the NOU and implemented with support by the Ministry of Commerce and the Department of Customs.</p> <p>Customs Brokers, recognized key stakeholders in the implementation of the LQS, were trained in ASYCUDA and the classification of Pesticides, Toxic Chemicals, ODS, Refrigerants and their Products. The NOU was actively monitoring the enforcement of the provisions under the Act and Regulations to ensure that the LQS is effective. During the Tranche, the NOU was called upon to assist the Customs and Excise Department with the handling of two cases of illegal ODS imports.</p>
	Establishment of standards for the transportation, handling and storage of refrigerants	The Saint Lucia Bureau of Standards (SLBS), the national entity with the mandate to establish standards in Saint Lucia, was engaged to develop and establish national standards for the transportation, handling, storage and disposal of refrigerants. The SLBS recommended the development of Technical Regulations in order to achieve the objectives of this component

	Activity	Progress In Implementation
		in an effective manner. A proposal for this initiative was submitted to the SLBS by the NOU.
	Review of customs training manual and conduct training	The revised Customs Manual which includes recommendations from the Customs Training Workshop held in November 2013, was printed and disseminated to frontline Customs Officers. 2 one-day training workshops were conducted, training a total of 21 Customs Brokerage Agencies.
	Develop and implement procedures to monitoring servicing of Saint Lucian flagged vessels	Efforts to develop procedures to monitor the servicing of Saint Lucia flagged vessels revealed that the Saint Lucia Air and Sea Ports Authority Act Cap 8.13 and the Saint Lucia's Registration and Proprietary Interests in Ships Regulations No. 18 of 2010, requires ships to keep records which may include a list of ODSs and equipment that contain ODSs. MARPOL Annex VI require ships to maintain a list of ODS and ODS equipment onboard. In an effort to prepare for upcoming discussions with Parties on the treatment of ODS used onboard ships, the NOU entered into discussions with SLASPA on its intention to ratify MARPOL Annex VI. Ratification of Annex VI will provide a basis from which it will become mandatory for flag ships and ships in Saint Lucian waters to better manage ODS used onboard. These discussions will also allow the Saint Lucia to participate fruitfully at the upcoming negotiations, and to gain a better understanding of the interpretation of relevant international conventions, our national shipping legislation and to strengthen the enabling environment to allow Saint Lucia to remain compliant to the Montreal Protocol. SLASPA was requested to provide a list of all ships registered under Saint Lucia's flag, in an effort to examine the number of ships directly implicated. SLASPA has indicated their support of ratification of MARPOL Annex VI.
	Introduction of climate and energy efficiency considerations of alternative refrigerants to replace HCFCs	The NOU worked closely with the Energy Unit to develop initiatives for the introduction and promotion of climate and energy efficient technologies in Saint Lucia and to incorporate such considerations into existing policies and future projects. Ministers and relevant heads have been sensitized about the benefits of selecting climate and energy efficient alternative refrigerants to replace HCFCs. The general public was also continually informed about the availability of climate-friendly and energy efficient technologies.
Tranche 2	Create and enforce an enabling policy, legal and institutional framework to support the phase out HCFCs along timelines consistent with the Montreal Protocol control measures Train Customs Officers and other Enforcement Personnel such as the Marine Police, in the Application of the HCFC LQS and in the Identification and Classification of ODS, Refrigerants and their	Two training sessions conducted training 21 Customs Brokers and 50 Customs and Marine Police Officers. The Customs Desk book were distributed to participants. In addition the UN Environment's Customs Quick Tool and Other material related to illegal trade included in the training material and the Quick Tool converted into a poster and distributed to air and sea ports as well as other areas within Customs.

	Activity	Progress In Implementation
	Products	
Tranche 3	Strengthen the policy, legal and institutional framework	3 training sessions conducted training a total of 30 Customs Officers. The Customs Desk book was printed and distributed to participants; the UNEP Customs Quick Tool and other material related to illegal trade were included in the training material.
Component III	Education and Awareness	
Tranche 1	Conduct public awareness activities to inform about HCFC alternatives among the private sector Plan and execute activities in commemoration of Ozone Day	A half-day symposium on energy efficient HCFC alternatives was hosted in September 2013 and it targeted mainly the management of all major users and retailers of refrigerators and air conditioning units and financing entities. A series of activities in commemoration of the International Day for the Preservation of the Ozone Layer during the week of 16 th September 2013
Tranche 2	<ul style="list-style-type: none"> - Inform the general public about the HCFC phase out; - Provide information about emerging technology options to reduce HCFC consumption; the economic and environmental benefits of HCFC phase out; - Raise awareness on the health and safety issues related to the use of natural refrigerants and how these are to be handled; and - Provide information about the specific activities to achieve the targeted consumption reductions. 	<p>The general public was kept informed of HCFC phase out and Low GWP, energy efficient alternatives. A number of radio interviews and awareness programmes were held in collaboration with the various media houses, NOU and the National Air Condition Association (NARA). Meetings were held with importers to discuss progress with HCFC phase out, alternatives and the import/export licensing system.</p> <p>The Customs Quick tool reproduced and distributed to various key Customs areas. A Poster regarding restriction of sale of Refrigerants to Certified Technicians developed, published and distributed to retailers and brochures on the HCFC phase-out schedule and the policies and legal structure were produced and distributed to enable the transition to an HCFC free economy.</p>
Tranche 3	Development and dissemination of public education and awareness material and supporting interventions	<ol style="list-style-type: none"> 1. An ozone and climate brochure was developed and disseminated. UN Environment's Energy Efficiency in the RAC Sector also reproduced and distributed 2. A meeting was held with stakeholders to provide an update on the Act and revised Regulations. 3. Ozone Day 2017 was celebrated and included a Ministers Address; publication of an article in the Newspaper; a presentation to RAC students at the Sir Arthur Lewis Community College and launching of UNEP & ASHRAE's refrigeration literacy course; Media interviews; Dissemination of Information packages containing brochures on energy efficiency in the RAC sector, ozone and climate leaflet, and promotional items (bags, pens, pencils, notepads, caps) to key stakeholders; wearing ozone day polo shirts during the month of September to create awareness; Ozone day information was posted on Departments Facebook page
Component IV	Monitoring, Evaluation and Reporting	
Tranche 1,2 and 3	Monitoring, Evaluation and Reporting (MER)	To ensure effectiveness implementation of all projects within the HPMP, the NOU contracted a national consultant under the project with responsibility for continuous monitoring of implementation of project activities. The consultant also provided support in the preparation of all reports and Tranche Requests required under the Project and identified solutions to

	Activity	Progress In Implementation
		challenges encountered.
Component V	Investment Component – UNIDO	
Tranche 1 and 2	<p>Provide support to the NOU to reduce consumption and introduce alternative refrigerants.</p> <p>Support the training program with the printing of manuals in good refrigeration practices and alternative refrigerants</p>	<p>A national expert was hired for the service sector implementing activities and also to carry out special training for trainers aiming to train 30 trainers at country level.</p> <p>50 manuals were prepared.</p>
Tranche 3	<p><i>Reduce the refrigerant consumption from leakage in the RSS through the promotion and training in the concept of “refrigerant in not consumable:</i></p> <p>Train technicians, purchase tools and upgrade training centre for the introduction of HCs as an alternative.</p>	<p>This component, in consultation with UNIDO was reconstructed to meet the needs of the sector. It was decided to purchase equipment to upgrade a training facility and to conduct training on HCs. This component has not been completed.</p> <p>2 refrigerant identifiers (HC compatible) were procured to assist with training of technicians and Customs Officers</p>

Overarching Strategy

The overarching strategy for Saint Lucia is to implement an integrated plan for HCFC reductions in the RAC servicing sector (RSS) through the promotion and adoption of low GWP, energy efficient alternative technologies to achieve climate benefits. The strategy will be based on strengthening the implementation of the existing policies and capacity development of refrigeration experts to support the adoption of appropriate ozone and climate friendly alternative technologies.

Saint Lucia implemented a staged approach strategy of HCFC Phase-out Management Plan (HPMP). Stage two will seek to implement activities to phase out remaining HCFC consumption based on the promotion of natural refrigerant use. The Government of Saint Lucia conducted a National Survey on consumption of ODS alternatives in line with Decision XXXVI/9 of the Montreal Protocol on the protection of ozone layer. The main objective of the survey was to enable Saint Lucia to better understand its consumption trends of ODS alternatives and their distribution by sectors and subsectors. Furthermore, the survey also focused on opportunities and challenges for adoption of the alternatives. The results of the survey will be incorporated into the HPMP stage 2.

HCFC Consumption

The HCFC consumption for Saint Lucia in 2017 is 0.64 ODP tonnes and the estimated consumption for 2018 is 0.63 ODP tonnes

The HPMP Stage II for Saint Lucia is aiming to support the country to achieve complete phase-out of HCFCs under the Montreal Protocol by 2030.

Information to be collected

Information to be collected during the Stage-II HPMP preparation would include:

- Conduct surveys to collect information on the HCFC quantities currently consumed by RAC sector, inventory of remaining HCFC-based equipment especially commercial HCFC-based equipment;
- Information on policy initiatives regarding the phase-out of HCFCs such as certification process of technicians, existing codes of practice and their enforcement;
- Identify and discuss with the relevant stakeholders, possible ways of reducing the current consumption of HCFCs in the country.
- Determine the market profile of HCFC-based equipment and equipment depending on the alternatives especially low GWP technologies which are ozone friendly. Incorporate results of the survey into the HPMP stage 2.

Activities proposed for Stage II Preparation

The HPMP stage II for Saint Lucia will be developed with assistance from UN Environment as a leading agency and UNIDO, as a cooperating agency. The proposed activities and budget are provided in the table below:

Activities	Proposed cost	UNEP	UNIDO
Conduct surveys to determine HCFC quantities currently consumed by servicing workshops; and to establish inventory of existing HCFC-based equipment both domestic and commercial.	10,000		10,000
National review, discussion and consultation meetings on the draft of Stage II HPMP	8,000	8,000	
Recruitment of international / national experts to assist in the development of stage II HPMP	12,000	12,000	
Total (USD) without PSC	30,000	20,000	10,000

Note: The funding level of each activity is indicative and subject to changes based on the further discussion between the NOU, implementing agency and the national stakeholders during the Stage-II preparation.

Funding Request for the Preparation of Stage-II HCFC Phase-out Management Plan for TANZANIA

Background

Stage 1 of the HPMP for the Republic of Tanzania was approved at the 67th Executive Committee meeting. The project was approved to achieve the 35% reduction in HCFC consumption for the period 2012 to 2020 at the amount of US \$210,000, consisting of US \$110,000 plus agency support costs of US \$14,300 for UNEP as the lead agency, and US \$100,000 plus agency support costs of US \$9,000 for UNIDO as the cooperating agency.

The strategy of the government of Tanzania is to achieve total phase out of HCFC ahead of the Montreal Protocol schedule through the promotion and adoption of energy efficiency alternative technologies with ozone and climate benefits. This can only be achieved if adequate support is made available to the Government and if proven alternative technologies are readily available to the end-users. The Government of Tanzania is promoting the use of natural refrigerants and other viable alternatives technologies that have high energy efficiency with low global warming.

The first stage of the HPMP focused on (a) training of customs and other law enforcement agents and strengthening of customs training schools; (b) strengthening Refrigeration Association, Technical training institutes and training of RAC technicians; (c) strengthening of Regional R/R Centers and incentive programme for commercial and industrial refrigeration end-users; (d) monitoring and evaluation of the implementation of HPMP.

The Government of Tanzania is committed to the following control measures with the support of funding and technical assistance from the Multilateral Fund and implementing agencies:

- (i) Freeze the consumption of HCFCs in 2013 to the agreed baseline figure.
- (ii) Reduce consumption of HCFCs by 10% from 2015.
- (iii) Reduce consumption of HCFCs by 35% from 2020.

Tanzania agreed its starting point for sustained aggregate reduction in HCFC consumption of 1.7 ODP tones as a baseline. The Government of Tanzania has made tremendous progress in the implementation of stage 1 of its HPMP. Notable achievements include meeting the 2013 HCFC freeze and 10 percent reduction targets in 2015. In addition, the Government of Tanzania has strengthened the capacity of refrigeration technicians on good refrigeration practices and has trained enforcement officers from various public and private agencies on monitoring illegal trade in ODS.

The approved HPMP Stage I preparation funds have been fully used, and it is confirmed that there is no balance remaining.

The endorsement from the Government for the request of the Stage-II HPMP preparation has been received.

Progress in the implementation of HPMP Stage-I

	Activity	Progress in Implementation
1	<i>Capacity Building</i>	
Project 1	Training of Customs and other law enforcement officers and strengthening of customs training schools.	<p>The project objective is to enable customs and other enforcement officers to be acquainted with ozone issues under the Montreal Protocol, ODS regulations and other legislation regarding ozone issues in Tanzania for effective enforcement.</p> <p>Tranche 1: Three training sessions on the licensing and quota system, and on the monitoring and control of imports of ODS and ODS-based products were held for 110 customs officers.</p> <p>Tranche 2: Two training session for customs and other law enforcement officers on motoring and enforcement of ODS policy and regulations were conducted.</p> <ul style="list-style-type: none"> • One training workshop for customs officers in controlling and monitoring importation of Ozone Depleting Substances (ODS) to combat illegal trade of ODS, was held from 28 – 30 March, 2018 at the Center for Enhancement of Effective Malaria Interventions (CEEMI) conference hall, Dar es salaam. • Training for enforcement officers on prevention of illegal trade organized on 16 October, 2017 at NIMR Conference Hall in Dar es salaam region. <p>In total 90 enforcement officers and other law enforcers were trained under tranche II. The trainings contributed to the reduction in cases of illegal trade and better control on imports of refrigerants.</p>
Project 2	Training of service technicians in good refrigeration practices and strengthening of the Refrigeration Association and technical institutes.	<p>The main aim of the training is to equip refrigeration technicians with knowledge and necessary skills in hydrocarbon technologies and good refrigeration practices.</p> <p>Tranche 1: The training programme for refrigeration servicing technicians was implemented, and 35 trainers and 60 technicians were trained in good servicing practices, refrigerant recovery and recycling, and safety issues related to the use of</p>

	Activity	Progress in Implementation
		<p>hydrocarbons. A technician certification programme is being implemented to ensure good servicing practices.</p> <p>Tranche 2: One training of 35 refrigeration service technicians were conducted in Dar es Salaam city from 24th to 25th February, 2017. The capacity of refrigeration technicians was strengthened through training. In total 35 technicians were trained in good refrigeration practices including the use of hydrocarbon technologies. Regional Train-the-Trainer Workshop on refrigerant quality control was held in Kibaha, Pwani region from 20 – 23, February, 2017. It was attended by 35 participants from different regions of the country. The targeted participants for this training workshop were Instructors/Trainers of Refrigeration and Air Conditioning Courses from Vocational Training Centres, Technical Colleges and Institutes of Science and Technology as well as some reputable and experienced refrigeration technicians in the country from Private Refrigeration and Air Conditioning servicing workshops; User maintenance personnel from industries; personnel/technicians from Government departments involved in refrigeration and air conditioning facilities.</p>
2	<i>Investment project</i>	
Project 3	Provision of equipment and strengthening regional Centres of Excellence and incentive programme for commercial and industrial refrigeration end-users	<p>Tranche 1: Tools and equipment were purchased and distributed to six training centres and the Dar es Salaam Institute of Technology; facilities in these training centres were upgraded to deliver better training. Vocational training institutions and a few large repair workshops have been identified to serve as centers of excellence that will carry out technicians training, data collection and management of servicing equipment for rental purposes.</p> <p>Tranche 2: UNIDO started the implementing activities with mission to Tanzania specifically target the market availability of quality refrigerants through reinforced standards and awareness raising among re-sellers and end-users in 2017 in Dar es Salaam city.</p> <p>Based on the visits and conditions in the country the implementation approach was decided. Tanzania Bureau of Standards (TBS) and Dar es</p>

	Activity	Progress in Implementation
		salaam Regional Vocational Training and Service Centre were equipped with two refrigerant identifiers. Special training was held for the use of R-290 and R-600a and training in good refrigeration practices in Kibaha.
3	<i>Monitoring, evaluation of implementation of the HPMP</i>	
Project 4	Monitoring and evaluation	The NOU performed its duties of ensuring the effectiveness of all activities within the HPMP through continuous monitoring of project implementation and regular collection of data to measure progress against performance criteria.

Overarching Strategy

The overarching strategy for the Republic of Tanzania is to implement an integrated approach to reduce consumption of HCFCs in the RAC sector through adoption of high energy efficiency alternative technologies to maximize climate benefits. The strategy will focus on strengthening implementation of policies and legislations related to the phase-out of ODS and capacity development of enforcement officers and refrigeration experts to support the adoption of appropriate ozone and climate friendly alternative technologies.

The Republic of Tanzania adopted a staged approach strategy on implementation of the stage 1 of the HPMP. Based on progress made in the implementation of stage1, Tanzania will aim to implement activities to phase out remaining HCFC consumption through the continued promotion of natural refrigerants use in its stage 2 of HPMP. Tanzania conducted a National Survey on consumption of Ozone Depleting Substance (ODS) alternatives in line with Decision XXXVI/9 of the Montreal Protocol on the protection of ozone layer. The survey provided and understanding of consumption trends of ODS alternatives and their distribution by sectors and subsectors in the country. It further provided information on opportunities and challenges for adoption of the alternatives which will be included in the stage 2 of the HPMP.

The HPMP Stage II for the Republic of Tanzania is aiming to support the country to achieve the 2030 Montreal Protocol phase-out target.

HCFC Consumption

The HCFC consumption for Tanzania for 2017 is 20.89 metric tons.

Information to be collected

The Government of Tanzania aims to collect the following information during the Stage-II HPMP preparation:

- Surveys to determine current consumption of HCFCs used by RAC sector, update inventory of HCFC-based equipment especially air conditioners and commercial HCFC-based equipment;
- Data and information on policies related to the phase-out of HCFCs such as licensing systems, certification process of technicians, existing codes of practice and their enforcement and standards;

- Discussion with stakeholders on innovative ways of reducing the current consumption of HCFCs in the country.
- Information on market profile of HCFC-based equipment and equipment depending on the alternatives especially low GWP technologies which are ozone friendly.

Activities proposed for Stage II Preparation

The HPMP stage II for the Government of Tanzania will be developed with technical support from UNEP as a lead agency and UNIDO, as a cooperating agency. The proposed activities and budget are provided in the table below:

Activities	Proposed cost	UNEP	UNIDO
Surveys to determine current consumption of HCFCs by servicing workshops; and to update inventory of HCFC-based equipment in the country.	10,000	5,000	5,000
Hold review, discussion and consultation meetings on the draft of Stage II HPMP	5,000	5,000	
Recruitment of international / national experts to assist in the development of stage II HPMP	15,000	10,000	5,000
Total (USD) without PSC	30,000	20,000	10,000

Note: The funding level of each activity is indicative and subject to changes based on the further discussion between the NOU, implementing agency and the national stakeholders during the Stage-II preparation.

Funding Request for the Preparation of Stage-II HCFC Phase-out Management Plan of UGANDA

Background

The first stage of the HCFC Phase-out Management Plan (HPMP) for Uganda was approved at the 68 Meeting of the Executive Committee with a total funding of US\$ 164,500 plus support cost for the period 2012 to 2020 consisting of US \$84,500 plus agency support costs of US \$10,985 for UNEP as the lead agency, and US \$80,000 plus agency support costs of US \$7,200 for UNIDO as the cooperating agency to reduce HCFC consumption by 35% of the baseline.

The overarching strategy has the main goal to provide ozone and climate benefits through the integrated plan for ODS reductions for the refrigeration sector, promotion and adoption of energy efficiency alternative technologies.

The first stage is aimed at phasing out the consumption of HCFCs in the country as required by the Montreal Protocol. The focus is (a) ODS policy and regulation; (b) further training of customs and other law enforcement agents and strengthening of customs training schools; (c) strengthening of the Uganda National Association of Refrigeration and Air-conditioning (UNARA), technical institutions and additional training of RAC technicians; (d) strengthening of Regional R/R Centers and incentive programme for commercial and industrial refrigeration end-users; (e) development of a comprehensive programme for reduction of HCFC and carbon emissions in the refrigeration and air conditioning sector.

The project has been implemented with support from UNEP as a Lead Agency and UNIDO as a Cooperating Agency.

The Government of Uganda committed to the following control measures with the support of funding and technical assistance from the Multilateral Fund Secretariat and implementing agencies:

- (i) Freeze the consumption of HCFCs in 2013 to the agreed baseline figure.
- (ii) Reduce consumption of HCFCs by 10% from 2015.
- (iii) Reduce consumption of HCFCs by 35% from 2020.

The Government of Uganda agreed its starting point for sustained aggregate reduction in HCFC consumption of **0.20** ODP tonnes as a baseline. This is based on the actual consumption reported under Article 7 of the Montreal Protocol for 2009 and 2010.

Uganda has made tremendous progress in the implementation of stage 1 of its HPMP. Notable achievements include meeting the 2013 HCFC freeze and 10 percent reduction targets in 2015. Furthermore, Uganda has built the capacity of refrigeration technicians on good refrigeration and air conditioning practices and has trained enforcement officers from various public and private agencies on monitoring trade in ODS. Uganda has also embarked on conducting training in good refrigeration practices in four selected Vocational Training Institutes.

The Executive Committee approved the verification report to be carried out in Uganda for stage I of the HPMP. The verification report was carried out and confirmed that the

Government is implementing a licensing and quota system for HCFC imports and exports and imports of HCFC from 2015. The verification concluded that Uganda was in compliance with the Montreal Protocol HCFC reduction schedule and with its Agreement with the Executive Committee. It is noted, however, that for the years 2016 and 2017 there was no importation of HCFCs into the country.

The approved HPMP Stage I preparation funds have been fully used, and it is confirmed that there is no balance remaining.

The endorsement from the Government for the request of the Stage-II HPMP preparation has been received.

Progress in the implementation of HPMP Stage-I

	Activity	Progress In Implementation
1	<i>Legislation</i>	
	Review of ODS policy and regulations.	<p>The Government of Uganda is on course of reviewing the overall ODS phase-out policy, the national environment act, and ODS regulations. The aspects relating to HFC phase-down and climate change (Kigali Amendment) are also incorporated into the review of the said laws.</p> <p>Tranche 1: One meeting on the Montreal Protocol and national ODS regulations with the Uganda Revenue Authority was organized for enforcing import controls and licensing system.</p> <p>Tranche 2: Three meetings have been conducted in line with reviewing the ODS Regulations. The first (inception) meeting was held in December, 2017, the second in February, 2018 and the third in April, 2018. The first meeting comprised technical staff of NEMA. The , while the second and third meetings comprised the following stakeholders: Ministry of Justice and Constitutional Affairs, Ministry of Energy and Mineral Development, Ministry of Trade, Industry and Cooperatives, Ministry of Agriculture, Animal Industry and Fisheries, Chemistry Section/ Tax Investigations Department (Uganda Revenue Authority), Directorate of Industrial Training, Uganda National Association of Refrigeration and Air-conditioning (UNARA), Uganda National Bureau of Standards and the National Environment Management Authority.</p>
2	<i>Capacity Building</i>	
Component 1	Training of Customs and other law enforcement officers and strengthening of customs training schools.	<p>Tranche 1: Training curriculum of the Customs school was revised to include modules on the ozone, and 5 newly recruited Customs officers were trained; 12 Customs and law enforcement officers were trained on compliance with and enforcement of ODS regulations, as well as techniques in preventing illegal trade.</p> <p>Tranche 2: One training session for customs and other law enforcement</p>

	Activity	Progress In Implementation
		<p>officers on motoring and enforcement of ODS policy and regulations were conducted. A total of Sixty (60) enforcement officers were trained. Participants were drawn from Customs Department and Tax Investigations Department (Uganda Revenue Authority), Uganda Police/ Criminal Investigations Department, Ministry of Trade, Industry and Cooperatives, Ministry of Agriculture, Animal Industry and Fisheries, Uganda Bureau of Standards and National Environment Management Authority. Customs Officers from different border posts attended this training.</p> <p>Refrigerant identifiers were procured and distributed to relevant enforcement entities. The training contributed to improvements in monitoring trade/imports of ODS and ODS-dependent equipment.</p>
<p>Component 2</p>	<p>Training of service technicians in Good Refrigeration and Air Conditioning (RAC) practices and strengthening of the Refrigeration Association and technical institutes.</p>	<p>Tranche 1: Two-day training of trainers workshop on good servicing practices was organized for 18 technicians; they were also provided with toolkits (e.g., charging hoses, refrigerant release hose for HC, capillary tube cutter) for good service practices. Meetings were held with UNARA to implement the code of conduct of technicians, to start the certification process of technicians, to develop a database of technicians, and to undertake a capacity assessment of the institution that will conduct technicians' training.</p> <p>Tranche 2: The capacity of refrigeration technicians was strengthened through training and provision of necessary tool kits. A total of twenty five (25) technicians were trained in Good RAC practices at Lira Technical Institute including the use of hydrocarbon technologies, with a further sixty five (65) technicians trained at Bushenyi, Elgon and Ogolai Technical Institutes. The Administration of Lira Technical Institute committed themselves will start a RAC course at their institute with effect from the 2019/ 2020 academic year.</p> <p>Conducted a meeting with the Directorate of Industrial Training (DIT), a body which certifies RAC technicians, to agree on a common position for certifying RAC technicians and also incorporate the Montreal Protocol in the curriculum for the RAC courses at the different levels of certification. The NOU was provided with lists of certified RAC technicians for gazetting so as to ensure easy follow up of the RAC technicians and also ensure that only gazetted RAC technicians undertake servicing of the RAC equipment. A Code of Practice for RAC was drafted and it is used by owners of facilities that use refrigerants and RAC equipment.</p>

	Activity	Progress In Implementation
Component 3 (UNIDO)	Provision of equipment and strengthening regional Centres of Excellence and incentive programme for commercial and industrial refrigeration end-users	<p>Tranche 1: Strengthening of six vocational centres, the Kyambogo University and Uganda National Association for Refrigeration and Air-conditioning (UNARA) through provision of service tools (e.g., refrigerant recovery machines, vacuum pumps, handheld electronic leak detectors, service manifolds and other tools) to upgrade the equipment of those centres, and procurement of one refrigerant identifier for the NOU;</p> <p>Tranche 2: Equipment and tools were purchased and deliver to establish new training centres in four different cities around the country. Two centres have been already established, the other two are pending for training of trainers.</p>
Component 4	Monitoring and evaluation	To ensure effectiveness implementation of all projects within the HPMP, the NOU recruited national experts under the project to have continues monitoring of implementation of project activities.

Overarching Strategy

The overarching strategy for Uganda is to implement an integrated plan for HCFC reductions in the RAC sector through promotion and adoption of energy efficiency alternative technologies to achieve climate benefits. The strategy will be based on strengthening the implementation of the existing policies and capacity development of RAC experts to support the adoption of appropriate ozone and climate friendly alternative technologies.

Uganda implemented a staged approach strategy of HCFC Phase-out Management Plan (HPMP). Stage two will aim at implementing activities to sustain HCFC phase out and promote natural refrigerants use. The Government of Uganda conducted a National Survey on consumption of Ozone Depleting Substance (ODS) alternatives in line with Decision XXXVI/9 of the Montreal Protocol on the protection of ozone layer. The main objective of the survey was to enable Uganda better understand its consumption trends of ODS alternatives and their distribution by sectors and subsectors. Furthermore, the survey also focused on opportunities and challenges for adoption of the alternatives. The results of the survey will be incorporated into the HPMP stage 2.

The HPMP Stage II for Uganda is aiming to support the country to achieve complete phase-out of HCFCs under the Montreal Protocol by 2030. Currently the country has zero consumption and on track to achieve the 2030 target in advance.

HCFC Consumption

There was no importation of HCFCs in the 2016 – 2017 period, it is envisaged that the same trend will prevail in 2018 or less than 0.1 tonnes of HCFC would be imported.

Information to be collected

Information to be collected during the Stage-II HPMP preparation would include:

- Conduct surveys to collect information on the HCFC possible demand by RAC sector, inventory of HCFC-based equipment especially air conditioners and commercial HCFC-based equipment;
- Information on policy initiatives regarding the phase-out of HCFCs such as certification process of technicians, existing codes of practice and their enforcement;
- Identify and discuss with the relevant stakeholders, possible ways of keeping zero or lowest possible consumption of HCFCs in the country.
- Determine the market profile of HCFC-based equipment and equipment depending on the alternatives especially low GWP technologies which are ozone friendly. Incorporate results of the survey into the HPMP stage 2.

Activities proposed for Stage II Preparation

The HPMP Stage II for Uganda will be developed with assistance from UNEP as a Leading Agency and UNIDO as a Cooperating Agency. The proposed activities and budget are provided in the table below.

Activities	Proposed cost	UNEP	UNIDO
Conduct surveys to determine HCFC possible demand by servicing workshops; and to establish inventory of existing HCFC-based equipment both domestic and commercial.	10,000	5,000	5,000
National review, discussion and consultation meetings on the draft of Stage II HPMP	10,000	10,000	
Recruitment of international / national experts to assist in the development of Stage II HPMP	10,000	5,000	5,000
Total (USD) without PSC	30,000	20,000	10,000

Note: The funding level of each activity is indicative and subject to changes based on the further discussion between the NOU, implementing agency and the national stakeholders during the Stage-II preparation.

Enabling Activities for Kigali Amendment in Bahamas (As per Executive Committee decision 79/46)

Submitted by United Nations Environment Programme (UN Environment)

1. Background

On behalf of The Government of the Commonwealth of the Bahamas (GCOB), UN Environment is submitting this project proposal to the Multilateral Fund for the Implementation of the Montreal Protocol to seek support for the country's early ratification of the Kigali Amendment (KA). This will be achieved through the implementation of specific nationally appropriate enabling activities to assist the country to fulfill initial obligations with regard to hydrofluorocarbon (HFC) phase-down in line with the KA. In accordance with Executive Committee Decision 79/46, Bahamas is eligible for US\$ 95,000.

2. Country ODS Policy and Legislative Framework

The Commonwealth of The Bahamas acceded to the Vienna Convention for the Protection of the Ozone Layer on April 1, 1993; Bahamas became Party of Montreal Protocol (MP) on May 4, 1993, and at the same time acceded to London and Copenhagen Amendments; on March 16, 2005 were ratified Montreal and Beijing Amendments.

Bahamas was identified as a low volume consumer (LVC) and as an Article 5 country. With the assistance of the Multilateral Fund (MLF) through its implementing agency – the United Nations Environment Programme and the Regional Office for Latin America and the Caribbean (UNEP/ROLAC), the approved Country Programme was formulated.

This provided the basis for the designated focal point for the Montreal Protocol – the Ministry of Environment and Housing – to establish The Bahamas National Ozone Unit (NOU)

The Bahamas has a legislative, regulatory, and legal framework for controlling the importation and distribution of Hydrochlorofluorocarbons (HCFCs) in its territory. The NOU under the authority of the Department of Environmental Health Services (DEHS), Ministry of Environment & Housing (MEH) is responsible for the execution of projects approved under the HPMP, reporting requirements under the Montreal Protocol, and public education and awareness programmes to ensure that the Bahamas complies with the provisions of the Protocol. In the frame of the HPMP, the NOU oversees the coordination and the management of the HPMP components.

The overarching strategy is based on regulatory measures, technical capacity building of trainers and technicians, and technology choices which market adopts in future.

In the Bahamas HCFCs are predominantly used for servicing residential, commercial, and industrial refrigeration systems. The HCFC used in the country is HCFC-22. There are no facilities to manufacture HCFCs in the country and the country relies on imports of HCFCs to meet its consumption demands. Based on consumption records, the country is experiencing a reducing demand for HCFCs. And HCFCs are increasingly being replaced in the local market by R-410A and other HFCs.

HCFCs trade is controlled by the Montreal Protocol (Import/Export Licensing System of Controlled Substances) Regulations (Cap. 216A) and the Customs Management (Amendment) Act 2013. These rules re-strict or prohibit the trade in ODS and equipment using ODS subject to the acquisition of import/export licenses.

In year 2013, GCOB has partly enforced quota and licensing system to control trade in HCFCs. All imports of HCFC need permit and license from the NOU. The NOU is responsible to issue required permits & licenses. However, during years 2013, 2014, 2015 and 2016 there was no company specific quota allocation. Permits & licenses were issued on first come first serve basis based on country consumption limits. A company specific quota allocation system has been initiated in December 2016 for year 2017 and onwards.

3. Projects funded by the Multilateral Fund

The HPMP for Bahamas was approved in January 2012 at the 65th Meeting of Executive Committee, in the same ExCom was approved stage I of the HCFC phase-out management plan (HPMP) for the period 2011 to 2020, at the amount of US \$308,320 (excluding agency support costs), The HPMP Stage I commits to achieve a 35% reduction in 2020 and focuses largely on activities for the servicing sector using HCFC-22.

It was observed that it would be useful to revise the proposal to develop a strategy for the use of more climate-friendly alternatives to HCFCs, and that it might be useful for the Bahamas to take a staged approach that shortened the period for stage I and allowed for the use of new alternatives with a lower GWP during stage II as they became available. Further details were also requested on the activities that had been included to address the high leakage rates.

The second tranche of the HCFC Phase-Out Management Plan (HPMP) of the Bahamas was approved at the 71st Ex-Com meeting, and the third tranche was approved at the 80th Ex-Com meeting. This was to facilitate the Bahamas's compliance with the 2013, 2015 and 2020 control targets for Annex-C, Group I Substances (HCFCs). The NOU developed a roadmap with support from UNEP for phase-out of HCFCs in the Bahamas describing the long-term vision and action plan including the policy instruments for phase-out of production and consumption of HCFCs in the Bahamas in accordance with the decision of the 19th MOP (Meeting of Parties).

The commitment of the Government of the Commonwealth of the Bahamas was to accelerate the reduction in HCFC consumption, to achieve a reduction of 35 per cent of the baseline in 2020 and 97.5 per cent of the baseline in 2025, with a service tail of 2.5 per cent per annum until 2030, when the complete phase-out of HCFCs will be achieved.

The Government is currently implementing the Phase VI of the Institutional Strengthening Project.

Unfortunately, Bahamas did not complete its ODS alternatives survey in time for submission to the Executive Committee. The NOU recognizes that this information is very important for the successful development of enabling activities for Kigali Amendment. Nevertheless, the report was in its final stage with the survey having been completed from three major islands in the archipelago (New Providence, Grand Bahama, and Abaco).

4. Institutional arrangements for implementation of enabling activities

The implementation of the enabling activities will be accomplished through the existing national institutional framework already established for the implementation of the Montreal Protocol in Bahamas.

The NOU under the authority of the Department of Environmental Health Services (DEHS), Ministry of Environment & Housing (MEH) is responsible for coordinating, implementation, and monitoring of all activities towards the smooth phase-out of Ozone Depleting Substances (ODS) in Bahamas.

The UN Environment Compliance Assistance Programme (CAP), and regional and national experts/consultants will also provide support to the NOU in project implementation.

Numerous technician trainings in EPA¹ 608 and 410a safety have been carried out in New Providence and Grand Bahama, and one is currently underway on the island of Abaco. In addition, in 2017 a train the trainers exercise in the use of alternative gasses was held in Grenada and four senior technicians from the Bahamas completed this exercise. In light of this a local replication of this training is being planned for later this year on the island of New Providence.

5. Components proposed for enabling activities

Component 1:	Facilitate early ratification of the Kigali Amendment
Objective:	To attain a broader understanding of the Requirements under the Kigali Amendment (KA) and to prepare the necessary instruments in support of ratification
Target Group:	High-level decision makers, relevant governmental institutions, companies, importers, and servicing technicians in the sectors that use HFCs
Description of activities	<ul style="list-style-type: none"> • Undertake an analysis of existing ozone and climate policy/legislation to adjust support implementation of the KA. The Analysis should include: <ul style="list-style-type: none"> - The comparative impacts to Bahamas of an early, late and no ratification of the KA; - Preparation of a policy paper on the ratification of the KA, to instruct the Government of Bahamas, namely the Ministry of Environment & Housing and the Ministry of Foreign Affairs. • Stakeholder consultations to facilitate the ratification process. • Provide technical assistance on HFC data collection and reporting. • Awareness raising of relevant stakeholders on HFC phase-down and energy efficiency and climate friendly refrigerant options.
Outputs	<ul style="list-style-type: none"> • Analysis report prepared and distributed to relevant agencies. • Production of fact sheets on the KA to facilitate consultations and speedy ratification. • Ratification instrument drafted by the relevant Government agency. • Two training workshops held on HFC data collection and reporting.

¹ EPA-Approved Section 608 Certification is needed to service building air conditioning and refrigeration systems.

	<ul style="list-style-type: none"> • Preparation of a Policy Paper on the Ratification of the KA. • Up to 3 stakeholder consultations held.
Outcome	The ultimate outcome of this component is ratification of the KA. It should be noted that in the ratification process is outside of the purview and mandate of the Bahamas National Ozone Unit. NOU, as the technical coordinating focal point for the Montreal Protocol will be able to prepare the necessary background information (policy paper) to guide firstly, the President who then, after approval of the Amendment by Parliament, directs the Ministry of Foreign Affairs on the deposit the ratification instrument).

Proposed Component 2:	Capacity-building & training for alternatives
Objectives:	To enhance capacity within the RAC servicing sector (RSS) for the management of alternatives through their life cycle (use, storage, transportation, and disposal)
Target Group:	NOU, technicians, RAC association, vocational institutions, importers of HFCs/HFC alternative and their equipment/products
Description of activities	<ul style="list-style-type: none"> • Undertake an assessment of training (and other) needs for the servicing sector, needed to support the transition to low GWP, higher energy efficient (EE) alternatives, such as natural refrigerants (and other not-in-kind alternatives) and standards. • Conduct a mapping exercise to determine the HFC refrigerants available on the local market, their alternatives, and their uptake. • Host a National Workshop on barriers to the use of Low-GWP Refrigerants and opportunities to overcome these . • Host a Training Seminar for RAC Servicing Technicians on the Management of alternatives through their life cycle (use, storage, transportation and disposal). • Training for NOU in implementing the HFC phase-down will be critical to us meeting national obligations under the KA.
Outputs	<ul style="list-style-type: none"> • An assessment report containing country specific needs for the RSS to transition to low GWP, higher EE alternatives; including but not limited to training requirements and training tools/equipment; safety standards; etc. • Report on HFC refrigerants available on the local market, their alternatives as well as projections on alternative technology uptake. • Report on identified barriers to the use of Low-GWP Refrigerants and opportunities to overcome them. • Report on RAC Servicing Sector Training Seminar on the management of alternatives through their life cycle. • An assessment report containing the knowledge acquired and challenges that ozone officers must overcome in order to efficiently support the implementation of the Kigali Amendment.
Outcome	Strengthened capacity to manage alternatives through a greater understanding of the needs and opportunities created by the KA and improved capacity for decision-making and ODS management

Proposed Component 3:	Article 4B licensing & Reporting
Objective:	To strengthen the existing regulatory import/export licensing system to include HFCs and HFC alternatives
Target Group:	Customs brokers and ODSs alternative importers,
Description of activities	<ul style="list-style-type: none"> • Undertake national consultations on the revision of the ODS LQS. • Undertake a comprehensive review of the existing ODS LQS towards including HFCs and HFC alternatives into the licensing system and updating the licensing system. The review will also explore including controls on HFC-based products and equipment and supporting policy interventions such as setting minimum energy efficiency standards for equipment and developing and/or adapting safety standards for the proper handling and operating with natural/toxic refrigerants in line with international standards. • Provide assistance to General Administration of Customs in developing country-specific national HS Codes for HFCs (mainly to differentiate individual HFCs and key HFC blends) and HFC alternatives, in order to ensure proper monitoring and recording of imports/exports of individual HFCs/alternatives substances.
Outputs	<ul style="list-style-type: none"> • An updated import/export licensing system to meet all requirements of the Article 4B as well as to facilitate the country compliance with the HFC phase-down schedule. • Development of country-specific HS Codes for HFCs and HFC alternatives, to improve data capture and data reporting.

	<ul style="list-style-type: none"> Recommendations for policy interventions to support the Article 4B licensing and reporting system.
Outcome	A comprehensive import/export licensing system that can respond to the obligations under the KA once it is ratified.

Proposed Component 4:	Development of National Strategies
Objective:	To increase change the mindset of the RAC servicing sector (RSS) towards low GWP and natural refrigerants and to increase the uptake of their technologies
Target Group:	RAC servicing sector/end-users, vocational institutions, importers of HFCs/alternative substances/RAC equipment, and the public
Description of activities	<ul style="list-style-type: none"> Undertake a Knowledge, Attitude and Practices (KAP) study is to explore changes in Knowledge, Attitude and Practices of the RSS regarding Low GWP and natural refrigerants. Development of a national strategy to change the mindset in the RSS, informed by the results from the KAP study. Development of a national strategy and an action plan on a staged approach to introducing low GWP, EE alternatives, informed by the results from the KAP study.
Outputs	<ul style="list-style-type: none"> Attitude of persons in the RAC servicing sector and public towards low GWP and natural refrigerants improves. A KAP Study identifying the Knowledge, Attitude and Practices of the RSS regarding Low GWP, natural refrigerants. Radio spots, newspaper ads, and messages promote the low-GWP and zero-GWP replacement technologies.
Outcomes	RSS and end-users mindset towards low-GWP and natural refrigerants improve and sector able to safely manage these refrigerants, allowing for the increase uptake.

6. Proposed Budget

Table 1. Proposed Budget per component

Activities	Proposed cost in (USD) without PSC
Component 1: Facilitate early ratification of the Kigali Amendment	26,000
Component 2: Capacity-building & training for alternatives	25,000
Component 3: Article 4B licensing & Reporting	26,000
Component 4: Development of National Strategies	18,000
Total in (USD) without PSC	95,000

Table 2: Proposed Budget Breakdown

Activities	Item	US\$
Component 1: Facilitate early ratification of the Kigali Amendment	Conduct an Analysis of existing Ozone and Climate policy/legislation and adjustments necessary to implement the Kigali Amendment (KA) (<i>Consultant services</i>)	8,000
	Conduct up to 3 Stakeholder consultations to facilitate the ratification process at the national level (<i>Facilitator Services; service contracts</i>)	6,000
	Conduct 2 training sessions on HFC data collection and reporting (one for NOU and one for General Administration of Customs and customs brokers).	6,000
	Awareness raising of relevant stakeholders on HFC phase-down and energy efficiency improvement options: - Production of information sheets on the KA (<i>service contracts; printing services etc.</i>)	6,000
Subtotal 1		26,000
Component 2: Capacity Building & training for alternatives	Undertake an assessment of training (and other) needs for the servicing sector (<i>Consultant Services</i>)	5,000
	Conduct a mapping exercise to determine the HFC refrigerants available on the local market, their alternatives, and their uptake (<i>Consultant Services</i>)	5,000
	Host a National Workshop on barriers to the use of Low-GWP Refrigerants and opportunities to overcome these (<i>Service Contracts</i>)	5,000
	Host a Training Seminar for RAC Servicing Technicians on the Management of alternatives through their life cycle (<i>Consultant and Contract services</i>)	5,000
	Training for NOU in implementing the HFC phase-down (<i>Service Contracts</i>)	5,000
Subtotal 2		25,000
Component 3: Article 4B licensing & Reporting	National consultations on the revision of the ODS LQS (<i>Service Contracts</i>)	8,000
	Comprehensive review of the existing ODS LQS: to include HFCs and HFC alternatives into the licensing system and updating the licensing system - Explore including controls on HFC-based products and equipment - Supporting policy interventions (<i>Consultant and Contract services</i>)	12,000
	Country Specific HS Codes for HFCs and alternatives (<i>Consultant Services</i>)	6,000
Subtotal 3		26,000
Component 4: Development of National Strategies	Undertake KAP study (<i>Consultant Services</i>)	6,000
	Development of a National strategy to change the mindset in the RSS (<i>Consultant and Contract services</i>)	6,000
	Development of a National Strategy and Action Plan on a Staged approach to introducing low GWP, EE alternative (<i>Consultant and Contract services</i>)	6,000
Subtotal 4		18,000
Total (without agency support cost)		95,000

7. Enabling activities milestones and time plan

Activities	2019												2020					
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6
Component 1: Facilitate early ratification of the Kigali Amendment																		
Signature of the SSFA between UN Environment and the Government.																		
Contracting Consultants /Facilitators																		
Analysis of existing Ozone and Climate policy/legislation for KA																		
Stakeholder consultations																		
Training: HFC data collection and reporting																		
Awareness raising																		
Component 2: Capacity-building & training for alternatives																		
Contracting Consultants/Facilitators																		
Assessment of Training needs																		
Mapping exercise: HFC refrigerants available on local market, alternatives, and uptake																		
National Workshop on barriers to the use of Low-GWP Refrigerants and opportunities to overcome these.																		
Technicians Training Seminar: Management of alternatives																		
NOU Training: implementing the HFC phase-down																		
Component 3: Article 4B licensing & Reporting																		
Contracting Consultants/Facilitators																		
Review of the existing ODS LQS																		
Consultations: revision of ODS LQS																		
Develop Country-specific HS Codes for HFCs and alternatives																		
Component 4: Development of National Strategies																		
KAP Study																		
National Strategy: to change the mindset in the RSS																		
National Strategy and Action Plan: Staged approach to introducing low GWP, EE alternatives																		

8. Implementation Plan

ACTIVITY	RESP ENTITY	TARGET GROUP	START DATE (Month/Year)	DATE OF COMPLETION (Month/Year)	BUDGET (US\$)	MILESTONES	EXPECTED OUTPUTS
COMPONENT 1: Facilitate the ratification of the Kigali Amendment							
Signature of the SSFA	NOU	N/A	Feb 2019	Feb 2019	-	Signed SSFA	1 st payment issued; commencement of work
Contracting Consultant /Facilitator	NOU	N/A	Mar 2019	Apr 2019	-	Signed contract	Consultant on board
Analysis of existing Ozone and Climate policy/legislation for KA	NOU	High-level decision makers, Gov't agencies, companies, importers, servicing technicians	May 2019	Jun 2019	8,000	Report	Analysis documents prepared and submitted to the Ministry and Cabinet
Stakeholder consultations	NOU	High-level decision makers, Gov't agencies, companies, importers, servicing technicians	May 2019	Jul 2019	6,000	Reports	Preparation of Instrument of Ratification
Training: HFC data collection and reporting	NOU	NOU, General Administration of Customs and customs brokers	May 2019	Jul 2019	6,000	Training workshop report	Strengthened capacity for HFC data collection and reporting
Awareness raising: Production of information sheets on the KA	NOU	Private and public sector, high level decision-makers	Mar 2019	Mar 2020	6,000	Awareness materials	Awareness materials on HFC phase down produced
COMPONENT 2: Capacity building and awareness on HFCs and alternatives management							
Contracting Consultant/Facilitator	NOU	N/A	Mar 2019	Apr 2019	-	Signed contract	Consultant on board
Assessment of Training needs	NOU	Technicians, RAC association, vocational institutions.	Apr 2019	Sep 2019	5,000	Training Needs Report	Training needs for RAC sector identified
Mapping exercise: HFC refrigerants available on local market, alternatives, and uptake	NOU	Technicians, RAC association, vocational institutions, HFCs/ alternative and equipment/products importers	Apr 2019	Oct 2019	5,000	Report	Clear picture of HFCs available on local market, future uptake, trends

ACTIVITY	RESP ENTITY	TARGET GROUP	START DATE (Month/Year)	DATE OF COMPLETION (Month/Year)	BUDGET (US\$)	MILESTONES	EXPECTED OUTPUTS
National Workshop on barriers to the use of Low-GWP Refrigerants and opportunities to overcome these.	NOU	Technicians, RAC association, vocational institutions, HFCs/ alternative and equipment/products importers	Jul 2019	Jul 2019	5,000	Workshop Report	Actions necessary to facilitate Bahamas transition away from HFCs
Technicians Training Seminar: Management of alternatives	NOU	Technicians, RAC association, vocational institutions.	Jul 2019	Oct 2019	5,000	Seminar Report	Understanding of Life cycle management of alternatives
NOU Training: implementing the HFC phase-down	NOU, ROLAC	Ministry of Environment, NOU	Sep 2019	Oct 2019	5,000	Training meeting and Workshop Reports	NOU enabled to implement the HFC phase down
COMPONENT 3: Article 4B licensing system and reporting							
Contracting Consultant/Facilitator	NOU	N/A	Mar 2019	Mar 2019	-	Signed contract	Consultant on board
National Consultations: revision of ODS LQS	NOU	Customs brokers, ODSs alternative importers	Apr 2019	Nov 2019	8,000	Reports	Current LQS reviewed
Comprehensive review of the existing ODS LQS	NOU	Customs brokers, ODSs alternative importers	Apr 2019	Nov 2019	12,000	Reports	Current LQS reviewed; recommendations identified
Develop Country-specific HS Codes for HFCs and alternatives	NOU	Customs brokers, ODSs alternative importers	May 2019	Dec 2019	6,000	List of Country-Specific Codes	Country-specific HS Codes for HFCs, alternatives
COMPONENT 4: Development of National Strategies							
KAP Study	NOU	RAC servicing sector/end-users, National Institute of Vocational Training, HFC/alternative, equipment importers, general public	May 2019	Mar 2020	6,000	Study	Understanding of the KAP of the RAC/MAC Sector regarding Low GWP and natural refrigerants
National Strategy: to change the mindset in the RSS	NOU	RAC servicing sector/end-users, National Institute of Vocational Training;	Jun 2019	Nov 2019	6,000	Strategy	Change in mindset of RSS, towards transitioning to HFC alternatives

ACTIVITY	RESP ENTITY	TARGET GROUP	START DATE (Month/Year)	DATE OF COMPLETION (Month/Year)	BUDGET (US\$)	MILESTONES	EXPECTED OUTPUTS
		HFC/alternative, equipment importers					
National Strategy and Action Plan: Staged approach to introducing low GWP, EE alternatives	NOU	RAC servicing sector/end-users, National Institute of Vocational Training; HFC/alternative, equipment importers, public	Jun 2019	Nov 2019	6,000	Strategy and Action Plan	Strategy and Action plan to transition into low GWP, EE alternatives

9. Statement by the Government and Implementing Agency

The Government of Bahamas and UN Environment confirm that the proposed enabling activities will not delay the implementation of HCFC phase-out activities in the country.

Enabling Activities for Kigali Amendment in Bolivia As per Executive Committee decision 79/46

Submitted by United Nations Environment Programme (UN Environment)

1. Background

On behalf of Plurinational State of Bolivia, UN Environment is submitting this Project request, aimed to facilitate and support the country's early ratification of the Kigali Amendment and to undertake specific initial activities that help them fulfil their initial obligations with regard to hydrofluorocarbon (HFC) phase-down in line with the Kigali Amendment, according to Executive Committee decision 79/46. Based on that decision, eligible funding for enabling activities in Bolivia would be US\$ 150,000.

2. Country ODS policy and Compliance Status

The Plurinational State of Bolivia ratified the Vienna Convention, Montreal Protocol on Substances that Deplete the Ozone Layer and the London and Copenhagen Amendments on October 3, 1994; the Montreal Amendment on April 12, 1999, and the Beijing Amendment on September 4, 2013 and is classified as a party operating under paragraph 1 of Article 5 of the Protocol.

The intention of the Government of the Plurinational State of Bolivia is to make the best efforts to ratify the Kigali Amendment as soon as possible.

A quota system for HCFC import was established in the country in 2014 and follows the ODS reduction scheduled to ensure the compliance action plan approved by the XXVI Meeting of the Parties to the Montreal Protocol.

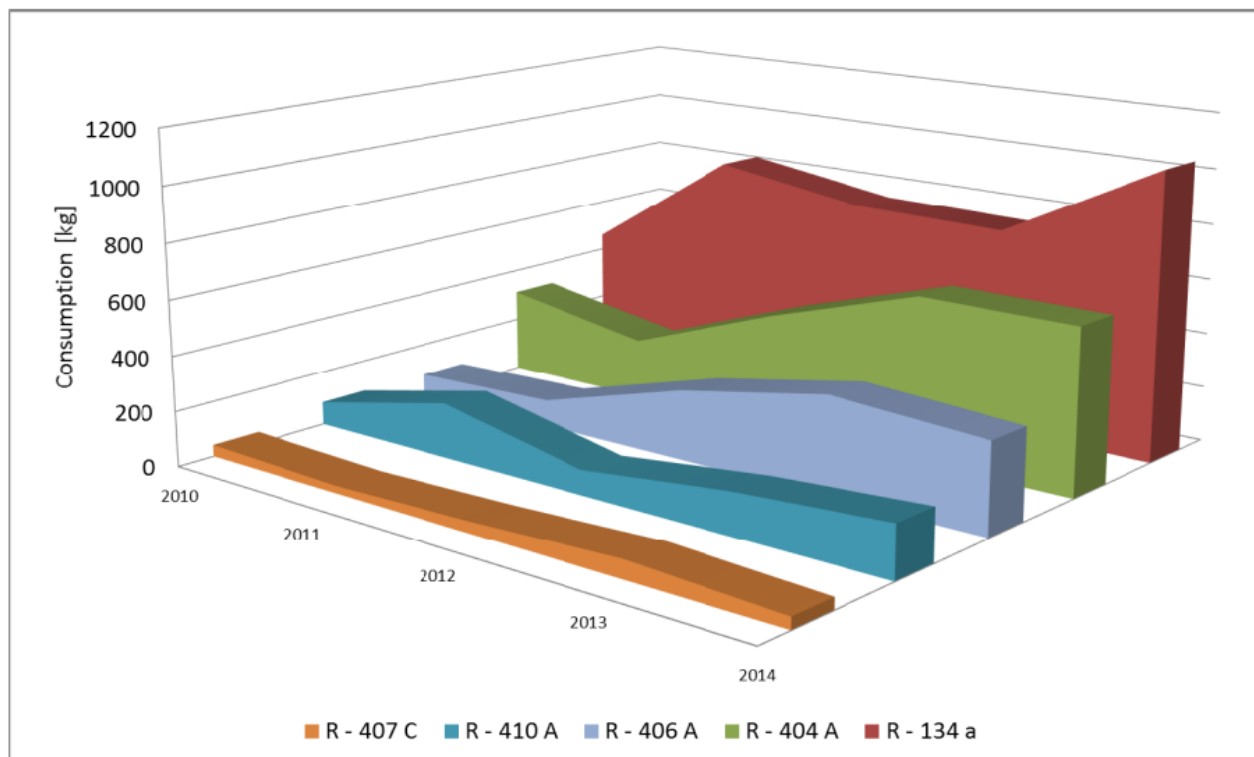
3. Projects funded by the Multilateral Fund

The HCFC Phase-out Management Plan (HPMP) for Bolivia was approved in July 2011 at the 64th Meeting of Executive Committee of the Multilateral Fund for the implementation of the Montreal Protocol. The project was approved in accordance with the Agreement between the Government and the Executive Committee for the period 2011 to 2020 to meet the 35 per cent reduction in HCFC consumption. An amount of US\$315,000 was provided to address HCFC consumption in the refrigeration servicing sector to reach up to and include the 35 per cent reduction in 2020 in line with decision 64/53.

Bolivia is successfully executing Stage I of HPMP and the Institutional Strengthening Project (phase X). Country successfully achieved more than 10% of HCFCs reduction in 2015. The country baseline was 6,1 ODP tonnes and 2.06 ODP tonnes were reported as consumption in 2017. Currently, the fourth tranche of Bolivia HPMP (stage I) is under implementation and some actions are being taken to limit the HFC growth such as the training of technicians in natural refrigerants applications.

The HPMP second stage will be submitted to the Multilateral Fund in 2020 to assist the country with the total HCFCs phase-out. Bolivia has also successfully concluded an ODS alternatives survey in 2016, which showed very high level of HFCs consumption in 2014. In Bolivia, there are not production facilities of HFCs or other ODSs' alternatives.

Chart 1: 2014 HFC Consumption in Bolivia



SOURCE: 2015 National HFC Survey prepared by UNIDO

The most consumed HFC refrigerant in recent years is clearly represented by R-134a, which is the most promoted in the world since its development as a direct substitute for CFC-12.

Due to the expected increase in HFC consumption, the Bolivian government has decided to take early measures to address HFCs, presenting a proposal for activities to facilitate the ratification of the Kigali Amendment, as well as activities related to development of capacity building and technical assistance project to adopt alternatives to HFCs.

4. Institutional arrangements for implementation of enabling activities.

Implementation of the enabling activities will be accomplished using existing national infrastructure and institutional setting already established for ODS phase-out activities. The institutional arrangement in Bolivia is such that ozone-depleting substance management projects are executed by the Ministry of Environment and Water, through the Government Ozone Commission (NOU). The UN Environment Compliance Assistance Programme staff members, regional and national experts/consultants will provide support to the NOU in the implementation of this project.

Other relevant stakeholders that will be involved in the discussion on the Kigali amendment ratification process are the Ministries of Foreign Affairs and other government agencies. Several targeted meetings will be organized with the RAC associations, vocational institutes (which are the institutions that have traditionally provided training in the refrigeration sector) and with the National Customs of Bolivia to help implement and control the licensing system for HFCs.

This Project drafts an action plan to support the ratification of the Kigali amendment and enables the country to identify and address main challenges/needs per sector of HFC's users. The selected approach is a joint work together with the industry/end-users/importers to prevent the growth of imports of HFCs through policy measures as well as to promote the use of alternatives of low/zero-GWP by the manufacturing sector. Furthermore, training

of technicians, as well as, update standards for the handling of flammable alternatives are key elements, to assure a smooth transition to low/zero-GWP alternatives and awareness raising on expected changes in service sector and end-users.

5. Components proposed for enabling activities

Proposed Component 1:	Facilitate early ratification of the Kigali Amendment and legal measures
Objective:	Achieve a broader understanding of the Kigali amendment provisions and to prepare legislative basis for the ratification
Target Group:	High-level decision makers, relevant governmental institutions, and main stakeholders of HFCs market.
Description of activities	<ul style="list-style-type: none"> • Support for analysis of existing Ozone and Climate policy/legislation/strategies and adjustments to implement the Kigali Amendment • Analysis of the impact in Bolivia of the Kigali Amendment ratification. • Conduct a stakeholder consultation meeting to facilitate the ratification process at the national level. • Awareness raising of relevant stakeholders on the Kigali Amendment, HFC phase-down and energy efficiency options
Outputs	<ul style="list-style-type: none"> • All necessary documents and legal changes (Law on ratification of the Kigali amendment, framework legislation and advantage of an early ratification) submitted to the National Assembly and the process of adoption is advanced. • Production of information related with the Kigali amendment to be transmitted to relevant stakeholders.
Outcomes	The ultimate target of this component is ratification of the Kigali Amendment. However, the ratification process itself is beyond the mandate of the Government Ozone Commission. Even though the National Ozone Unit (Comisión Gubernamental del Ozono, by its name in Spanish) does not have direct influence on the timing of the process, with this intervention Bolivian competent authorities and main private stakeholders will be well prepared to support the Kigali amendment ratification process by the National Assembly.

Proposed Component 2:	Capacity-building & training for alternatives
Objectives:	<ul style="list-style-type: none"> • Identify the needs of the servicing sector that would facilitate the HFC phase-down. • Provide basic training to the NOU, servicing and assembly sectors and end-users for addressing the emerging responsibilities of the Kigali Amendment. • Develop a consultative process for addressing the problem of MAC and refrigerated transport sector.
Target Group:	NOU officers, training centers in RAC, RAC-End users, importers of HFCs/alternative substances/RAC equipment including mobile sector, and government officers as appropriate.
Description of activities	<ul style="list-style-type: none"> • Undertake an assessment of training needs for the servicing sector that will be used for further planning of the activities related to adopt low-GWP and zero-GWP replacement technologies to HFCs, e.g. natural refrigerants as hydrocarbons.

	<ul style="list-style-type: none"> • Organize round table discussions on low-GWP and zero-GWP alternatives per each RAC sub-sector targeting larger end-users (chain of hotels, supermarkets, shopping malls, etc). • Training on design, installation and maintenance of energy efficient RAC systems, related to low and zero-GWP replacement technologies to HFCs, e.g. natural refrigerants. The participants would belong to refrigeration service sector (installation and maintenance), project developers, technical departments of leading companies and university professors from vocational centers. • Training of NOU officers on increased responsibilities of the application of the Kigali amendment, including data reporting in CO2 eq tonnes, energy efficiency, safety standards, etc. • Conducting consultations with stakeholders and government agencies in order to revise the rules, criteria and procedures to import second-hand units of refrigerated transport and MAC, which is an endemic problem in Bolivia due to the transboundary transit of second-hand units coming from other countries.
Outputs	<ul style="list-style-type: none"> • Report of challenges and requirements for introducing low-GWP and zero-GWP alternatives on the servicing sector side, like training requirement, availability of tools/ equipment, and safety standards, among others. • At least 20% of service technicians and end users are aware of environmental and energy efficiency advantages in the selection of low-GWP and zero-GWP alternative technology to RAC equipment. • NOU staff upgrade their knowledge and skills to meet the new responsibilities, particularly to monitor the consumption of HFCs as well as to envisage a streamlined approach to HFC phase-down complementary with the country energy efficiency policy. • Assessment report of country circumstances associated to the transboundary transfer of used transport units and a critical route to update the imports' control to inefficient units of MAC and refrigerated trucks.
Outcome	Governmental Ozone Commission (NOU), RAC sector service technicians and end users trained and aware on the environmental and energy efficiency advantages of alternative low and zero PCA technologies.

Proposed Component 3:	Article 4B licensing & Reporting
Objective:	Develop a required regulatory package to set up import/export licensing system for HFC and HFC's alternatives
Target Group:	Customs Service and ODSs alternative importers.
Description of activities	<ul style="list-style-type: none"> • Comprehensive review of current ODS's license/quota system resulting in a proposal for how to include HFCs and HFC blends, based on CO2 equivalent tons. • Define the HFC's quota system model to adopt, and to envisage a critical path for achieving the HFC phase-down goals by affecting both sides of the market (offer and demand). • Design, set-up and running of ODSs data base for implementing the HFCs license system. • Assisting customs authorities in developing national custom codes for commonly imported HFCs and its alternative substances, (mainly to

	<p>differentiate pure HFCs and blends), in order to ensure proper monitoring and recording of imports/exports of HFCs alternatives.</p> <ul style="list-style-type: none"> Propose draft of ministerial resolutions and procedure manual to approve HFC's quotas and assignation of HFC import permits per importer.
Outputs	<ul style="list-style-type: none"> Current ODSs license/quota system updated to meet all requirements of the Article 4B as well as to facilitate the country compliance with the HFCs phase-down schedule. HFC's database developed and tested, user manual issued, and assignation of roles officially defined. Modification of the customs code import/export as well as the risk warning system, in order to avoid those HFCs (pure substances or blends) might enter through more than one code position or skipping the licensing system requirement. Proposal of ministerial resolutions and procedures manual for managing of HFC quotas and licenses system developed.
Outcomes	The Ministry of Environment and Water is empowered to an effective implementation of HFCs controls once the Kigali Amendment is ratified

Proposed Component 4:	Technical assistance project for the use of flammable refrigerants
Objective:	Enhance the expertise of service sectors and end-users for adopting alternatives of low-GWP and zero-GWP and safe handling of flammable refrigerants.
Target Group:	RAC Service/End-users, Universities and Vocational Institutes, importers of HFCs/alternative substances/RAC equipment, and the General Public.
Description of activities	<ul style="list-style-type: none"> Manage the development / adoption of national standards on the safe use of flammable refrigerants. Training of service technicians on the safe use of flammable refrigerants. Training of end users on the benefits of the use of flammable refrigerants. Market analysis for hydrocarbon refrigerants from domestic production.
Outputs	<ul style="list-style-type: none"> Proposals for national standards on the safe use of flammable refrigerants. At least 70 service technicians trained in standards on the safe use of flammable refrigerants. At least 4 demonstration sessions for end users on the benefits of the use of flammable refrigerants. Proposal of market analysis for hydrocarbon refrigerants from domestic production.
Outcomes	RAC service sectors and end-users proactively engaged in the HFC phase-down.

Proposed Component 5:	Revise the national labor competency standards for professionals in RAC sector.
Objective:	Review and expand the existing standards in the current certification system for labor competencies in the RAC service sector of Bolivia considering the alternative substances and technologies with zero/low Global Warming Potential.

Proposed Component 5:	Revise the national labor competency standards for professionals in RAC sector.
Target Group:	Ministry of Environment and Water, Ministry of Labor and Social Welfare, National Chamber of Industry, Association of Refrigeration Technicians, Importers / manufacturers, Universities, workers from RAC sector.
Description of activities	<ul style="list-style-type: none"> • Carry out the relevant procedures for hiring an expert to support the revision of the national labor competency standards. • Provide technical advices, and preparation/implementation of workplan for an overall revision of national labor competency standards for the refrigeration and air conditioning technicians. • Analyze the existing national labor competency standards to define further steps (revision and/or expansion) towards fulfill the Kigali Amendment provisions. • Evaluate changes to be adopted in the national labor competency standards, with emphasis on the safe handling/good practices in the manipulation of substances/technologies with zero/low Global Warming Potential • Deliver a proposal of the national labor competency standards according to the Technical Committee of Ministry of Labor and Social Welfare. • Carry out actions to disseminate changes made to the national labor competency standards accreditation system for labor competencies aimed at technicians and / or professionals of the RAC sector. • Develop and implement a dissemination campaign aimed to end users on the importance of hiring technicians and / or professionals accredited by labor competencies.
Outputs	<ul style="list-style-type: none"> • The certification system for labor competencies of the RAC sector of Bolivia is adapted and new standards for certification are enacted. • RAC service sector and end-users are aware of the advantages offered by technicians certified in labor competencies under the revised framework to include the inherent innovations of the Kigali Amendment.
Outcomes	Main country stakeholders can accept the new expected roles due to their understanding of the shifting context and acquiring confidence by using the opportunities associated to the revised RAC certification system considering alternative substances and technologies with low or zero GWP.

6. Budget

Table 1. Budget per component

Activities	Proposed cost in (USD) without PSC
Component 1: Facilitate early ratification of the Kigali Amendment and legal measures.	15,000
Component 2: Capacity building & training for alternatives.	45,000
Component 3: Article 4B licensing & Reporting.	9,000
Component 4: Technical assistance project for the use of flammable refrigerants.	55,000
Component 5: Revise the national labor competency standards for professionals in RAC sector.	26,000
Total in (USD) without PSC	150,000

Table 2. Budget per item

Activities	Item	US \$
Component 1: Facilitate early ratification of the Kigali Amendment and legal measures	Support for analysis of existing Ozone and Climate policy/legislation/strategies and adjustments to implement the Kigali Amendment.	1,000
	Analysis of the impact in Bolivia of an early ratification of the Kigali Amendment.	1,000
	Conduct a stakeholder consultation meeting to facilitate the ratification process at the national level.	1,000
	Awareness raising of relevant stakeholders on the Kigali amendment, HFC phase-down and energy efficiency options.	12,000
Component 2: Capacity-building & training for alternatives	Undertake an assessment of training needs for the servicing sector that will be used for further planning of the activities related to adopt low-GWP and zero-GWP replacement technologies to HFCs, e.g. natural refrigerants as hydrocarbons.	16,000
	Organize round table discussions on low-GWP and zero-GWP alternatives per each RAC sub-sector targeting larger end-users (chain of hotels, supermarkets, shopping malls, etc).	9,000
	Training on design, installation and maintenance of energy efficient RAC systems, related to low and zero-GWP replacement technologies to HFCs, e.g. natural refrigerants. The participants would belong to refrigeration service sector (installation and maintenance), project developers, technical departments of leading companies and university professors from vocational centers.	12,000
	Training of NOU officers and government agencies on increased responsibilities of the application of the Kigali amendment, including data reporting in CO2 eq tonnes, energy efficiency, safety standards, etc.	2,000
	Conducting consultations with stakeholders and government agencies in order to revise the rules, criteria and procedures to import second-hand units of refrigerated transport and MAC.	6,000
Subtotal 2		45,000
Component 3: Article 4B licensing & Reporting	Comprehensive review of current ODS's quota system resulting in a proposal for how to include HFCs and HFC blends, into the system.	2,000
	Define the HFC's quota system model to adopt, and to envisage a critical path for achieving the HFC phase-down goals by affecting both sides of the market (offer and demand).	1,000
	Design, set-up and running of ODSs data base for implementing the HFCs license system	3,000
	Assisting customs authorities in developing national custom codes for commonly imported HFCs and its alternative substances, (mainly to differentiate pure HFCs and blends), in order to ensure proper monitoring and recording of imports/exports of HFCs alternatives.	2,000
	Propose draft of ministerial resolutions and procedure manual to approve HFC's quotas and assignation of HFC import permits per importer.	1,000
Subtotal 3		9,000
Component 4: Technical assistance project for use of flammable refrigerants	Manage the development / adoption of national standards on the safe use of flammable refrigerants.	10,000
	Training of 70 service technicians on the safe use of flammable refrigerants.	27,000

Activities	Item	US \$
	Carry out 4 training sessions for end users on the benefits of flammable refrigerants.	8,000
	Market analysis for hydrocarbon refrigerants from domestic production.	10,000
Subtotal 4		55,000
Component 5: Revise the national labor competency standards for professionals in RAC sector.	Carry out the relevant procedures for hiring an expert to support the revision of the national labor competency standards.	0
	Provide technical advices, and preparation/implementation of workplan for an overall revision of national labor competency standards for the refrigeration and air conditioning technicians.	4,000
	Analyze the existing national labor competency standards to define further steps (revision and/or expansion) towards fulfill the Kigali Amendment provisions.	4,000
	Evaluate changes to be adopted in the national labor competency standards, with emphasis on the safe handling/good practices in the manipulation of substances/technologies with zero/low Global Warming Potential.	3,000
	Deliver a proposal of the national labor competency standards according to the Technical Committee of Ministry of Labor and Social Welfare.	2,000
	Carry out actions to disseminate changes made to the national labor competency standards accreditation system for labor competencies aimed at technicians and / or professionals of the RAC sector.	7,000
	Develop and implement a dissemination campaign aimed to end users on the importance of hiring technicians and / or professionals accredited by labor competencies.	6,000
Subtotal 5		26,000
Total (US \$)		150,000

7. Enabling activities milestones and time plan

Activities	2019												2020					
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6
Component 1: Facilitate early ratification of the Kigali Amendment and legal measures																		
Support for analysis of existing Ozone and Climate policy/legislation/strategies and adjustments to implement the Kigali Amendment.																		
Analysis of the impact in Bolivia of an early ratification of the Kigali Amendment.																		
Conduct a stakeholder consultation meeting to facilitate the ratification process at the national level.																		
Awareness raising of relevant stakeholders on the Kigali amendment, HFC phase-down and energy efficiency options.																		
Component 2: Capacity-building & training for alternatives																		
Hiring Experts and consultants																		
Undertake an assessment of training needs for the servicing sector that will be used for further planning of the activities related to adopt low-GWP and zero-GWP replacement technologies to HFCs, e.g. natural refrigerants as hydrocarbons.																		
Organize round table discussions on low-GWP and zero-GWP alternatives per each RAC sub-sector targeting larger end-users (chain of hotels, supermarkets, shopping malls, etc).																		
Training on design, installation and maintenance of energy efficient RAC systems, related to low and zero-GWP replacement technologies to HFCs, e.g. natural refrigerants. The																		

Activities	2019												2020					
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6
participants would belong to refrigeration service sector (installation and maintenance), project developers, technical departments of leading companies and university professors from vocational centers.																		
Training of NOU officers and government agencies on increased responsibilities of the application of the Kigali amendment, including data reporting in CO2 eq tonnes, energy efficiency, safety standards, etc.																		
Conducting consultations with stakeholders and government agencies in order to revise the rules, criteria and procedures to import second-hand units of refrigerated transport and MAC.																		
Component 3: Article 4B licensing & Reporting																		
Comprehensive review of current ODS's quota system resulting in a proposal for how to include HFCs and HFC blends, into the system.																		
Define the HFC's quota system model to adopt, and to envisage a critical path for achieving the HFC phase-down goals by affecting both sides of the market (offer and demand).																		
Design, set-up and running of ODSs data base for implementing the HFCs license system.																		
Assisting customs authorities in developing national custom codes for commonly imported HFCs and its alternative substances, (mainly to differentiate pure HFCs and blends), in order to ensure proper monitoring and recording of imports/exports of HFCs alternatives.																		

Activities	2019												2020					
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6
Propose draft of ministerial resolutions and procedure manual to approve HFC's quotas and assignation of HFC import permits per importer.																		
Component 4: Technical Assistance project																		
Manage the development / adoption of national standards on the safe use of flammable refrigerants.																		
Training of 70 service technicians on the safe use of flammable refrigerants.																		
Carry out 4 training sessions for end users on the benefits of flammable refrigerants.																		
Market analysis for hydrocarbon refrigerants from domestic production.																		
Component 5: Revise the national labor competency standards for professionals in RAC sector.																		
Carry out the relevant procedures for hiring an expert to support the revision of the national labor competency standards.																		
Provide technical advices, and preparation/implementation of workplan for an overall revision of national labor competency standards for the refrigeration and air conditioning technicians.																		
Analyze the existing national labor competency standards to define further steps (revision and/or expansion) towards fulfill the Kigali Amendment provisions.																		
Evaluate changes to be adopted in the national labor competency standards, with emphasis on the safe handling/good practices in the manipulation of substances/technologies																		

Activities	2019												2020					
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6
with zero/low Global Warming Potential.																		
Deliver a proposal of the national labor competency standards according to the Technical Committee of Ministry of Labor and Social Welfare.																		
Carry out actions to disseminate changes made to the national labor competency standards accreditation system for labor competencies aimed at technicians and / or professionals of the RAC sector.																		
Develop and implement a dissemination campaign aimed to end users on the importance of hiring technicians and / or professionals accredited by labor competencies.																		

8. Implementation Plan

ACTIVITY	RESP ENTITY	TARGET GROUP	START DATE (Month/Yr)	DATE OF COMPLETION (Month/Year)	BUDGET (US\$)	MILESTONES	EXPECTED OUTPUTS
COMPONENT 1: Facilitate early ratification of the Kigali Amendment and legal measures.							
<ul style="list-style-type: none"> •Support for analysis of existing Ozone and Climate policy/legislation/strategies and adjustments to implement the Kigali Amendment •Analysis of the impact in Bolivia of an early ratification of the Kigali Amendment. • Conduct a stakeholder consultation meeting to facilitate the ratification process at the national level 	NOU	High-level decision makers, relevant governmental institutions, and main stakeholders of HFCs market.	Jan 2019	May 2019	3,000	Report	All necessary documents and legal changes (Law on ratification of the Kigali amendment, framework legislation and advantage of an early ratification) submitted to the National Assembly and the process of adoption is advanced
Awareness raising of relevant stakeholders on HFC phase-down and energy efficiency options.	NOU	Relevant governmental institutions, and main stakeholders of HFCs market	Jun 2019	Jun 2020	12,000	Awareness materials	Production of information related with the Kigali amendment to be transmitted to relevant stakeholders.
COMPONENTE 2: Capacity-building & training for alternatives							
Undertake an assessment of training needs for the servicing sector that will be used for further planning of the activities related to adopt low-GWP and zero-GWP replacement technologies to HFCs, e.g. natural refrigerants as hydrocarbons.	NOU	Vocational institutions in RAC sector, Association of refrigeration technicians	Apr 2019	Sep 2019	16,000	Report	Report of challenges and requirements for introducing low-GWP and zero-GWP alternatives on the servicing sector side, like training requirement, availability of tools/ equipment, and safety standards, among others.
Organize 4 round table discussions on low-GWP and zero-GWP alternatives per each RAC sub-sector targeting larger end-users (chain of hotels, supermarkets, shopping malls, etc).	NOU, Association of refrigeration technicians	Technicians of RAC sector	Oct 2019	Nov 2019	9,000	Report	

ACTIVITY	RESP ENTITY	TARGET GROUP	START DATE (Month/Yr)	DATE OF COMPLETION (Month/Year)	BUDGET (US\$)	MILESTONES	EXPECTED OUTPUTS
Training on design, installation and maintenance of energy efficient RAC systems, related to low and zero-GWP replacement technologies to HFCs, e.g. natural refrigerants. The participants would belong to refrigeration servicing sector (installation and maintenance), project developers, technical departments of leading companies and university professors from vocational centers.	NOU, Association of refrigeration technicians	Technicians of refrigeration servicing sector.	Dec 2019	Apr 2020	12,000	End-users trained on specific selected technologies	At least 20% of service technicians and end users are aware of environmental and energy efficiency advantages in the selection of low-GWP and zero-GWP alternative technology to RAC equipment
Training of NOU officers and government agencies on increased responsibilities of the application of the Kigali amendment, including data reporting in CO2 eq tonnes, energy efficiency, safety standards, etc.	NOU	Stakeholders	Apr 2019	Jun 2020	2,000	NOU staff and stakeholders trained	NOU staff and government agencies upgrade their knowledge and skills to meet the new responsibilities, particularly to monitor the consumption of HFCs as well as to envisage a streamlined approach to HFC phase-down complementary with the country energy efficiency policy.
Conducting consultations with stakeholders and government agencies in order to revise the rules, criteria and procedures to import second-hand units of refrigerated transport and MAC.	NOU,	Stakeholders	Apr 2019	Mar 2020	6,000	Report	Assessment report of country circumstances associated to the transboundary transfer of used transport units and a critical route to update the imports' control to inefficient units of MAC and refrigerated trucks.
COMPONENT 3: Article 4B licensing & Reporting.							
• Comprehensive review of current ODS's quota system resulting in a proposal for	NOU	Customs Service, and	Jan 2019	Mar 2019	3,000	Report	Current ODSs license/quota system updated to meet all

ACTIVITY	RESP ENTITY	TARGET GROUP	START DATE (Month/Yr)	DATE OF COMPLETION (Month/Year)	BUDGET (US\$)	MILESTONES	EXPECTED OUTPUTS
<p>how to include HFCs and HFC blends, into the system.</p> <ul style="list-style-type: none"> Define the HFC's quota system model to adopt, and to envisage a critical path for achieving the HFC phase-down goals by affecting both sides of the market (offer and demand). 		ODSs alternative importers					requirements of the Article 4B as well as to facilitate the country compliance with the HFCs phase-down schedule.
Design, set-up and running of ODSs data base for implementing the HFCs license system	NOU	Customs Service, and ODSs alternative importers	Oct 2019	Dec 2019	3,000	Report	HFC's database developed and tested, user manual issued, and assignation of roles officially defined
Assisting customs authorities in developing national custom codes for commonly imported HFCs and its alternative substances, (mainly to differentiate pure HFCs and blends), in order to ensure proper monitoring and recording of imports/exports of HFCs alternatives.	NOU	Customs Service, and ODSs alternative importers	Apr 2019	Sep 2019	2,000	Report	Modification of the customs code import/export as well as the risk warning system, in order to avoid those HFCs (pure substances or blends) might enter through more than one code position or skipping the licensing system requirement.
Propose draft of ministerial resolutions and procedure manual to approve HFC's quotas and assignation of HFC import permits per importer	NOU	Relevant governmental institutions, and main stakeholders of HFCs market	Oct 2019	Oct 2019	1,000	Ministerial Resolutions	Proposal of ministerial resolutions and procedures manual for managing of HFC quotas and licenses system developed
COMPONENTE 4: Technical Assistance project							
Manage the development / adoption of national standards on the safe use of flammable refrigerants.	NOU, UN Environment, Vocational Institute	RAC Service/End-users, Universities and Vocational Institutes, importers of HFCs/alternative substances/RAC equipment	Sep 2019	Dec 2019	10,000	Have a proposal for adoption of national standard for using of flammable refrigerants.	Proposals for national standards on the safe use of flammable refrigerants.

ACTIVITY	RESP ENTITY	TARGET GROUP	START DATE (Month/Yr)	DATE OF COMPLETION (Month/Year)	BUDGET (US\$)	MILESTONES	EXPECTED OUTPUTS
Training of service technicians on the safe use of flammable refrigerants.	NOU, UN Environment, Vocational Institute	RAC Service/End-users, Universities and Vocational Institutes, importers of HFCs/alternative substances/RAC equipment, and the General Public	Sep 2019	Dec 2019	27,000	Technicians trained to use flammable refrigerants.	At least 70 service technicians trained in standards on the safe use of flammable refrigerants.
Carry out training sessions for end users on the benefits of flammable refrigerants.	NOU, UN Environment, Vocational Institute	RAC Service/End-users, Universities and Vocational Institutes,	May 2019	Jun 2019	8,000	End users aware on environmental and energy efficiency advantages of alternative technologies of low and zero PCA.	At least 4 demonstration sessions for end users on the benefits of the use of flammable refrigerants
Market analysis for hydrocarbon refrigerants from domestic production.	NOU, UN Environment, Vocational Institute	RAC Service/End-users, Universities and Vocational Institutes,	Jan 2019	Dec 2019	10,000	Stakeholders aware on commercial availability and proactively engaged in the dissemination of information about hydrocarbon refrigerants.	Proposal of Market analysis for hydrocarbon refrigerants from domestic production.
COMPONENTE 5: Revise the national labor competency standards for professionals in RAC sector.							
Carry out the relevant procedures for hiring an expert to support the revision of the national labor competency standards.	NOU, UN Environment	NOU, UN Environment	Apr 2019	Apr 2019	0	Contracts Signed	Consultants recruited.
Provide technical advices, and preparation/implementation of workplan for an overall revision of national labor competency standards for the refrigeration and air conditioning technicians.	NOU, UN Environment	NOU, UN Environment	Jun 2019	Dec 2020	4,000	Report	Activities timely implemented.

ACTIVITY	RESP ENTITY	TARGET GROUP	START DATE (Month/Yr)	DATE OF COMPLETION (Month/Year)	BUDGET (US\$)	MILESTONES	EXPECTED OUTPUTS
Analyze the existing national labor competency standards to define further steps (revision and/or expansion) towards fulfill the Kigali Amendment provisions.	NOU, UN Environment	NOU, UN Environment	May 2019	Aug 2019	4,000	Reports	A summary of current state, a gap analysis and the desired state to include safe handling/good practices in the manipulation of substances/technologies with zero/low Global Warming Potential.
Evaluate changes to be adopted in the national labor competency standards, with emphasis on the safe handling/good practices in the manipulation of substances/technologies with zero/low Global Warming Potential.	NOU, UN Environment	NOU, UN Environment	Aug 2019	Sep 2019	3,000	Report	Approach agreed to include the safe handling/good practices in the manipulation of substances/technologies with zero/low Global Warming Potential as part of the national labor competency standards.
Deliver a proposal of the national labor competency standards according to the Technical Committee of Ministry of Labor and Social Welfare.	NOU, UN Environment	NOU, UN Environment	Jan 2020	Feb 2020	2,000	Report	Documents to upgrade the national labor competency standards drafted.
Carry out actions to disseminate changes made to the national labor competency standards accreditation system for labor competencies aimed at technicians and / or professionals of the RAC sector.	NOU, UN Environment, Vocational Institute	RAC Service/End-users, Universities and Vocational Institutes,	Nov 2020	Dec 2020	7,000	Technicians know the revised labor competences	RAC service technicians are aware of the advantages offered by technicians certified in labor competencies under the revised framework to include the inherent innovations of the Kigali Amendment.
Develop and implement a dissemination campaign aimed to end users on the importance of hiring technicians and / or professionals accredited by labor competencies.	NOU, UN Environment, Vocational Institute, RAC Service Associations.	RAC Service/End-users, Universities and Vocational Institutes,	Nov 2020	Dec 2020	6,000	Knowledge requirement established for hiring technicians	End-users are aware of the advantages offered by technicians certified in labor competencies under the revised framework to include the inherent innovations of the Kigali Amendment.

9. Statement by the Government and Implementing Agency

The Government of Bolivia and UN Environment confirm that the proposed enabling activities will not delay the implementation of HCFC phase-out activities in the country.

Enabling Activities for HFC Phase-down in Brunei Darussalam

As per Executive Committee decision 79/46

Submitted by UN Environment OzonAction on behalf of the National Ozone Unit,
Department of Environment, Parks and Recreation, Ministry of Development

1. Background

Negara Brunei Darussalam (Brunei Darussalam) is currently classified as an Article 5 country under the Montreal Protocol (ratified on 27th May 1993) succeeding the previous Vienna Convention (ratified on 26th July 1990). It has also ratified the subsequent London Amendment, Copenhagen Amendment, Montreal Amendment and Beijing Amendment on 3rd March 2009. The country has not yet ratified the Kigali Amendment, but in its internal process for the ratification of Kigali Amendment.

Brunei Darussalam National Ozone Unit (NOU) is administered under the Department of Environment, Parks and Recreation (DEPR) under the Ministry of Development. The NOU serves as the focal point for stakeholders, both governmental and private entities, to regulate, implement and monitor the Montreal Protocol Activities in the country. Through the Multilateral Fund support, two phasing-out activities were approved to the country namely (i) Refrigerant Management Plan (RMP) and (ii) HCFC Phase-out Management Plan (HPMP) Stage I. The RMP was a proven success as the consumption of CFCs were ultimately phased out before 2010. The HPMP Stage I is currently being implemented for meeting 2020 HCFC phase-out targets.

The overall objective of the HPMP Stage I for Brunei Darussalam is to enable the country to comply HCFC phase-out obligations under the Montreal Protocol; freeze at baseline consumption in 2013, 10% reduction in 2015 and 35% reduction in 2020. The HPMP Stage I elaborates the three-pronged approaches: 1) limit the supply of HCFCs, 2) reduce demand of HCFCs for servicing existing equipment and 3) limit new demand of HCFCs. These strategic approaches have been implemented through a number of activities on policy and enforcement, non-investment and investment. Brunei Darussalam through UN Environment, as the lead implementing agency, is requesting the project preparation funds for the preparation of HPMP Stage II at the 82nd Executive Committee (ExCom) meeting.

The NOU is requesting UN Environment to submit this Enabling Activity project request, aimed to fulfil the initial obligations with regard to hydrofluorocarbon (HFC) phase-down, which includes facilitating ratification of the Kigali Amendment, establishing Article 4b licensing system for HFCs and undertaking awareness and conducting specific capacity building activities. Based on ExCom decision 79/46, the eligible funding for enabling activities in Brunei Darussalam is US\$ 150,000 (without PSC).

2. Country ODS policy and Compliance Status

2.1 Current ODS Policy

ODSs are classified as restricted/controlled under the Customs Act- Prohibition and Restriction on Imports and Exports (Amendment) Order 2006.

- The Act designates that only the importer/exporter who registers and has approved Application Permit (AP) issued by DEPR is allowed to import/export HCFCs in accordance with the quantity specified in the AP.
- At the moment, Brunei Darussalam has banned the import of all types of ODSs and HCFCs with the exception of HCFC-22, the only ODS being consumed in the country.

Since January 2013, DEPR has fully enforced its licensing and quota system to control the import and export of HCFC as follows.

- The importers and exporters of all refrigerants including HCFC must first register with DEPR. For each shipment, a registered importer/exporter needs an approved AP from DEPR prior to the import/export.
- Since January 2013, DEPR implemented the mandatory requirement for importers of HCFC to label HCFC containers with the water and tamper proof sticker provided by DEPR before they are released to the market. To ensure the purity and proper declaration of the refrigerant, random sampling of the cylinders is carried out using the Refrigerant Identifier (RI). Each sticker is provided with a specific running number for efficient tracking throughout the supply chain.
- In 2017, a National Single Window for application of import and export of HCFCs has been fully operational. All applications and approval are undertaken via electronic system, which can be accessed by DEPR, customs and importers.

At the moment, there is no requirement for importer of ODS-based equipment to obtain import license. However, Brunei Darussalam has introduced measures to reduce the installation of HCFC-based equipment in the country.

- The Department of Mechanical and Electrical (DME) has been put in place requirement for ODS-free equipment installation to be included in tender issued by the government for all types of refrigeration and air-conditioning equipment.
- The NOU has coordinated with the Department of Mechanical and Electrical as well as the Ministry of Energy, Manpower and Industry (MEMI) on the ban of HCFC based equipment under the purview of the MEMI under their Energy, Efficiency and Conservation Act (EEC), which is still under consideration.

2.2 Current HFC Policy

The Customs Act- Prohibition and Restriction on Imports and Exports (Amendment) Order 2006 does not have provisions on import and export control of HFCs and HFC blends. DEPR had made voluntary agreement with importers of HFCs to comply with the AP requirement for record keeping for future references.

2.3 HCFC Compliance Status

Since 2013, there is only one type of HCFC commonly used which is HCFC-22 as the government has banned the import of other types of HCFCs (except HCFC-22). Brunei Darussalam is ODS import-dependent country. The exporting country is China, Malaysia and Singapore. HCFC consumption during 2013-2017 as per Ozone Secretariat is shown in Table below.

Table-1: HCFCs consumption in Brunei Darussalam during 2013-2017

Substances	HCFC Consumption (ODP Tonnes)					
	Baseline	2013	2014	2015	2016	2017
Consumption of Annex C-I (ODP Tonnes)	6.10	4.27	4.00	3.57	3.75	3.45
Maximum Allowable Consumption as agreed with ExCom						
HPMP Stage I (ODP Tonnes)	-	6.10	6.10	5.49	5.49	5.49

Source: Article 7 data

Brunei Darussalam has complied with HCFC phase-out obligations under the Montreal Protocol and maximum allowable consumption for HCFC consumption as agreed with the ExCom from 2013-2017.

3. Requirement for Enabling Activity Project proposal

In 2017, the Brunei Darussalam NOU with the assistance from UN Environment conducted an ODS alternative survey. The objective of the survey was to get a good understanding of the ODS Alternative substances used in the past, and the growth patterns of ODS alternatives by substance and equipment used in various applications.

Brunei Darussalam only consumes ODS alternatives in the servicing and maintenance of refrigeration and air conditioning (RAC) equipment as there is no manufacturing sector associated with ODS alternatives consumption in the country. All RAC equipment are imported from other countries. In the current market share, HFC are the most consumed ODS alternative amongst other substances. HFCs and HFCs blends that are being used in the country are: HFC-134a, R-410A, R-404A and R-407C respectively. HFC-134a are the predominantly used ODS alternative in the domestic refrigeration, with some increase in market share for R-600a (HC). In commercial refrigeration, HFC-134a is the major alternative amongst R-404A and R-407C used in the large refrigeration system and cold storage. The ODS alternatives in large air-conditioning applications e.g. chiller, variable refrigerant flow (VRF) and package sector are mostly HFC-134a (chillers) while R-410A (VRF and package) and R-407C (chillers) has been identified to be used on newer equipment. Mobile Air-conditioning (MAC) predominantly uses only HFC-134a now and is seen to increase over the next few years.

Due to the safety concern raised by safety related authorities, Brunei Darussalam has not yet introduced lower GWP alternatives, which are flammable refrigerant (HFC-32 and R-290), in the air-conditioning sector for the domestic market. As the average number of air-conditioners per capita in Brunei Darussalam is very high, this is a challenge for country to continue the growth of R-410A usage in the air-conditioning sector due to economic growth and the future ban on import of HCFC-based equipment (which is pending on approval).

The potential enabling activities that would be required for successful prepared for the implementation of Kigali Amendment in the country are

- Stakeholder meetings of relevant government departments, and private agencies etc. to sensitize on Kigali Amendment and support activities/process for Kigali Amendment Ratification.
- Developing a national action plan to prepare for the implementation of the Kigali Amendment, especially, meeting the initial obligations.
- Review the existing national legislations and procedures under the AP and provide recommendations to establish HFC licensing, quota, data recording, monitoring and reporting mechanism. Expanding the mandatory labelling requirement for the import control of HFCs.
- Review the present institutional frameworks established for HCFC phase-out for sustainable transition into HFC phase-down and also promote energy efficiency linkages. As there would be additional stakeholders from those collaborated during HPMP implementation, there is a need to assess the broader stakeholders and develop new partnerships that would be pertinent to implementing HFC phase-down obligations. For instance, mapping of institutions, functions and proposed partnerships to promote energy efficient technologies along with the promotion of low GWP technologies.
- To address country concerns on safety of low GWP alternatives
 - The evaluation will be conducted to evaluate safety and energy efficiency of flammable refrigerant in the room air-conditioning sector to provide supporting

information on the safety to relevant safety authorities prior to the introduction of flammable refrigerant in the air-conditioning sector.

- The existing safety regulations namely Fire Safety Order 2016, an act under the Fire and Rescue Department and mainly intended for petroleum product, will be reviewed to determine whether it covers flammable refrigerant and there is need to develop specific safety standards for flammable refrigerant.
- Roundtable for government and private sector on low GWP technologies in particular flammable refrigerants and their safe handling will be organized to support the review of existing regulations.
- Assessment of readiness of servicing sector and the needs for safe adoption and handling of low GWP technologies.
- Awareness and information outreach to general public and specific audience on ODS alternatives and benefits of the Kigali Amendment.

4. Components proposed for enabling activities

Proposed Component 1	Country Assessment Report & Facilitation of Kigali Amendment Ratification
Objective:	To achieve greater awareness and consensus understanding of the Kigali Amendment amongst the key stakeholders and preparation of document to support for ratification of Kigali Amendment.
Target Group:	Government agencies such as NOU, Royal Customs and Excise Department, Department of Mechanical and Electrical, Ministry of Energy, Manpower and Industry and other stakeholders such as vocational schools, end-users, MAC/RAC servicing workshop and technicians, importers of refrigerants and equipment, Fire and Rescue Department etc.
Description of activities	<ul style="list-style-type: none"> - Identify, sensitize and consult with key stakeholders on Kigali Amendment and the roles of various agencies. - Prepare relevant documents/background notes, which is required to facilitate the cabinet approval for the ratification of the Kigali Amendment. - Develop draft Country Assessment Report. The scope would include existing ozone, energy efficiency and climate policy/legislation & technologies and institutional needs for the implementation of the Kigali Amendment. It would also have a national action plan that details the framework for the initial implementation of the Kigali Amendment.
Outputs	<ul style="list-style-type: none"> - Two national consultation workshops for Kigali Amendment ratification. - Two consultation workshops for feedback on Country Assessment Report. - Draft Country Assessment Report for Kigali Amendment.
Outcome	Enable the policy and technical discussions to facilitate the ratification of Kigali Amendment.

Proposed Component 2	Facilitating Introduction of Low GWP (Flammable) Alternatives and Capacity Building of Concerned Stakeholders on the Safe Adoption of Flammable Refrigerants
Objectives:	<p>To provide supporting information to relevant authorities for decision making to facilitate the introduction of flammable refrigerants taking into account energy efficiency.</p> <p>To strengthen capacity of concerned stakeholders involved with energy efficiency, climate change, standards development/adoption, service technicians, public procurement etc.</p>
Target Group:	NOU, Fire and Rescue Department, Department of Mechanical and Electrical, Ministry of Energy, Manpower and Industry, RAC servicing workshops and technicians, importers of refrigerants and equipment, owner of equipment.
Description of activities	<ul style="list-style-type: none"> - Evaluating safety and energy efficiency of larger air-conditioner equipment (e.g. VRF etc), which are widely used in Brunei. - Building capacity for Fire and Rescue Department, Department of Mechanical and Electrical and Ministry of Energy Manpower and Industry on safety standard for flammable refrigerant and public procurement policy. - Reviewing the existing safety regulations to determine whether it covers flammable refrigerant and whether there is a need to develop specific safety standards for flammable refrigerant in the country. - Conducting training workshops on servicing good practices for handling low GWP and flammable refrigerants and systems. - Organizing a round table discussion for government and private sector to discuss low-GWP alternatives and energy efficiency opportunities for RAC/MAC servicing sector, results of safety assessment and review of existing regulations. - Assessing the situation of servicing sector in the country to identify challenges and intervention required to ensure safe adoption of flammable refrigerant.
Outputs	<ul style="list-style-type: none"> - Safety assessment report on the use of flammable refrigerant in larger air-conditioner equipment (e.g. VRF etc.) covering safety and energy efficiency aspects. - One capacity building workshop for Fire and Rescue Department, Department of Mechanical and Electrical, Ministry of Energy Manpower and Industry in the review of existing safety standard and development of safety standard for flammable refrigerants and promotion of low GWP technologies in public procurement policy. - Proposal for amendment of the existing safety regulation / draft safety standard for flammable refrigerant. - Two training workshops on flammable refrigerants for service technicians; one workshop for residential air-conditioner and another workshop for larger air-conditioner - One round table discussion on HFC alternatives and energy efficiency linkages for RAC & MAC service sector and related energy efficiency opportunities. - Report on challenges and requirements for introducing low-GWP alternatives in the servicing sector e.g. training requirement, availability of tools/ equipment etc.
Outcome	Introduction of lower GWP alternatives in air-conditioning sector in the country. Improved understanding of the challenges and needs of servicing sector and large-end users on low-GWP alternatives. Capacity of servicing sector to handle low GWP and flammable refrigerant is strengthened.

Proposed Component 3	Article 4B licensing & Reporting
Objective:	To facilitate the establishment of Article 4b licensing and reporting mechanism for HFC. To expand the implementation of labelling requirement to include HFC and HFC blends; to increase monitoring capacity of authorities.
Target Group:	NOU, Royal Customs and Excise Department, importers, retailers, relevant government agencies etc.
Description of activities	<ul style="list-style-type: none"> - Comprehensively review ODS import/export licensing/quota system, to identify how to include HFCs and HFC blends into the licensing system. - Coordinate with Royal Customs and Excise Department to explore the possibility to revise the national codes/HS codes for commonly imported HFCs and HFC blends in order to ensure proper monitoring and recording of imports/exports of individual HFCs/alternatives substances. - Review the current approach and methodologies related to the collection, verification and country reporting of HFCs use and determine the approach to strengthen the data collection and monitoring mechanism. - Extend the mandatory labeling requirement for refrigerant cylinders to include HFCs and HFC blends. - Assess the legislation and policy options where HFC consumption could be controlled/reduced.
Outputs	<ul style="list-style-type: none"> - Consultation workshops with Royal Customs and Excise Department and relevant government agencies and stakeholders on <ul style="list-style-type: none"> (i) Reviewing the existing licensing, quota, monitoring and reporting system through the National Single Window System (ii) Draft amendment of the legislation to include HFC control under the current licensing and quota system; and (iii) Finalizing the procedures for implementation of licensing and quota system for HFCs as well as labelling requirement of HFC cylinders, data collection, verification and reporting of HFCs. - Draft amendment of the legislation to include HFC under the current licensing and quota system. - Procedures for implementation of licensing and quota system for HFCs as well as data collection, verification and reporting of HFCs. - Launching of the labeling requirement for HFC and HFC blends cylinders - Recommendations for further legislation and policy measures for phasing down HFCs.
Outcome	Facilitating the establishment of licensing/quota system for HFCs to meet all requirements of the Article 4B and HFCs is effectively controlled during Kigali Amendment implementation.

Proposed Component-4	Communication & Awareness
Objective	Raise general awareness of the public and various end-users about the importance and benefits of Kigali Amendment.
Target Group:	NOU, schools, general & specific end-users, importers, service sector, retailers etc.
Description of activities	<ul style="list-style-type: none"> - Develop flyers and information brochures on Environmental benefits of Kigali Amendment. - Develop quick tool /guide on energy efficiency and cost benefits for general public. - Develop quick information flyers and posters on ODS alternatives and their safe handling for major stakeholders - Launch public event jointly with the energy office to promote benefits of energy efficient and low GWP refrigerant based room air-conditioners and educate the public on the technique to select room air-conditioners - with exhibition of energy efficient air-conditioner - Partner with schools, importers, service technicians and other relevant agencies for distribution and outreach of such materials.
Outputs	<ul style="list-style-type: none"> - Information Brochures on benefits of Kigali HFC Amendment (English and Local Language) - Quick Guide to general public on benefits of Energy Efficiency (English and Local Language) - Poster for safe handling of ODS alternatives. (English and Local Language) - Increase in awareness of the general public on benefits of energy efficient and low GWP room air-conditioners and educate the public on the technique to select room air-conditioners
Outcome	Better understanding of the Kigali Amendment of the public and major stakeholders and raised awareness on ODS free, low GWP and higher energy efficiency products.

5. Institutional arrangements for implementation of enabling activates.

The NOU would be responsible for the project implementation, monitoring and progress reporting. UN Environment would provide the necessary support to the NOU with regards to project implementation, as well as progress reporting and administrative closure of the project to the MLF.

The NOU would also seek the guidance and supports from the relevant government stakeholders such as agencies that are in charge of energy efficiency, standards and climate change. In addition, the private sector, equipment importers, industry and RAC service sector will also be engaged positively to the project activities and stakeholder workshops. The project duration is proposed to be 18-months and the project implementation plan is placed in Annex-I.

6. Budget

Activities	Budget without PSC (US\$)
Component 1: Country Assessment Report & Facilitation of Kigali Amendment Ratification	
1.1 Technical Assistance for preparation of relevant documents/background notes for cabinet approval and Country Assessment Report (1 national consultant x 3 months x US\$ 4,000)	12,000
1.2 Organization of (i) 2 national consultation workshops for Kigali Amendment ratification and (ii) 2 consultation workshops for Feedback on Country Assessment Report (4 workshops x US\$2,000)	8,000
Sub-total:	20,000
Component 2: Facilitating Introduction of Low GWP (Flammable) Alternatives and Capacity Building of Concerned Stakeholders on the Safe Adoption of Flammable Refrigerants	
2.1 Undertaking evaluation on safety and energy efficiency of larger air-conditioner equipment (e.g. VRF etc) and preparation of safety assessment report (1 RAC expert x 5 months x US\$ 4,000)	20,000
2.2 Undertaking an assessment of challenges and needs of the servicing sector that will be used for further planning of the activities related to adoption of low-GWP and flammable technologies. (2 meeting x US\$1,000; 1 national consultant x 2 months x US\$ 4,000)	10,000
2.3 Organizing a round table discussion on low-GWP alternatives for RAC/MAC sub-sector targeting larger end-users (1 national round table x US\$ 3,000)	3,000
2.4 Training workshops for servicing sector on safe handling of flammable alternatives. (2 workshops x US\$ 3,000; one international expert US\$6,000)	12,000
2.5 Capacity building workshop for Fire and Rescue Department, Department of Mechanical and Electrical and Ministry of Energy Manpower and Industry on safety standard for flammable refrigerant and public procurement policy (1 workshop x US\$ 2,000; one standard expert US\$3,000)	5,000
2.6 Amendment of the existing safety regulation / draft safety standard for flammable refrigerant (2 consultation meetings x US\$ 1,000; 1 legal consultant x 2 months x US\$ 4,000)	10,000
Sub-total:	60,000
Component 3: Article 4B licensing and reporting	
3.1 Comprehensive review of ODS import/export licensing/quota system and procedures through the National Single Window, and develop mechanisms for implementation of licensing and quota system for HFCs, HFC blends and HFC based equipment as well as HFC cylinder labeling requirement, data collection, verification and reporting (3 consultation workshops x US\$ 2,000, 1 national consultant x 3-months x US\$ 4,000)	18,000
3.2 Drafting and finalizing the legal text for the amendment of the existing regulation to include HFC licensing and quota system as well as data collection, verification and reporting based on agreed procedures. (2 consultation meetings x US\$ 1,000; 1 legal consultant x 2 months x US\$ 4,000)	10,000
3.3 Design and production of stickers for labeling requirement of HFC and HFC blends cylinders (will be designed to distinguish different types of refrigerants) (design and production of stickers @ US\$ 6,000)	6,000
3.4 Coordinating with Royal Customs and Excise Department and explore the possibility to revise the national HS codes for commonly imported HFCs and HFC blends in order to ensure proper monitoring and recording of imports/exports of	6,000

Activities	Budget without PSC (US\$)
individual HFCs/alternatives substances. (2 consultation meeting x US\$ 1,000; 1 national consultant x 1-month x US\$ 4,000)	
Sub-total:	40,000
Component 4: Communication & Awareness	
4.1 Development of specific knowledge products e.g. quick guides, brochures and flyers on Kigali Amendment, Energy Efficiency and Safe-Handling of Low GWP technologies in consultation with relevant stakeholders. (Consultants for 2-month x US\$ 4,000 per month)	8,000
4.2 Design, publication and distribution of awareness material obtained from activities above.	15,000
4.3 Launching public event jointly with the energy office to promote benefits of energy efficient and low GWP room air-conditioners and educate the public on the technique to select room air-conditioners - with exhibition of energy efficient air-conditioner to show to the public (1 public event x US\$ 7,000)	7,000
Sub-total:	30,000
Total Cost without PSC	150,000

7. Enabling activities milestones and time plan

Activities	February 2019 – July 2020																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Component 1:																		
Activity 1.1		X	X	X	X	X	X	X	X	X	X							
Activity 1.2		X	X	X	X	X	X	X	X	X	X							
Component 2:																		
Activity 2.1		X	X	X	X	X	X	X	X	X								
Activity 2.2		X	X	X	X	X	X	X	X	X								
Activity 2.3							X	X	X	X								
Activity 2.4											X	X	X	X	X			
Activity 2.5											X	X	X	X	X			
Activity 2.6											X	X	X	X	X	X	X	X
Component 3:																		
Activity 3.1		X	X	X	X	X	X	X										
Activity 3.2								X	X	X	X							
Activity 3.3												X	X	X	X	X	X	X
Activity 3.4					X	X	X	X	X	X	X	X	X	X	X	X	X	X
Component 4:																		
Activity 4.1		X	X	X	X	X	X	X	X	X	X							
Activity 4.2						X	X	X	X	X	X	X	X	X	X	X	X	X
Activity 4.3											X	X	X	X	X	X	X	X

8. Statement by the Government and Implementing Agency

The Government of Brunei Darussalam and UN Environment confirm that the proposed enabling activities will not delay the implementation of HCFC phase-out activities in the country.

Project Implementation Plan

Annex-I

Activity	Responsible entity	Target Group	Start Date M/Y	Date of Completion M/Y	Budget (US\$)	Milestones	Expected outputs
Component 1: Country Assessment Report & Facilitation of Kigali Amendment Ratification							
1.1 Preparation of relevant documents/background notes for cabinet approval and Country Assessment Report	NOU UN Environment	<ul style="list-style-type: none"> ○ Royal Customs and Excise Department, Department of Mechanical and Electrical, Ministry of Energy Manpower and Industry, vocational schools, Fire and Rescue Department ○ Importers & retailers of refrigerants and RAC/MAC equipment. ○ MAC/RAC service workshops and technicians ○ Private Sector & large end-users 	March 2019	January 2020	12,000	<ul style="list-style-type: none"> Consultant hired Desk Research and review Consultation Meeting Summary Stakeholder review of country assessment report 	<ul style="list-style-type: none"> Recommendations/documents for initiation/facilitation of Kigali ratification Country assessment report for implementation of Kigali Amendment and support of the ratification process.
1.2 Organization of Awareness/Stakeholders Workshop and Government Consultation Workshop on Kigali Amendment and Consultation Workshop on Country Assessment Report. (4 workshops)			March 2019	January 2020	8,000	<ul style="list-style-type: none"> Agenda of the workshops finalized. Stakeholders identified Workshop report 	<ul style="list-style-type: none"> Increased awareness of the stakeholders on Kigali Amendment.
Sub-Total					20,000		
Component 2: Facilitating Introduction of Low GWP (Flammable) Alternatives and Capacity Building of Concerned Stakeholders on the Safe Adoption of Flammable Refrigerants							
2.1 Undertaking evaluation to evaluate safety and energy efficiency of larger air-conditioner equipment	NOU UN Environment	NOU, Fire and Rescue Department, Department of Mechanical and Electrical, Ministry of Energy Manpower and Industry, RAC servicing workshops and technicians, importers of	March 2019	November 2019	20,000	<ul style="list-style-type: none"> Consultant hired Evaluation conducted 	<ul style="list-style-type: none"> Supporting information for government authority to allow the introduction of flammable refrigerant.

		refrigerants and equipment, owner of equipment					
2.2 Undertake an assessment of challenges and needs of the servicing sector to adopt low-GWP and flammable technologies.	NOU UN Environment	NOU, Fire and Rescue Department, Department of Mechanical and Electrical, Ministry of Energy Manpower and Industry, RAC servicing workshops and technicians, importers of refrigerants and equipment, owner of equipment	March 2019	November 2019	10,000	Consultant hired	Service Sector Assessment that would be used for future planning under Kigali Amendment.
2.3 Organizing a round table discussion on low-GWP alternatives for RAC/MAC sub-sector targeting larger end-users (1 round table)			August 2019	November 2019	3,000	Agenda of the round table finalized. Stakeholders identified Workshop reports	Increased Awareness of Service sector and specific sub-sectors such as RAC, MAC and large end-users.
2.4 Training workshop for service sector on safe handling of flammable HFC alternatives. (2 workshops)			December 2019	April 2020	12,000	Agenda of the workshop finalized International expert hired Workshop report	Increased understanding of the service sector on safe handling of HFC alternatives.
2.5 Capacity building workshop on safety standard for flammable refrigerant and public procurement policy (1 workshop)		Fire and Rescue Department, Department of Mechanical and Electrical, Ministry of Energy Manpower and Industry	December 2019	April 2020	5,000	Agenda of the workshop finalized Workshop report	Capacity of government agencies related to safety and public procurement is strengthened
2.6 Amendment of the existing safety regulation / draft safety standard for flammable refrigerant		Fire and Rescue Department, Department of Mechanical and Electrical, Ministry of Energy Manpower and Industry	December 2019	July 2020	10,000	Proposal for amendment of the existing safety regulation / draft safety standard for flammable refrigerant	Safe introduction of flammable refrigerant to provide more alternatives to country.
Sub-Total					60,000		
Component 3: Article 4B licensing and reporting							
3.1 Conducting comprehensive review of ODS import/export	NOU	NOU, Royal Customs and Excise	March 2019	September 2019	18,000	Consultant Hired	Review of present policies and legislations

licensing/quota system and procedures and develop procedures for implementation of licensing and quota system for HFCs, HFC blends and HFC based equipment as well as HFC cylinder labeling requirement, data collection, verification and reporting	UN Environment	Department, importers, retailers, relevant government agencies etc.				Desk Research & Literature Review Consultation Meetings Meeting Summary & Draft Recommendations	and provisions to include HFCs
3.2 Drafting and finalizing the legal text for the amendment of the existing regulation to include HFC licensing and quota system as well as data collection, verification and reporting based on agreed procedures			September 2019	December 2019	10,000	Draft Amendment for licensing, quota and reporting system for HFC Consultation meetings	Article 4b licensing and reporting system proposal
3.3 Design and production of stickers for labeling requirement of HFC and HFC blends cylinders			January 2020	July 2020	6,000	Launching labeling requirement for HFCs and HFC blends	Effective monitoring tools for NOU to track the source of refrigerant and confirm the legal import and composition of HFC and HFC blends
3.4 Coordinating with Royal Customs and Excise Department and explore the possibility to revise the national HS codes for commonly imported HFCs and HFC blends in order to ensure proper monitoring and recording of imports/exports of individual HFCs/alternatives substances			June 2019	July 2020	6,000	HS code of HFCs import	Review of present national codes/HS codes for HFCs
Sub-Total					40,000		
Component 4: Communication & Awareness							
4.1 Development of knowledge products e.g. quick guides,	NOU	NOU, schools, general & specific	March 2019	December 2019	8,000	Brochures & Quick Guide for awareness	Information material on Kigali Amendment

brochures and flyers on Kigali Amendment, Safe-Handling of Low GWP technologies etc.	UN Environment	end-users, importers, service sector, retailers etc.				and distribution	related benefits distributed for wider awareness.
4.2 Design and publication of awareness material obtained from EA activities			July 2019	July 2020	15,000	Printing and distribution of the awareness materials	
4.3 Public event to promote benefits of energy efficient and low GWP room air-conditioners and educate the public on the technique to select room air-conditioner	NOU and Energy Office	General public, government authorities and end users (e.g. building owners etc.)	December 2019	July 2020	7,000	The public event is launched with participation of energy office and importers and traders	Increase in awareness of the general public on benefits of energy efficient room air-conditioners and educate the public on the technique to select room air-conditioners
Sub-Total					30,000		
Grand Total (without PSC)					150,000		

Enabling Activities for Kigali Amendment
As per Executive Committee decision 79/46

Date
September, 2018

Services Performed For:
Country: Cabo Verde
Local Executing Authority: DIRECÇÃO NACIONAL DO
AMBIENTE, MINISTÉRIO DA AGRICULTURA E AMBIENTE



Funding Request for Enabling Activities for Kigali Amendment in Cape Verde

Background

Stage I of the HCFC phase-out management plan (HPMP) for the Republic of Cape Verde (Cape Verde) was approved in July 2011 at the 64th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol (decision 64/28). The project was approved in accordance with the Agreement between the Government of Cape Verde and the Executive Committee for the period 2011 to 2020. The country has committed to a 35 per cent reduction in consumption on HCFC baseline by 2020, in the servicing sector.

The total level of funding approved in principle was US \$160,000 plus agency support costs of US \$20,800 for UNEP as the sole implementing agency. The first tranche of stage I of the HPMP and the corresponding implementation plan for Cape Verde was approved at the amount of US \$44,000 plus agency support costs of US \$5,720, for UNEP.

The second tranche of stage I of the HPMP was approved at the amount of US \$35,000 plus agency support costs of US \$4,550, for UNEP.

The third tranche of stage I of the HPMP was approved at the amount of US \$35,000 plus agency support costs of US \$4,550, for UNEP.

The fourth tranche of stage I of the HPMP was approved at the amount of US \$30,000 plus agency support costs of US \$3,900, for UNEP.

Baseline HCFC consumption was 1.1 ODP tonnes and the country reported consumption of 0.08 ODP tonnes in 2017.

The country also conducted an ODS alternatives survey in 2016, which showed that HFC-134a and R-410A, R-407C and R-404A mixtures are the main HFC refrigerants used in the country, mostly in refrigeration and air-conditioning servicing sector. Annual demand for HFCs has been steadily increasing from the period of 2012-2015, amounting to 2.1 metric tonnes in 2015. For that reason, the government has decided to take early steps to address HFCs, herewith submitting a proposal for activities to facilitate ratification of the Kigali amendment and related development of a licensing system, as well as capacity building related activities for adopting alternatives to HFCs.

Based on the decision of the Executive Committee 79/46, eligible funding for enabling activities for Cape Verde is US\$ 95,000.

Institutional Arrangements for Implementation of Enabling Activities

Implementation of the enabling activities will be accomplished using the existing national infrastructure and institutional setting already established for ODS phase-out activities. Institutional arrangement in Cape Verde is such that management of ozone depleting substances and some climate change related projects are executed by the same office, which will facilitate the streamlining of activities.

The proposed project components will be implemented through the NOU, which is operating under the **DIRECÇÃO NACIONAL DO AMBIENTE**,. The head of NOU is directly reporting to the Director General of the **DIRECÇÃO NACIONAL DO AMBIENTE**, Other relevant stakeholders will be involved in the discussion on the Kigali amendment ratification process through the already established National Ozone Committee, which has representatives from the Directorate General of Customs and Excise of the Ministry of Budget, Ministry of Commerce, Department of Statistics and Demographic Studies, Association of Refrigeration Technicians, Importers, and other governmental and non-governmental institutions. Several targeted meetings will be organized with the private sectors including hotels and restaurants, servicing sectors, Technical Training Institutes which are the institutions that have traditionally provided training in the refrigeration sector and with the Customs Department for assisting in development of licensing and quota system for HFCs.

Components Proposed for Enabling Activities

Proposed Component 1:	Facilitation of Ratification of the Kigali Amendment
Objective	To achieve a broader understanding of the Kigali amendment provisions and to prepare legislative bases for the ratification
Target Group:	High-level decision makers, relevant governmental institutions, private companies and servicing technicians in the sectors that are using HFCs.
Description of activities	<ol style="list-style-type: none"> 1. Analysis of existing Ozone and Climate Policy and Legislation and drafting the amendments in the existing legislation to allow for ratification of the Kigali amendment (HFC phase-down schedule, licensing requirements, HFC reporting requirements). 2. Stakeholder consultations to facilitate the ratification process at the national level. 3. Translation of the Kigali amendment into national language 4. Drafting the Law on ratification of the Kigali amendment with the justification document, as required by the national legislative process 5. Production of information sheets on the Kigali amendment to facilitate consultations and speed up the ratification (translation of the Ozone Secretariat's briefing note on ratification and 10 OzonAction factsheets into national language and printing 50 copies of each of the translated documents) <p>The ultimate target of this component is ratification of the Kigali amendment. The ratification process itself is done outside of the mandate of the NOU, and the NOU doesn't have direct influence on the timing of the process. For that reason, the NOU will consider this component finalized when all necessary documents and legal changes (Law on ratification of the Kigali amendment and updated existing ODS legislation) are ready and the process of adoption is advanced.</p>
Outputs	<ol style="list-style-type: none"> a) Draft document for analyzed/revised existing Ozone and Climate Policy and Legislation in place. b) At least 3 stakeholder consultative meetings during the legislation drafting process. c) National language Kigali amendment translated document in place. d) Ratification documents to National Legislation prepared and submitted e) Awareness materials on HFC phase down produced

Proposed Component 2:	Capacity-Building & Training on Alternatives
Objective	To understand the training needs in the servicing sector that would allow for HFC phase-down
Target Group:	Private companies and servicing technicians in the sectors that are using HFCs including Technical Training Institutes in RAC sectors
Description of activities	<ol style="list-style-type: none"> 1. Undertaking the training needs assessment for the servicing sector and preparing an assessment report that will be used for further planning of the activities related to use of HFCs and low-GWP alternatives. For these activities, hiring a national consultants with good understanding of the issues will be needed and for that, consultative meetings, elaboration of terms of reference and interviews with the technicians should be done. 2. Conduct sensitization meetings for technicians on safe handling of HFCs and its alternatives. It is important to keep on updating technicians with new technologies and refrigerants gases into the market.
Outputs	<ol style="list-style-type: none"> a) Training Needs for RAC sector identified b) At least 4 sensitization meetings on identification of HFCs and its Alternatives conducted.

Proposed Component 3:	Article 4B Licensing and Reporting
Objective	To develop a required regulatory package for HFC import/export licensing system
Target Group:	National Customs Service and importers/exporters of HFCs and HFC containing equipment
Description of activities	<ol style="list-style-type: none"> 1. Revising existing National Ozone Depleting Substances Legislation and drafting the ODS alternative regulation to allow early ratification of the Kigali Amendment (HFC phase-down schedule, licensing requirements, HFC reporting requirements). 2. Assisting Customs Office in developing national custom codes for different HFCs and include them into the Customs Tariff in order to ensure proper monitoring and recording of imports/exports or re-export of individual HFCs. Assist the Customs Department to develop country-specific national HS Codes for HFCs to facilitate proper monitoring and recording of imports/exports of individual HFCs/alternatives
Outputs	<ol style="list-style-type: none"> a) National ODS regulation revised, b) Country-specific national HS Codes for HFCs developed

Proposed Budget

Activities	Proposed cost in (USD) without PSC
<i>Component 1:Facilitation of ratification of the Kigali amendment</i>	<i>47,000</i>
1. Analysis of existing legislation and drafting amendments (2 national consultants x 4 months x US\$ 1,000.00)	8,000
2. Stakeholder consultations to facilitate the ratification process at the national level (3 stakeholders' consultation x US\$ 2,000)	6,000
3. Translation of the Kigali amendment into national language (2 national consultants x 4 months x US\$ 1,000)	8,000
4. Drafting The law on ratification of the Kigali amendment with the justification document, as required by the national legislative process (3 national consultant x 5 months x US\$ 1,000.00)	15,000
5. Production of information sheets on the Kigali amendment to facilitate consultations and speed up the ratification (translation of the Ozone Secretariat's briefing note on ratification and 10 OzonAction factsheets into national language and printing 50 copies of each of the translated documents)	10,000
<i>Component 2:Capacity-building & training on alternatives</i>	<i>24,000</i>
1. Undertaking the training needs assessment for the servicing sector and preparing an assessment report (3 national consultants x 4 months x US\$ 1,000.00) (4 consultative meetings x US\$ 3,000.00)	12,000 12,000
<i>Component 3:Article 4B licensing and reporting</i>	<i>24,000</i>
1. Review of the national licensing system of and a proposal for how to include HFCs (1 national consultant x 6 months x US\$ 1,000.00)	6,000.00
2. Assisting national customs authorities in establishing national custom codes for HFCs (3 national consultant x 3 months x US\$ 1,000.00) (3 meetings x US\$ 3,000.00)	9,000 9,000
Total in (USD) without PSC	95,000

Implementation Plan

Activity	Responsible Entity	Target Group	Start Date (Month/Yr.)	Date Of Completion (Month/Year)	Budget (US\$)	Milestones	Expected Outputs
Component 1: Facilitate the Ratification of the Kigali Amendment							
Analysis of existing legislation and drafting amendments	NOU	RAC, Govt. Ministries, Customs Office	January 2019	January 2020	8,000	Report on analyzed legislations	Provision of the document on analyzed legislations and draft amendments
Conduct stakeholder consultative meetings on the ratification of the Kigali Amendment.	NOU	RAC, Govt. Ministries, Customs Office	January 2019	January 2020	6,000	Meeting minutes	At least 3 stakeholder consultative meetings
Translation of the Kigali amendment into national language	NOU	RAC, Govt. Ministries, Customs Office	January 2019	January 2020	8,000	Reports	Provisions of the Kigali Amendment and relevant information on HFC phase down translated into the national language.
Drafting The law on ratification of the Kigali amendment with the justification document, as required by the national legislative process	NOU	Legislative Assembly	January 2019	July 2019	15,000	Reports	Ratification documents to the Legislative Assembly prepared and submitted
Production of information sheets on the Kigali amendment to facilitate consultations and speed up the ratification	NOU	RAC, Govt. Ministries, Customs Office	January 2019	September 2019	10,000	Awareness materials	Awareness materials on HFC phase down produced
Component 2: Capacity Building and Awareness on HFCS and Alternatives Management							

Activity	Responsible Entity	Target Group	Start Date (Month/Yr.)	Date Of Completion (Month/Year)	Budget (US\$)	Milestones	Expected Outputs
Undertaking the training needs assessment for the servicing sector and preparing an assessment report	NOU	RAC Sector	January 2019	July 2020	12,000	Training needs Reports	Training Needs for RAC sector identified
Conduct sensitization meetings for technicians on safe handling of HFCs and its alternatives.	NOU	RAC Sector	January 2019	July 2020	12,000	Meeting Reports	At least 4 sensitization meetings on identification of HFCs and its Alternatives conducted
Component 3: Article 4B Licensing System and Reporting							
Revise the existing National Ozone Depleting Substances legislation (and ODS based equipment) and drafting the ODS alternative regulation to allow early ratification of the Kigali Amendment	NOU	RAC sector, Enforcement Agencies, Importers	January 2019	September 2019	6,000	Review Reports	National ODS regulation revised, Country-specific national HS Codes for HFCs developed
Assisting Customs Office in developing national custom codes for different HFCs and include them into the Customs Tariff in order to ensure proper monitoring and recording of imports/exports or re-export of individual HFCs.	NOU	Customs Office	January 2019	July 2020	18,000	Reports	Country-specific national HS Codes for HFCs developed

Statement by the Government and Implementing Agency

The Government of Cape Verde and UN Environment confirm that the proposed enabling activities will not delay the implementation of HCFC phase-out activities in the country.

Funding Request for Enabling Activities for HFC Phase-down in the Cook Islands

As per Executive Committee decision 79/46

Date

16 October 2018

Prepared by:

**National Ozone Unit, National Environment Services
& UN Environment OzonAction**

For Submission of:

82nd Executive Committee Meeting

I. Background

The Cook Islands became a Party to the Vienna Convention and the Montreal Protocol (MP) on 22 December 2003 along with the London, Copenhagen, Montreal Amendment and the Beijing Amendment. The National Environment Service (NES), which is a Government agency, is responsible for the implementation of the Montreal Protocol related activities in the Cook Islands which houses the National Ozone Unit (NOU). The Government of the Cook Islands has been actively working towards meeting its HCFC-phase out commitments to the Montreal Protocol. Cook Islands has supported the recent amendment of the Montreal Protocol in Kigali to include HFCs as a controlled substance and plans to proceed with national consultations the last quarter of 2018.

As the implementing agency of the Multilateral Fund Projects and as part of the Compliance Assistance Programme (CAP), UN Environment has been working closely with the Government of the Cook Islands in the implementation of the Montreal Protocol activities through the Compliance Assistance Programme (CAP) and the projects approved under the Multilateral Funds. These interventions supported the Cook Islands to set up the institutional framework within the country to phase-out consumption of ozone depleting substances (ODS) including policy and legislation, capacity building of both National Ozone Officer (NOO) and local stakeholders and outreach strategies for successful implementation of the country's ODS phase-out programme. Currently, UN Environment is supporting the NOU on the implementation of the Institutional Strengthening (IS) Project and the HCFC Phase-out Management Plan (HPMP) Stage I. UN Environment also supported the Cook Islands on the nation-wide survey and preparation of the report under the ODS Alternatives Survey for which the final report has been submitted to the Multilateral Fund in 2017

The Executive Committee (ExCom) Decision 79/46 invited Article 5 countries to propose project to facilitate and support their early ratification of the Kigali Amendment and to undertake specific initial national level systems that help them fulfil their initial obligations with regard to hydrofluorocarbon (HFC) phase-down in line with the Kigali Amendment. Based on ExCom decision 79/46, the government of Cook Islands through UN Environment is submitting this project proposal to seek financial support for the Enabling Activities Project. In accordance with the ExCom decision, the eligible funding for enabling activities being requested for the Cook Islands is 50,000 USD (without PSC).

II. Institutional arrangements for implementation of the Cook Islands Enabling Activities

The National Environment Services (NES) is the national focal point of the Montreal Protocol, the NOU will play the leading role in the implementation of the approved Enabling Activities. The Ozone Depleting Substances Regulation 2008 provides the bases to implement the obligation of the Montreal Protocol in the Cook Islands. The licensing and quota systems control and monitor movement of ODS are included under the ODS Regulation 2008. However, the ODS regulation 2008 does not include non-ODS and Hydrocarbon (HC). Therefore, the enabling activities will help the NOU in working with stakeholders specifically with Crown Law (Legal Department) to incorporate legislation and policies to incorporate non-ODS and HC to the ODS regulation.

It is essential for the NOU to work closely with all concerned national stakeholders both within the public and private sectors during the implementation of this project. Under the Enabling Activities, the national stakeholders coordinated under the IS project and HPMP would remain the key partners in the implementation. In addition, there is need to include other stakeholders that were not involved in the implementation of HPMP e.g. stakeholders in mobile air-conditioning (MAC). The NOU needs to seek the guidance and inputs of additional relevant government stakeholders that would be important for the future Kigali Amendment compliance. The list of stakeholders that would be involved in the project is given in Table I below.

Table-I: List of National Stakeholders for the Cook Islands Enabling Activities Project

Name of Agency	Type of Organization	Focus Area
National Environment Services	Government	NOU/Main Focal Agency Licensing Authority
Ministry of Revenue and Customs Department	Government	Customs
Department of Statistics – Ministry of Finance and Economic Management	Government	Statistics
Maritime Cook Islands	Private	Marine Vessels & Land Transport/Vehicles
Private Companies (Importers)	Private Sector/Industry	Refrigerant, RAC and MAC Importers
Ministry of Police	Government	Police
Renewable Energy Efficient Department (REDD)	Government	Energy Efficiency
Climate Change Cook Islands	Government	Climate Change
RAC Association and RAC/MAC service workshops	Public/Private	MAC and RAC Service Sector
Cook Islands Tourism	Government	Tourism

While a number of activities are to be implemented under the Enabling Activities, it would not be possible with the present limited resources and capacity constraint of the Cook Islands NOU to carry out all activities. The NOU would require the support of the experts/consultants and UN Environment to expedite project implementation. For planning and monitoring of project activities, UN Environment will work closely with Cook Islands NOU to ensure timely implementation of the project activities and to maximize the benefits from the Enabling Activities toward the ratification of the Kigali Amendment and its initial obligations. NOU will provide the necessary administrative, logistical and personnel support for the project implementation in close coordination with the UN Environment and other national stakeholders. The UN Environment would provide the necessary support to the NOU with regards to project progress reporting and administrative closure of the project to the MLF.

III. Components proposed for the Cook Islands Enabling Activities Project

The Government of Cook Islands is proposing to implement 4 inter-related activities under this project. Cook Islands has not ratified the Kigali Amendment, therefore, Enabling Project is essential to support the preparation of the necessary background documents that would be required by the NOU in initiating the process for ratification of the Kigali Amendment by the Government of Cook Islands. The Government of Cook Islands would lead the political process required for the ratification of the Kigali Amendment at the national level and the UN Environment would provide the technical support for developing requisite country assessments. Furthermore, the project component would facilitate the organization of stakeholder workshops that would be required for building a consensus amongst government agencies that is crucial for Kigali Amendment ratification and implementation.

The Cook Islands NOU conducted a detailed ODS alternative survey during 2016-2017 with the support of UN Environment. The objective of the survey was to assist Cook Islands to better understand their historical and predicted consumption trends for ODS alternatives, and distribution by sector and sub-sector. The alternative survey also allowed the Cook Islands to gain more understanding on the import and servicing use trends of ODS alternatives, technology end-use trends and challenges in the data collection of HFC import. The Cook Islands has established a good licensing and reporting mechanism for ODS. However the current ODS regulation 2008 does not include HFC licensing and reporting. For establishing such a system, the Cook Islands NOU would need technical assistance in reviewing the present system towards a stronger and more holistic licensing and reporting mechanism to ensure that data is accurately captured and reported. The implementation of HPMP Stage I and ODS Alternatives Survey revealed that the country is experiencing the rising trend of ODS alternatives use, which is attributed to the government intervention to phase-out HCFCs.

Based on the ODS Alternatives Survey, the industry voiced their concerns that they are not comfortable to handle flammable refrigerant e.g. R-600a being used in the domestic refrigerator due to the lack of proper training and equipment/tools. Cook Islands ODS alternative survey was an important exercise which indicated findings on the need to strengthen trade control, licensing system, data recording, monitoring and reporting of non-ODS based refrigerants and appliances. Therefore, the project components proposed are as follows

- I. Country Assessment & Stakeholder Workshops for Ratification of Kigali Amendment
- II. Article 4B Licensing & Reporting
- III. Setting-up Institutional Framework for safe use of ODS alternatives
- IV. Communication & Awareness

Proposed Project Component-I	Country Assessment & Stakeholder Consultation Workshops for implementing Kigali Amendment
Objective	<ul style="list-style-type: none"> ○ To conduct country assessment and prepare a Country Assessment Report that would encompass the linkages of HFC phased-down with different aspects e.g. promoting energy efficiency and climate change mitigation. <ul style="list-style-type: none"> ○ Understand the current situation and context with regard to technology and policy related to energy efficiency and ozone & climate friendly perspectives; ○ Clarify the inter-governmental framework and delineate the various agencies that have linkages with HFC phase-down and their respective roles in implementing the Amendment; and ○ Envisage the national roadmap/action plan on promoting technology and policy related to energy efficiency and ozone & climate friendly perspectives. ○ To undertake stakeholder consultations related to the Kigali Amendment across various stakeholders with objectives to:

	<ul style="list-style-type: none"> ○ Inform key stakeholders on the importance and benefit of the Kigali Amendment; ○ Sensitize and ensure stakeholders participation of the relevant government agencies, importers and service technicians on the aspects of the Kigali Amendments and their respective roles and to obtain a greater commitment from the stakeholders; and ○ Provide a platform for exchange of ideas and feedback on improving the present policies, trade controls, monitoring and reporting mechanisms for controlled substances under the Montreal Protocol including HFCs.
Target Group:	<p>Target groups are as follows:</p> <ul style="list-style-type: none"> ○ Government agencies such as customs, statistics, renewable energy, energy efficiency, climate change, marine vessels, fisheries, ports authority etc; ○ Importers & retailers; ○ RAC/MAC service firms and technicians; and ○ Private sector & large end-users.
Description of activities of Project Component-I	<p>Proposed activities include a Country Assessment Report & National Stakeholders Workshop, which will:</p> <ul style="list-style-type: none"> ○ Identify wide range of stakeholders that would be involved in implementation phase; ○ Sensitize stakeholders on their role for successful implementation of the Kigali Amendment. ○ Develop a draft Country Assessment Report taking into account feedback/inputs from the stakeholders.
Outputs of the Project Component-I	<ul style="list-style-type: none"> ○ One (1) National Stakeholder Consultation Workshop for the Kigali Amendment; ○ Draft Country Assessment Report for Kigali Amendment implementation; and ○ Two (2) consultation workshops for feedback on the Country Assessment Report.

Proposed Project Component-II	Article 4B Licensing & Reporting
Objective	<ul style="list-style-type: none"> ○ To support Cook Islands to implement Decision of the Meeting of the Parties XVIII/1 & XVIII/2 of with regards to Article 4B of the Kigali Amendment to the Montreal Protocol, which requests parties to establish a HFC licensing, trade control, monitoring and reporting system by 1 January 2019 or within 3 months of date of entry of Kigali Amendment. ○ To conduct review and assessment of the present licensing and quota system and potential mechanism of broadening scope of the system to include ODS alternatives in particular HFCs. ○ To review the existing data recording, monitoring, reconciliation and reporting of the import statistic to identify the mechanism to strengthen the database keeping given that there is no specific HS code assigned to HFCs.
Target Group:	<p>Targeted groups are as follows:</p> <ul style="list-style-type: none"> ○ Government agencies such as customs, statistics, finance, crown law authority, procurement department, vessel registration and fisheries; ○ Importers & Retailers of refrigerant and equipment; and ○ Private Sector & large end-users.
Description of activities of Project Component-II	<p>Proposed activities include conducting comprehensive review of licensing system to incorporate ODS alternatives, HFCs, and HFCs based equipment. Activities includes:</p>

	<ul style="list-style-type: none"> ○ Reviewing the current licensing & quota system and related trade control national regulation for ODS alternatives in the Cook Islands. ○ Reviewing the capacity needs for the national implementing agencies for an effective licensing, monitoring and reporting system. ○ Consultation and feedback from all relevant stakeholders ○ Assessment report with proposed strengthening and update of licensing & reporting system for ODS alternatives, in particular HFCs; and ○ Identifying the feasibility of introducing electronic registry for all controlled substances and products in the country.
Outputs of the Project Component-II	Facilitating the establishment of licensing/quota system for HFCs to meet all requirements of the Article 4B and HFCs is effectively controlled during Kigali Amendment implementation.

Proposed Project Component-III	Setting-up Institutional Framework for Safe Use of ODS Alternatives
Objective	<ul style="list-style-type: none"> ○ To specifically sensitize all related local stakeholders in servicing sector (safety authority technicians, workshops, importers of refrigerant and RAC/MAC equipment and RAC Association) to understand the challenges in the country and to seek their feedback on the institutional framework needed for long-term personnel and institutional capacity in the safe introduction of HFCs that are flammable and toxic. ○ Based on inputs from stakeholders, to develop holistic approach and strategy to address the challenge for adoption of lower GWP alternatives that are flammable and toxic aiming to sustain the smooth transition to longer-term alternative technologies.
Target Group:	Targeted groups are as follows: <ul style="list-style-type: none"> ○ Safety authority, Climate Change Cook Islands and Ministry of Revenue ○ RAC service companies and technicians; ○ Importers & retailers of refrigerant and RAC/MAC equipment; and ○ Private sector & large end-users.
Description of activities of Project Component-III	Under this component, the NOU with support RAC experts and sensitize related local stakeholders in servicing sector and discuss current situation of RAC/MAC servicing sector to analyze challenges in the adoption of longer-term alternatives in the country. Based on feedback of the stakeholders, holistic approach and strategy to guide the NOU in addressing challenges in the servicing sector will be developed. This also includes exploring the possibility of giving incentive to longer-term alternatives technology.
Outputs of the Project Component-III	<ul style="list-style-type: none"> ○ Two (2) consultation workshops to sensitize and to develop holistic approach and strategy to address the challenge for adoption of lower GWP alternatives. <ul style="list-style-type: none"> ○ One workshop to sensitize and brainstorm with related stakeholders ○ One workshop to present the approach to ○ Holistic approach and strategy for setting up institutional framework for servicing sector.

Proposed Project Component-IV	Communication & Awareness
Objective	To apprehend knowledge and understanding of the general public and implementing partners through effective and strategic awareness measures on: <ul style="list-style-type: none"> • The importance and benefits of Kigali Amendment on the environment; and • The importance of safe handling of ODS alternative refrigerant technologies, in particular low GWP alternatives.
Target Group:	Targeted groups are as follows: <ul style="list-style-type: none"> • General public; • Service technicians; and • Government agencies.
Description of activities of Project Component-IV	Component IV would focus towards developing information materials in local language for outreach to general public. It would also assist towards increasing the demand for best practices in the service sector and better national understanding of the country for HFC phase-down. Proposed activities include: <ul style="list-style-type: none"> • Developing Flyers and Information Brochures on benefits of Kigali Amendment; • Developing quick information flyers and posters on ODS alternatives and their safe handling; • Partnering with schools, importers, service technicians and other relevant agencies for distribution and outreach of such materials; and • Maximizing the use of social media, television, radio and internet to disseminate information to the audiences.
Outputs of the Project Component-IV	<ul style="list-style-type: none"> • Information Brochures on benefits of Kigali Amendment. (English and Local Language). • Posters & bill boards for safe handling of ODS alternatives. (English and Local Language). • Other information and outreach materials

(a) Proposed budget for the Cook Islands Enabling Activities Project

Project Component	Main Project Activity	Proposed cost in (USD) without PSC
Project Component -I: Country Assessment & Stakeholders/Consultation Workshop for implementing Kigali Amendment	One National Stakeholders/Sensitization Workshops for the Kigali Amendment <i>Workshops/Meetings & Travel Costs estimated to be USD 3,000</i> <ul style="list-style-type: none"> - Identification of wide range of stakeholders. - Sensitization on Kigali Amendment & non-HFC alternatives. - Role of the various stakeholders - Feedback & Recommendations Report 	3,000
	Draft Country Assessment Report & 2 consultation/feedback workshop <i>Consultant, Workshops/Meetings & travel cost estimated to be USD 10,000</i> <ul style="list-style-type: none"> - Drafting of the Country Assessment paper (including national roadmap) for Kigali Amendment through review of National Policies, Legislations & Systems & Desk Research. 	10,000

Project Component	Main Project Activity	Proposed cost in (USD) without PSC
	<ul style="list-style-type: none"> - Two feedback/consultation workshops from the relevant stakeholders on the country assessment report <ul style="list-style-type: none"> o One workshop on Rarotonga o Another workshop in Aitutaki 	
Project Component -II: Article 4B Licensing & Reporting	<p>Comprehensive review of local licensing system of ODS alternatives and based-products</p> <p><i>Consultants & Travel Costs estimated to be USD 9,000</i></p> <ul style="list-style-type: none"> - Review of national licensing systems. Draft paper for strengthening the licensing, permit and monitoring system. - Support to review and improve the current approach and methodologies related to the collection, verification and country reporting of HFCs/alternative use. - National process to integrate the HFC into the national quota system to ensure HFC phase-down as per the Kigali Amendment. - Draft recommendation report for Article 4b licensing & reporting under Kigali Amendment. <p><u>Legal processing to include HFC licensing and quota system - estimated to be USD 3,000</u></p> <ul style="list-style-type: none"> - Meetings with concerned government stakeholders e.g. Crown Law - Drafting and finalizing the Amendment to Cook Islands Environment (Ozone Layer Protection) Regulations 2008/ New Regulation. <p><u>Workshops/Meetings & Travel Costs estimated to be USD 3,000</u></p> <ul style="list-style-type: none"> - National consultation/feedback workshops on the proposed HFC licensing and quota system and draft regulation with key stakeholders e.g. importers, port authorities, customs and Crown Law etc. 	15,000
Project Component -III: Setting-up Institutional Framework for Safe Use of ODS Alternatives	<p>Consultation workshops to sensitize and build capacity of servicing sector on development of holistic approach and strategy to address the challenge for adoption of lower GWP alternatives</p> <p><i>RAC expert, Workshops/Meetings & travel cost estimated to be USD 12,000</i></p> <ul style="list-style-type: none"> - Drafting of the Country Assessment paper (including national roadmap) for Kigali Amendment through review of National Policies, Legislations & Systems & Desk Research. - Two feedback/consultation workshops from the relevant stakeholders on the country assessment report <ul style="list-style-type: none"> o One workshop on Rarotonga o Another workshop in Aitutaki 	12,000
Project Component -IV: Communication and Awareness	<p>Communication and Awareness</p> <p><i>Design and production of materials & workshops estimated USD 7,000</i></p>	10,000

Project Component	Main Project Activity	Proposed cost in (USD) without PSC
	<ul style="list-style-type: none"> - Design and Development of Posters (numbers to be decided). - Design and Development Information Brochures & Flyers (numbers to be decided) - Translation into local Language - Printing Services Costs - Use of social media, television, radio and internet to disseminate information to the audiences - Outreach & awareness workshops & activity 	
Total in (USD) without PSC		50,000

(b) Cook Islands Enabling Activities Project Milestones and Timeline

Activities	February 2019 – July 2020																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Project Component -I: Country Assessment & Stakeholder Workshops for implementing Kigali Amendment	X	X	X	X	X	X	X	X	X									
Project Component -II: Article 4B Licensing & Reporting	X	X	X	X	X	X	X	X	X	X	X							
Project Component -III: Setting-up Institutional Framework for Safe Use of ODS Alternatives						X	X	X	X	X	X	X	X	X	X	X	X	X
Project Component -IV: Communication and Awareness									X	X	X	X	X	X	X	X	X	X

(c) Statement by the Government and Implementing Agency

The Government of the Cook Islands and the UN Environment confirm that the proposed enabling activities will not delay the implementation of HCFC phase-out activities in the country.

Project Implementation Plan

Annex-I

Activity	Responsible entity	Target Group	Start Date Month / Year	Date of Completion	Budget (US\$)	Milestones	Expected outputs
Project Component -I: Country Assessment & Stakeholder Workshops for implementing Kigali Amendment							
National Stakeholders/ Sensitization Workshops for the Kigali Amendment	NOU	<ul style="list-style-type: none"> Government agencies such as customs, statistics, renewable energy, energy efficiency, climate change, green public procurement, marine vessels, fisheries, ports authority etc. 	February 2019	October 2019	3,000	Desk Research Consultation Meeting Reports	Background papers that is necessary for Kigali implementation in Cook Islands. Workshop Reports
Draft Country Assessment Report & consultation/feedback workshop:	NOU	<ul style="list-style-type: none"> Importers & Retailers. RAC/MAC service firms and technicians. Private Sector & large end-users 	February 2019	October 2019	10,000	Country Assessment Reports Two consultation / workshop and reports Sector Specific Consultations & Assessment such as MAC sector, Cold Storages, Fisheries etc.	Country Assessment Reports Stakeholders Workshop report with recommendations
Project Component -II: Article 4B Licensing & Reporting							
Comprehensive review & strengthening of local licensing system of ODS alternatives and based-products.	NOU	<ul style="list-style-type: none"> Government agencies such as customs, statistics, finance, road transport authority, procurement department, vessel registration and fisheries Importers & Retailers. RAC/MAC service firms and technicians. 	February 2019	January 2020	9,000	Licensing & Reporting System Assessment & Recommendation Report	Assessment Report of the Cook Islands Article 4b Licensing & Reporting mechanism for Montreal Protocol, including recommendations for Kigali Amendment.

Activity	Responsible entity	Target Group	Start Date Month / Year	Date of Completion	Budget (US\$)	Milestones	Expected outputs
		<ul style="list-style-type: none"> Private sector & large end-users. 					
Legal processing to include HFC licensing and quota system - Meetings with concerned government stakeholders e.g. the Crown Law	NOU, CL	<ul style="list-style-type: none"> NOU Crown Law (CL) 	February 2019	January 2020	3,000	Draft Amendment / New regulation to include HFC licensing and quota system	Draft Amendment/New regulation to include HFC licensing and quota system
National consultation/feedback workshops on the proposed HFC licensing and quota system and draft regulation with key stakeholders	NOU	<ul style="list-style-type: none"> Importers, port authorities, customs Crown Law (CL) 	February 2019	January 2020	3,000	At least 1 national consultation/feedback workshop organized	Inputs from the national stakeholder to finalize the regulation
Project Component -III: Setting-up Institutional Framework for Safe Use of ODS Alternatives							
<p>Identify the expert to support the implementation of this activity.</p> <p>Organizing two consultation workshops to sensitize and to develop holistic approach and strategy to address the challenge for adoption of lower GWP alternatives</p> <p>Holistic approach and strategy for setting up institutional framework for servicing sector</p>	NOU	<ul style="list-style-type: none"> Safety authority, Climate Change Cook Islands and Ministry of Revenue RAC service companies and technicians; Importers & retailers of refrigerant and RAC/MAC equipment; and Private sector & large end-users. 	July 2019	July 2020	12,000	<p>At least 2 consultation workshops</p> <p>Holistic approach and strategy for setting up institutional framework for servicing sector</p>	Holistic approach and strategy for setting up institutional framework for servicing sector
Project Component -IV: Communication and Awareness							

Activity	Responsible entity	Target Group	Start Date Month / Year	Date of Completion	Budget (US\$)	Milestones	Expected outputs
<ul style="list-style-type: none"> •Develop Flyers and Information Brochures on benefits of Kigali Amendment. •Develop quick information flyers and posters on ODS alternatives and their safe handling. •Partner with schools, importers, service technicians and other relevant agencies for distribution and outreach of such materials. <p>Social media, television, radio and internet to disseminate information to the audiences</p>	NOU	<ul style="list-style-type: none"> • General Public • Service Technicians • Government Agencies 	October 2019	July 2020	10,000	Brochures & Quick Guide for awareness and distribution	<p>Information Brochures on benefits of Kigali Amendment. (English and Local Language)</p> <p>Poster for safe handling of ODS alternatives. (English and Local Language)</p>
Total in (USD) without PSC					50,000		

Enabling Activities for Kigali Amendment
As per Executive Committee decision 79/46

Date

September, 2018

Services Performed For:

Country: Mauritius

Local Executing Authority: Ministry of Social Security, National Solidarity, and Environment and Sustainable Development (Environment and Sustainable Development Division)



Funding Request for Enabling Activities for Kigali Amendment in Mauritius

Background

The Executive Committee of the Multilateral Fund at its 79th meeting adopted decision 79/46 related to enabling activities for Article 5 countries. The decision invites countries to propose projects to facilitate and support early ratification of the Kigali Amendment and to undertake specific initial activities that help them fulfil their initial obligations with regard to hydrofluorocarbon (HFC) phase-down in line with the Kigali Amendment.

The Government of Mauritius is currently implementing the Hydrochloroflourocarbon Phase-out Management Plan (HPMP) which is aimed at phasing out use of Hydrochloroflourocarbons (HCFCs) in the Refrigeration and Air-conditioning (RAC) sector. Mauritius has an HCFC baseline consumption of 8 ODP tonnes and it recorded a significant reduced consumption of 5.84 ODP tones in 2017. Mauritius has made tremendous progress in the implementation of stage 1 of its HPMP. Notable achievements include meeting the 2013 HCFC freeze and 10 percent reduction targets in 2015. Furthermore, under the HPMP, Mauritius has carried out a series of training of trainers and technicians on good refrigeration practices as well as on safe use of hydrocarbon technology on AC units, safe handling of ammonia refrigerant in chillers and maintenance of domestic refrigerators using R600a refrigerant. In the fight against the illegal trade of ODSs, over the past years, capacity building workshops have also been carried out for customs officers

The country also conducted an ODS alternatives survey in 2015, which showed that R-404a and R-410a are the most imported gases. Imports of R-404a increased by 80.3% within the period from 2010 to 2015, while for R-410a, they increased by about 280%. Other HFCs that are mostly used in the country are R 134a and R 407C. For that reason, the government has decided to take early steps to address HFCs, herewith submitting a proposal for activities to facilitate ratification of the Kigali amendment and related development of a licensing system, as well as capacity building related activities for adopting alternatives to HFCs.

Based on the decision of the Executive Committee 79/46, eligible funding for enabling activities for Mauritius is US\$ 150,000.

Institutional Arrangements for Implementation of Enabling Activities

Implementation of the enabling activities will be accomplished using the existing national infrastructure and institutional setting already established for ODS phase-out activities. Institutional arrangement in Mauritius is such that management of ozone depleting substances is conducted by the National Ozone Unit (NOU).

The NOU is located at the Environment and Sustainable Development Division of the Ministry of Social Security, National Solidarity and Environment and Sustainable Development of Mauritius. The NOU reports to the Director of the Environment and the Permanent Secretary who is also the National Focal Point.

Other relevant stakeholders will be involved in the discussion on the Kigali amendment ratification process through the already established National Ozone Steering Committee, which is chaired by the Director of the Department of Environment. This committee which comprise of various stakeholders including government and private institutions oversees the implementation of ozone activities. Several targeted meetings will be organized with the private sectors including hotels, restaurants, servicing sectors and technical training bodies which are the institutions that have traditionally provided training in the refrigeration sector and with the Customs Department for assisting in development of licensing and quota system for HFCs.

Components Proposed for Enabling Activities

Proposed Component 1:	Facilitation of Ratification of the Kigali Amendment
Objective	To achieve a broader understanding of the Kigali amendment provisions and to prepare legislative bases for the ratification
Target Group:	High-level decision makers, relevant governmental institutions, private companies and servicing technicians in the sectors that are using HFCs
Description of activities	<ol style="list-style-type: none"> 1. Review/Analysis of existing Ozone and Climate Policies (Nationally Determined Contributions), Standard, Regulations, and Legislations (Occupational Safety and Health Act, Dangerous Chemical Control Act, Consumer Protection (Supplies and Price Control) Regulations 2. Consultations with State Law Office and prepare base paper to allow for ratification of the Kigali amendment (HFC phase-down schedule, licensing requirements, HFC reporting requirements, safety standards) 3. Drafting the amendments texts in the existing legislation (s) and as applicable, draft Regulations to cater for required provisions for domestication 4. Prepare Drafting Instructions, as required by the State Law Office to ease administrative procedures for national legislative process 5. Production of information sheets on the Kigali amendment to facilitate consultations and speed up the ratification (translation of the Ozone Secretariat's briefing note on ratification and OzonAction factsheets into national language and printing of the translated documents) 6. Finalizing the package on the ratification of Kigali amendment and advancing the ratification process
Outputs	<ol style="list-style-type: none"> a) Base Paper for analyzed/ revised existing Ozone and Climate Policy and Legislation in place b) At least 4 stakeholder consultative meetings during the legislation drafting process c) Consultations including with State Law Office d) Awareness materials on HFC phase down produced e) Legal texts to domesticate Kigali amendment in place

Proposed Component 2:	Capacity-Building & Training on Alternatives
Objective	To identify the training needs in the servicing sector and enforcement sectors that would allow for a successful HFC phase-down
Target Group:	Training institutes involved in capacity-building in the RAC sectors, servicing technicians, importers of RAC equipment and refrigerants and customs
Description of activities	<ol style="list-style-type: none"> 1. Undertaking training needs assessment for the servicing sector and preparing an assessment report that will be used for further planning of the activities related to use of HFCs and low-GWP alternatives. For these activities, hiring a national consultant with good understanding of the provisions of the Montreal Protocol and Kigali Amendment will be needed. Consequently, consultative meetings, elaboration of terms of reference and interviews with the technicians/training institutes/importers will be carried out 2. Undertaking training needs assessment of customs and other enforcement agencies on effective monitoring and control of HFC importation 3. Conduct awareness sessions for technicians on safe handling of HFCs alternatives (natural refrigerants) and update technicians with new technologies and refrigerants gases on the local market
Outputs	<ol style="list-style-type: none"> a) Training Needs for RAC sector identified b) Training needs for enforcement officers for effective monitoring and control imports of HFCs identified c) At least 4 awareness sessions on identification of HFCs and its alternatives conducted

Component 3:	Article 4B licensing and reporting
Objective	To develop and update regulatory frameworks to incorporate control measures for HFCs
Target Group:	Customs Officers, relevant government agencies, importers/exporters of HFCs and HFC-containing equipment
Description of activities	<ol style="list-style-type: none"> 1. Revise the existing National Ozone Depleting Substances legislation (and ODS based equipment) and drafting the ODS alternative regulation to allow early ratification of the Kigali Amendment (HFC phase-down schedule, licensing requirements, HFC reporting requirements) 2. Assisting Customs Office in developing national custom codes for different HFCs and include them into the Customs Tariff in order to ensure proper monitoring and recording of imports/exports or re-export of individual HFCs. Assist the Customs Department to develop country-specific national HS Codes for HFCs to facilitate proper monitoring and recording of imports/exports of individual HFCs/alternatives 3. Establish a quota system for the import of HFCs with respect to its phasing-down 4. Conduct informative meetings with concerned stakeholders on standard for the refrigeration and air-conditioning sector and on the quota system for HFCs
Outputs	<ol style="list-style-type: none"> a) National ODS regulation revised b) Country-specific national HS Codes for HFCs developed c) Quota system established for the import of HFCs d) At least 4 informative meetings on standard for the refrigeration and air-conditioning sector and on the quota system for HFCs

Proposed Budget

Activities	Proposed cost in (USD) without PSC
<i>Component 1: Facilitation of ratification of the Kigali amendment</i>	61,000
1. Analysis of existing legislation and drafting amendments (2 national consultants x 5 months x US\$ 2,000.00) :	20,000
2. Stakeholder consultations to facilitate the ratification process at the national level (4 stakeholders' consultation x US\$ 4,000.00)	16,000
3. Drafting the law on ratification of the Kigali amendment with the justification document, as required by the national legislative process (2 national consultant x 4 months x US\$ 2,000.00)	16,000
4. Production of information sheets on the Kigali amendment to facilitate consultations and speed up the ratification	8,000
5. Preparing the package on the ratification of Kigali amendment (miscellaneous expenses – printing, copying, editing etc.)	1,000
<i>Component 2: Capacity-building & training on alternatives</i>	57,000
1. Undertaking the training needs assessment for the servicing sector and preparing an assessment report	25,000
2. Carrying out of at least 4 awareness sessions on identification of HFCs and its alternatives conducted	12,000
3. Undertaking training needs assessment of customs and other enforcement agencies on effective monitoring and control of HFC importation	20,000
<i>Component 3: Article 4B licensing and reporting</i>	32,000
1. Revision of existing National ODS legislation and drafting the HFCs and law GWP alternatives (1 national Expert x 4 months x US\$ 2,000.00)	8,000
2. Assisting national customs authorities in establishing national custom codes for HFCs and setting up the the quota system (2 national Expert x 3 months x US\$ 2,000)	12,000
3. Conduct informative meetings on standard for the refrigeration and air-conditioning sector and on the quota system for HFCs (4 meetings x US\$ 3,000)	12,000
Total in (USD) without PSC	150,000

Implementation Plan

Activity	Responsible Entity	Target Group	Start Date (Month/Yr.)	Date Of Completion (Month/Year)	Budget (US\$)	Milestones	Expected Outputs
Component 1: Facilitate the Ratification of the Kigali Amendment							
Analysis of existing legislation and drafting amendments for domestication of relevant provisions of Kigali Amendments	NOU	RAC, Govt. Ministries (MEACC), Customs Office, Police Department	February 2019	June 2019	20,000	Base Paper on analyzed legislations	Provision of the document on analyzed legislations and draft amendments
Conduct stakeholder consultative meetings on enabling policies and strategies for quick adoption of low GWP HFC alternative technologies and the phase down process of HFCs	NOU	Ministries RAC, Govt. Ministries (MEACC), Customs Office, Police Department	February 2019	June 2019	16,000	Meeting Reports	At least 4 consultative meetings conducted
Drafting The law on ratification of the Kigali amendment with the justification document, as required by the national legislative process	NOU	RAC, Govt. Ministries (MEACC), Customs Office, Police Department	July 2019	November 2019	16,000	Legal texts prepared in consultation with State Law Office	Ratification documents to the Legislative Assembly or Cabinet (in case of regulations) prepared and submitted
Production of information sheets on the Kigali	NOU	RAC, Govt. Ministries	February 2019	October 2019	8,000	Awareness materials	Production of information sheets

Activity	Responsible Entity	Target Group	Start Date (Month/Yr.)	Date Of Completion (Month/Year)	Budget (US\$)	Milestones	Expected Outputs
amendment to facilitate consultations and speed up the ratification		(MEACC), Customs Office, Police Department					
Preparing the package on the ratification of Kigali amendment	NOU	RAC, Govt. Ministries (MEACC), Customs Office, Police Department	July 2019	December 2019	1,000	Final package on ratification of the Kigali amendment	Final package of ratification of the Kigali amendment submitted.
Component 2: Capacity Building and Awareness on HFCS and Alternatives Management							
Undertaking the training needs assessment for the servicing sector and preparing an assessment report	NOU	RAC Sector	February 2019	December 2019	25,000	Training needs Reports	Training Needs for RAC sector identified
Conduct awareness sessions for technicians on safe handling of HFCs and its alternatives.	NOU	RAC Sector	February 2019	June 2020	12,000	Meeting Reports	At least 4 awareness meetings on identification of HFCs and its Alternatives conducted
Undertaking training needs assessment of customs and	NOU	Enforcement Officers in the	February 2019	December 2019	20,000	Training needs Reports	Training Needs for enforcement

Activity	Responsible Entity	Target Group	Start Date (Month/Yr.)	Date Of Completion (Month/Year)	Budget (US\$)	Milestones	Expected Outputs
other enforcement agencies on effective monitoring and control of HFC importation.		RAC Sector					officers in the RAC sector identified
Component 3: Article 4B Licensing System and Reporting							
Revise the existing National Ozone Depleting Substances legislation (and ODS based equipment) and drafting the ODS alternative regulation to allow early ratification of the Kigali Amendment (HFC phase-down schedule, licensing requirements, HFC reporting requirements).	NOU	RAC sector, Enforcement Agencies, Importers	March 2019	December 2019	8,000	Review Reports	National ODS regulation revised, Country-specific national HS Codes for HFCs developed
Assisting Customs Office in developing national custom codes for different HFCs and include them into the Customs Tariff in order to ensure proper monitoring and recording of imports/exports or re-export of individual HFCs. Draft Preparation for the Normative Instruction that establishes HFC quotas and national standards for the RAC	NOU	Customs Office	Jan 2019	Dec 2019	12,000	Reports	Country-specific national HS Codes for HFCs developed. Quota systems established.

Activity	Responsible Entity	Target Group	Start Date (Month/Yr.)	Date Of Completion (Month/Year)	Budget (US\$)	Milestones	Expected Outputs
sector.							
Conduct informative meetings on standard for the refrigeration and air-conditioning sector and on the quota system for HFCs.	NOU	Enforcement agencies	Jan 2019	June 2020	12,000	Meeting reports	At least 4 informative workshops conducted

Statement by the Government and Implementing Agency

The Government of Mauritius and UN Environment confirm that the proposed enabling activities will not delay the implementation of HCFC phase-out activities in the country.

Enabling Activities for Kigali Amendment in Democratic Republic of Timor-Leste

As per Executive Committee decision 79/46

Submitted by UN Environment on behalf of National Director of Climate Change,
Ministry of Coordination of Economic Affairs, Timor-Leste

1. Background

Democratic Republic of Timor-Leste (Timor Leste) is a Party to the Montreal Protocol on Substances that Deplete the Ozone Layer. Timor Leste has acceded to the Vienna Convention, the Montreal Protocol, the London, Copenhagen, Montreal and Beijing Amendments on 16 September 2009. Timor Leste is in its internal process for the ratification of Kigali Amendment.

Although the country is classified as an Article 5 (1) country of the Protocol and eligible for financial support under the Multilateral Fund (MLF), Timor Leste did not receive any financial and technical assistance to phase-out CFCs in the country. The country only received financial support through the CFC and HCFC Phase-out Management Plan (CHPMP) that was approved by the Executive Committee (ExCom) at its 63rd Meeting in April 2011.

Currently, Timor Leste is implementing HPMP Stage I, Third Tranche and HPMP Stage II, First Tranche.

- HPMP Stage I is part of the CHPMP, which would assist Timor Leste to totally phase-out consumption of CFC immediately after approval of the project and to meet 10% HCFC consumption reduction target by 2015 (to achieve a sustained level of 0.45 ODP tonnes prior to 1 January 2015). Based on the ExCom decision to approve the third tranche, implementation of HPMP Stage I will be completed by December 2018.
- HPMP Stage II, which has objective to assist Timor Leste to meet 40% reduction in 2020 and 78% reduction in 2025 will be implemented until 2025.

Due to the recent restructuring of the government administration, Timor Leste's National Ozone Unit (NOU) is now under the National Director of Climate Change, Secretariat of State of Environment, Ministry of Coordination of Economic Affairs. The NOU is taking lead and acts as the principal focal point for all ODS phase-out activities including organizing data collection, issuing license, controlling, reporting and implementing education and public awareness. The NOU is also mandated to work closely with relevant government institutions and other entities to ensure that all HPMP Stage I and Stage II activities are implemented in timely and efficient manner.

The NOU is requesting UN Environment to submit this Project request, aimed to fulfil the initial obligations with regard to hydrofluorocarbon (HFC) phase-down, which includes facilitating ratification of the Kigali Amendment, establishing Article 4b licensing & quota system for HFCs and undertaking awareness and conducting specific capacity building activities. Based on ExCom decision 79/46, the eligible funding for enabling activities in Timor Leste is US\$ 50,000.

2. Country ODS policy and Compliance Status

2.1 Current ODS Policy

Prior to the implementation of CHPMP, Timor Leste issued a Government Notification to ban ODS and ODS using equipment imports (non-HCFC). To put in place a licensing system, the Government of Timor Leste issued the Decree-law on Control of Imports and Exports and Uses of ODSs on 29 May

2012 (hereafter refers as Decree-Law) to regulate the export and import of ODS and trade in Timor Leste. It has been entered into force since 14 August 2012 and used by the NOU to control trade and use of ODS (including HCFCs) through an enforceable import quota and licensing scheme.

The Decree-Law entails the following provisions:

- NOU is the only institute that is authorized to issue import quotas of HCFCs based on historical imports and national allowable consumption levels under the Montreal Protocol;
- Import of CFCs and CFC-based equipment are totally banned in Timor-Leste according to the Decree-law;
- All importers /exporters of HCFCs must register with the NOU to get license to import / export HCFCs, products, materials and equipment that have been designed to use with HCFCs;
- All importers are required to submit application to the NOU to obtain a license for the importation and exportation of any HCFCs and HCFC-based equipment;
- The importers / exporters that have been assigned a registration and license are required to submit an annual report describing the quantity traded of HCFCs and products, materials and equipment that have been designed to use with HCFCs by the first quarter of the following year;
- The controlling and inspection of methyl bromide is under the National Directorate for Quarantine, Ministry of Agriculture.

The Decree-law doesn't require license of importation of any ODS alternatives, for example, HFC and other hydrocarbons refrigerants. Similarly, the Decree-law does not have any provisions to control equipment containing or has been designed for these ODS alternatives.

2.2 Compliance Status

Timor Leste is not an ODS producing country but is an ODS import-dependent country. Given that there is no manufacturing sector using ODS in the country; HCFCs imported into the country has been solely used for servicing of refrigeration & air-conditioning (RAC) equipment. The main HCFC imported is HCFC-22. Consumption of HCFC as reported to the Ozone Secretariat during 2009-2017 is shown in table below.

Table 1: HCFC Consumption of Timor Leste during 2009-2017

	2009	2010	2011	2012	2013	2014	2015	2016	2017	Baseline Consumption
HCFC-22 (MT)	9.32	8.84	2.81	3.90	5.24	5.58	7.48	1.56	4.46	
Consumption of Annex C-I (ODP Tonnes)	0.5	0.5	0.15	0.21	0.29	0.31	0.41	0.09	0.25	0.50
Maximum Allowable Consumption as agreed with ExCom										
HPMP Stage I (ODP Tonnes)	-	-	-	-	0.50	0.50	0.45	N/A	N/A	
HPMP Stage II (ODP Tonnes)	-	-	-	-	-	-	-	-	0.45	

Timor Leste has complied with the maximum allowable consumption for HCFC consumption as agreed with the ExCom and also the Montreal Protocol obligations from 2013-2017. The table indicates that the country was experiencing the rising trend of HCFC consumption from 2012 to 2015. The growth of HCFC consumption has been attributed to the dramatic development of new infrastructure as part of the economic development of the country. The consumption of HCFCs in 2016 have thereon decreased from 2015 due to the reduced annual quota and licenses issued by the NOU, which was attributed to the

carry-over use of HCFCs has been from stockpiles. However, HCFC consumption in 2017 increased as these stockpiles were exhausted.

3. Requirement for Enabling Activity Project proposal

At present, Timor Leste is implementing HPMP Stage I, Third Tranche and Stage II, First Tranche. As mentioned previously, the main ODS in Timor Leste is HCFC-22 which was mainly used in the RAC servicing sector especially residential air-conditioner.

In 2017, the NOU with the assistance from UN Environment conducted an ODS alternative survey. The objective of the survey was to get a good understanding of the ODS Alternative substances used in the past, and the growth patterns of ODS alternatives by substance and equipments used in various applications. The survey revealed that there is no manufacturing of RAC appliances, foam, aerosol, portable fire extinguisher and solvent sectors associated with ODS alternative in the country. Timor-Leste consumed ODS alternatives only in the servicing of the RAC equipment. As there is no manufacturing of ODS alternatives in the country, ODS alternatives are supplied from other countries.

The main ODS alternatives used in the country are high GWP HFCs and HFC blends such as R-134a, R-410A, R-407C and R-404A in mobile air-conditioning, air-conditioning and domestic and commercial refrigeration sector. Flammable refrigerants, which are HFC-32 and R-600a have been available in the country in the residential air-conditioning sector and domestic refrigerator respectively. In the future, it is anticipated that R-410A will be dominated in Timor Leste due to the increasing installation of residential air-conditioners. It is also anticipated that R-290 will also be introduced in the country for residential air-conditioning sector in the future, but with smaller market share when compared to R-410A and HFC-32.

Timor Leste supported the Kigali Amendment to the Montreal Protocol for HFC phase-down as it shares the global concern for curbing uncontrolled growth in HFCs and prevent climate change. It is the objective of the Government that through the Enabling Activity funds approved by the MLF, the country expressed its commitment to undertake necessary steps for ratification of the Kigali Amendment and meet the initial obligations of the HFC phase-down. Timor Leste would require support in undertaking enabling activities to create awareness and consensus amongst its stakeholders for ratification of Kigali Amendment, establish Article 4b licensing and reporting of HFCs and build local capacity for the safe use of low-GWP alternatives as initial requirements for HFC phase-down.

In this regard, the potential enabling activities that would be required for successful implementation of Kigali Amendment in the country are:

- Awareness and Consultation Workshop on Kigali Amendment amongst key government stakeholders and develop requisite documents for the ratification of the Kigali Amendment.
- Review the national policies, regulations and systems and provide recommendations to control HFCs import and export through the established licensing & quota systems, data recording, monitoring and reporting mechanism.
- Review the present institutional frameworks established for HCFC phase-out plans for sustainable transition into HFC phase-down. As there would be additional stakeholders from those collaborated during HPMP implementation, there is need to assess the broader stakeholders and develop new partnerships that would be pertinent to implementing HFC phase-down obligations. For instance, mapping of institutions, functions and proposed partnerships to promote energy efficiency and safety knowledge/skills along with the promotion of low GWP technologies.
- Awareness workshops for the service sector technicians on low GWP technologies, in particular flammable refrigerants and their safe handling.
- Assessment of readiness of servicing sector and the needs for safe adoption and handling of low GWP technologies.

- Knowledge products and outreach materials on Kigali Amendment.

4. Components proposed for enabling activities

Proposed Component 1	Stakeholder Consultation Workshops and facilitation of Kigali Amendment Ratification
Objective:	Achieving greater awareness and consensus understanding of the Kigali Amendment amongst the key stakeholders and preparation of document to support for ratification of Kigali Amendment.
Target Group:	<ul style="list-style-type: none"> - Government agencies such as Customs, National Labor Force Development Institute (INDMO), vocational schools, energy efficiency office, climate change office and green public procurement etc. - Importers & retailers of refrigerants and RAC/MAC equipment. - MAC/RAC service workshops and technicians - Private Sector & large end-users
Description of activities	<ul style="list-style-type: none"> - Identify, sensitize and consultation with key stakeholders on Kigali Amendment and the roles of various agencies. - Prepare relevant documents/background notes, which is required to facilitate the cabinet approval for the ratification of the Kigali Amendment. - Develop country assessment report on the implementation of Kigali amendment.
Outputs	<ul style="list-style-type: none"> - At least 1 national consultation workshop for Kigali Amendment ratification. - At least 1 stakeholder consultation workshop for country assessment report feedback. - Draft Country Assessment Report for Kigali Amendment.
Outcome	Enable the policy and technical discussions to facilitate the ratification of Kigali Amendment.

Proposed Component 2	Capacity Building and Training on low GWP alternatives
Objectives:	Increase the awareness and capacity of servicing sector and large end-users on HFC alternatives and opportunities for energy efficiency.
Target Group:	NOU, servicing sector, importers of HFCs/alternatives and equipment, end-users, energy focal points, training institutes etc.
Description of activities	<ul style="list-style-type: none"> - Organizing a round table discussion on low-GWP alternatives and energy efficiency opportunities for RAC/MAC servicing sector targeting larger end-users (supermarkets, shopping malls etc.). - Assessing readiness of servicing sector and the needs for safe adoption and handling of low GWP technologies. - Training workshop to demonstrate the service practices on low GWP and flammable refrigerant based systems.
Outputs	<ul style="list-style-type: none"> - At least 1 round table discussion on HFC alternatives and energy efficiency linkages for RAC & MAC service sector and related energy efficiency opportunities. - At least 1 training workshop on flammable refrigerants for service technicians.

	<ul style="list-style-type: none"> - Report on challenges and requirements for introducing low-GWP alternatives in the servicing sector e.g. training requirement, availability of tools/equipment, and safety standards, among others.
Outcome	Understanding of the challenges and needs of servicing sector and large-end users improved on low-GWP alternatives and requirements for handling such technologies under HFC phase-down. Capacity of servicing sector to handle low GWP and flammable refrigerant is strengthened.

Proposed Component 3	Article 4B licensing & Reporting
Objective:	Facilitate the establishment of HFC licensing and reporting mechanism under Article 4B of the Montreal Protocol.
Target Group:	NOU, customs authority, importers, retailers, relevant government agencies etc.
Description of activities	<ul style="list-style-type: none"> - Comprehensive review of ODS import/export licensing/quota system, to identify how to include HFCs, and HFCs based equipment into the licensing system. - Coordinate with Customs Authority to explore the possibility to revise the national codes/HS codes for commonly imported HFCs and HFC blends in order to ensure proper monitoring and recording of imports/exports of individual HFCs/alternatives substances. - Review the current approach and methodologies related to the collection, verification and country reporting of HFCs use and determine the approach to strengthen the data collection and monitoring mechanism. - Assess the legislation and policy options where HFC consumption could be controlled/reduced.
Outputs	<ul style="list-style-type: none"> - At least 2 consultation workshops with customs authority and relevant government agencies and stakeholders on (i) reviewing the existing licensing, quota, monitoring and reporting system and (ii) finalizing the procedures for implementation of licensing and quota system for HFCs as well as data collection, verification and reporting of HFCs. - Procedures for implementation of licensing and quota system for HFCs as well as data collection, verification and reporting for establishment of licensing/quota system for HFCs to meet all requirements of the Article 4B. - Recommendations for further legislation and policy measures for phasing down HFCs.
Outcome	Facilitating the establishment of licensing/quota system for HFCs to meet all requirements of the Article 4B and HFCs is effectively controlled during Kigali Amendment implementation.

Proposed Component-4	Communication & Awareness
Objective	Raise general awareness of the public and various end-users about the importance and benefits of Kigali Amendment.
Target Group:	NOU, schools, universities, general & specific end-users, importers, service sector, retailers etc.
Description of activities	<ul style="list-style-type: none"> - Develop flyers and information brochures on benefits of Kigali Amendment. - Develop quick tool /guide on energy efficiency ratings, labels and cost benefits for general public

	<ul style="list-style-type: none"> - Develop quick information flyers and posters on ODS alternatives and their safe handling. - Partner with schools, importers, service technicians and other relevant agencies for distribution and outreach of such materials.
Outputs	<ul style="list-style-type: none"> - Information Brochures on benefits of Kigali HFC amendment (Portuguese and Tetum) - Quick Guide to general public on benefits of Energy Efficient appliances. (Portuguese and Tetum) - Poster (Do's and Don'ts) for safe handling of ODS alternatives. (Portuguese and Tetum)
Outcome	Better understanding of the Kigali Amendment of the public and raised awareness on ODS free, low GWP and higher energy efficiency products.

5. Institutional arrangements for implementation of enabling activities.

The NOU would be responsible for the project implementation, monitoring and progress reporting. UN Environment would provide the necessary support to the NOU with regards to project implementation, as well as progress reporting and administrative closure of the project to the MLF.

The NOU would also seek the guidance and supports from the relevant government stakeholders that would be involving the implementation of the Kigali Amendment, especially, the government agencies that are in charge of energy efficiency, standards and climate change to promote energy efficient and climate friendly technologies in line with obligations of the Kigali Amendment. In addition, the private sector, equipment importers, industry and RAC service sector will also be engaged positively to the project activities and stakeholder workshops. The project duration is proposed to be 18-months and the project implementation plan is placed in Annex-I.

6. Budget

Activities	Budget without PSC (US\$)
Component 1: Stakeholder Consultation Workshops and facilitation of Kigali Amendment Ratification	
1.1 Technical Assistance for preparation of relevant documents/background notes for cabinet approval and Country Assessment Report (1 national consultant x 3 months x US\$ 2,000)	6,000
1.2 Organizing (i) consultation workshop for Kigali Amendment ratification and (ii) stakeholder consultation workshop for country assessment report feedback (2 workshops x US\$2,000)	4,000
Sub-total:	10,000
Component 2: Capacity Building and Training on low GWP alternatives	
2.1 Undertaking an assessment for the servicing sector that will be used for further planning of the activities related to adoption of low-GWP and flammable technologies. (2 meeting x US\$1,000; 1 national consultant x 2 months x US\$ 2,000)	6,000
2.2 Organizing a round table discussion on low-GWP alternatives for RAC/MAC sub-sector targeting larger end-users (1 national round table x US\$ 3,000)	3,000

2.3 Training workshop for servicing sector on safe handling of flammable alternatives. (1 workshop x US\$ 2,000; one international expert US\$3,000)	5,000
Sub-total:	14,000
Component 3: Article 4B licensing and reporting	
3.1 Conducting comprehensive review of ODS import/export licensing/quota system and procedures and develop procedures for implementation of licensing and quota system for HFCs, HFC blends and HFC based equipment as well as data collection, verification and reporting (2 consultation meetings x US\$ 1,000; 1 national consultant x 2 month x US\$ 2,000)	6,000
3.2 Drafting and finalizing the legal text for the amendment of the existing regulation to include HFC licensing and quota system as well as data collection, verification and reporting based on agreed procedures. (2 consultation meeting x US\$ 1,000; 1 legal consultant x 1 month x US\$ 4,000)	6,000
3.3 Coordinating with Customs Authority and explore the possibility to revise the national HS codes for commonly imported HFCs and HFC blends in order to ensure proper monitoring and recording of imports/exports of individual HFCs/alternatives substances. (2 consultation meeting x US\$ 500; 1 national consultant x 1-month x US\$ 2,000)	2,000
Sub-total:	15,000
Component 4: Communication & Awareness	
4.1 Development of knowledge products e.g. quick guides, brochures and flyers on Kigali Amendment, Safe-Handling of Low GWP technologies etc. (1 consultant x 2 months x US\$ 2,000)	4,000
4.2 Design and publication of awareness material obtained from EA activities.	7,000
Sub-total:	11,000
Total Cost without PSC	50,000

7. Enabling activities milestones and time plan

Activities	February 2019 – July 2020																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Component 1:																		
Activity 1.1		X	X	X	X	X	X	X	X	X	X	X						
Activity 1.2		X	X	X	X	X	X	X	X	X	X	X						
Component 2:																		
Activity 2.1		X	X	X	X	X	X	X	X	X								
Activity 2.2							X	X	X	X								
Activity 2.3											X	X	X	X	X			
Component 3:																		
Activity 3.1		X	X	X	X	X	X	X										

Activity 3.2								X	X	X	X							
Activity 3.3					X	X	X	X	X	X	X	X	X	X	X	X	X	X
Component 4:																		
Activity 4.1		X	X	X	X	X	X	X	X	X	X							
Activity 4.2						X	X	X	X	X	X	X	X	X	X	X	X	X

8. Statement by the Government and Implementing Agency

The Government of Timor Leste and UN Environment confirm that the proposed enabling activities will not delay the implementation of HCFC phase-out activities in the country.

Project Implementation Plan

Annex-I

Activity	Responsible entity	Target Group	Start Date M/Y	Date of Completion M/Y	Budget (US\$)	Milestones	Expected outputs
Component 1: Stakeholder Consultation Workshops and facilitation of Kigali Amendment Ratification							
1.1 Preparation of relevant documents/background notes for cabinet approval and Country Assessment Report	NOU UN Environment	<ul style="list-style-type: none"> ○ Customs, National Labor Force Development Institute (INDMO), vocational schools, energy efficiency office, climate change office and green public procurement etc. ○ Importers & retailers of refrigerants and RAC/MAC equipment. ○ MAC/RAC service workshops and technicians ○ Private Sector & large end-users 	March 2019	January 2020	6,000	Consultant hired Desk Research and review Consultation Meeting Summary Stakeholder review of country assessment report	Recommendations/documents for initiation/facilitation of Kigali ratification Country assessment report for implementation of Kigali Amendment and support of the ratification process.
1.2 Organization of Awareness/Stakeholders Workshop and Government Consultation Workshop on Kigali Amendment and Consultation Workshop on Country Assessment Report. (2 workshops)			March 2019	January 2020	4,000	Agenda of the workshops finalized. Stakeholders identified Workshop report	Increased awareness of the stakeholders on Kigali Amendment.
Sub-Total					10,000		
Component 2: Capacity Building and Training on low GWP alternatives							
2.1 Undertake an assessment for the servicing sector to adopt low-GWP and flammable technologies.	NOU UN Environment	NOU, servicing sector, large end-users, energy focal points, training institutes etc.	March 2019	November 2019	6,000	Consultant hired Service Sector Survey, Assessment & Recommendation Report	Service Sector Assessment that would be used for future planning under Kigali Amendment.
2.4 Organizing a round table discussion on low-GWP			August 2019	November 2019	3,000	Agenda of the round table finalized.	Increased Awareness of Service sector and specific

alternatives for RAC/MAC sub-sector targeting larger end-users (1 round table)						Stakeholders identified Workshop reports	sub-sectors such as RAC, MAC and large end-users.
2.5 Training workshop for service sector on safe handling of flammable HFC alternatives. (1 Workshop)			December 2019	April 2020	5,000	Agenda of the workshop finalized International expert hired Workshop report	Increased understanding of the service sector on safe handling of HFC alternatives.
Sub-Total					14,000		
Component 3: Article 4B licensing and reporting							
3.1 Conducting comprehensive review of ODS import/export licensing/quota system and develop procedures for implementation of licensing and quota system for HFCs, HFC blends and HFC based equipment as well as data collection, verification and reporting	NOU UN Environment	NOU, customs authority, importers, retailers, relevant government agencies etc.	March 2019	September 2019	6,000	Consultant Hired Desk Research & Literature Review Consultation Meetings Meeting Summary & Draft Recommendations	Review of present policies and legislations and provisions to include HFCs
3.2 Drafting and finalizing the legal text for the amendment of the existing regulation to include HFC licensing and quota system as well as data collection, verification and			August 2019	November 2019	6,000	Draft Amendment for licensing, quota and reporting system for HFC Consultation meetings	Article 4b licensing and reporting system proposal

reporting based on agreed procedures							
3.3 Coordinating with Customs Authority and explore the possibility to revise the national HS codes for commonly imported HFCs and HFC blends in order to ensure proper monitoring and recording of imports/exports of individual HFCs/alternatives substances			June 2019	July 2020	2,000	HS code of HFCs import	Review of present national codes/HS codes for HFCs
Sub-Total					15,000		
Component 4: Communication & Awareness							
4.1 Development of knowledge products e.g. quick guides, brochures and flyers on Kigali Amendment, Safe-Handling of Low GWP technologies etc.	NOU UN Environment	NOU, schools, general & specific end-users, importers, service sector, retailers etc.	March 2019	December 2019	4,000	Brochures & Quick Guide for awareness and distribution	Information material on Kigali Amendment related benefits distributed for wider awareness.
4.2 Design and publication of awareness material obtained from EA activities			July 2019	July 2020	7,000	Printing and distribution of the awareness materials	
Sub-Total					11,000		
Grand Total (without PSC)					50,000		