



OZONACTION COMPLIANCE ASSISTANCE PROGRAMME
2021-2023 STRATEGY
AND
2021 WORKPLAN, BUDGET AND PROGRESS REPORT

Submitted by

United Nations Environment Programme

to the 86th Executive Committee Meeting

CONTENTS

Introduction.....	1
Part I: 2021-2023 CAP Strategy	1
Purpose.....	1
Objectives	2
Strategic context.....	2
Vision.....	8
Comparative Advantage – UNEP's Mandate and Value addition.....	11
Shifting the Needle in 2021-2023	13
Part II: 2021 CAP Workplan and Budget	18
Part III: 2020 CAP Progress Report.....	28
Annex 1 – CAP budget proposal for 2021	42
Annex 2 – Financial analysis of CAP budget proposal for 2021	45
Annex 3 – CAP organigram.....	47
Annex 4 – OzonAction CAP partnerships	48
Annex 5 – Logical Framework Analysis for 2021	56
Annex 6 – Implementation of UNEP-assisted Article 5 country projects in 2021	68
Annex 7 – Country-Specific Project Services Proposed for 2021	73
Annex 8 – Progress report on four global CAP activities.....	84
Annex 9 – Report on the use of CAP staff for Multilateral Fund and Montreal Protocol activities.....	98
Annex 10 – Meetings and workshops organised by CAP.....	100

INTRODUCTION

1. In its capacity as an Implementing Agency of the Multilateral Fund, UN Environment Programme (UNEP) is submitting this document for the consideration of the Executive Committee at its 86th meeting. The document comprises:

- Part I: *2021-2023 Compliance Assistance Programme Strategy*.
- Part II: *2021 CAP Workplan and Budget*, with associated annexes.
- Part III: *2020 CAP Progress Report*, with associated annexes.

PART I: 2021-2023 CAP STRATEGY

PURPOSE

2. This strategy sets the overall vision and direction of the Compliance Assistance Programme (CAP) for the 2021-2023 period in UNEP's capacity as an Implementing Agency of the Multilateral Fund for the Implementation of the Montreal Protocol on Substances that Deplete the Ozone Layer. The period covered by this strategy is aligned to match the Multilateral Fund's Business Planning cycle. UNEP reviews and updates the strategy at the beginning of each triennium to reflect the evolving situation of Article 5 countries with respect to the Montreal Protocol and its Amendments. This is the third such strategy that UNEP has submitted.¹

3. UNEP developed this strategy based on the current and anticipated needs of Article 5 countries that it identified from various sources and through consultations and interactions with concerned stakeholders. This "need-based" approach considered feedback UNEP collected during its meetings of the Regional Networks of Ozone Officers, the CAP teams' regular and direct consultations with National Ozone Units (NOUs), ideas generated during joint implementation activities with our sister Implementing Agencies and bilateral agencies, as well as interactions with the Multilateral Fund Secretariat and Ozone Secretariat. UNEP also reviewed the two previous strategy documents as well as the decisions and discussions of the key Montreal Protocol events that have taken place since the last strategy was adopted three years ago.² This strategy follows UNEP's Results Based Management approach that includes a Theory of Change.

4. This strategy was developed during the unprecedented COVID-19 pandemic, which began in early 2020 and may continue for some time. All members of the Montreal Protocol family, including the NOUs and the Implementing Agencies, face continuing challenges associated with the virus. Health regulations, travel restrictions, social distancing requirements, teleworking, and macroeconomic impacts have affected every aspect of this collective work, including *inter alia* data collection, project implementation, project submissions, physical meetings, and missions. In spite of these daunting

¹ The previous strategies covered the periods 2016-2018 (UNEP/OzL.Pro/ExCom/75/33/Rev.1) and 2018-2020 (UNEP/OzL.Pro/ExCom/80/28).

² Namely, the 81st, 82nd, 83rd, 84th, and the intersessional Executive Committee meetings; the March and September 2018, March and October 2019, and February 2020 Inter-Agency Coordination Meetings; the 30th and 31st Meetings of the Parties; the 40th and 41st Open-Ended Working Group meetings; and the 60th, 61st, 62nd, and 63rd Implementation Committee meetings.

challenges, all Article 5 countries continue to demonstrate high-level commitment to implement the Montreal Protocol and a considerable number of projects and activities have progressed. In terms of UNEP's own operations, the COVID-19 pandemic has mainly impacted the delivery of those activities requiring travel (staff, participants, and consultants) as well as meetings and training that require physical participation. Most other CAP activities (compliance assistance services, global information and capacity building activities, project support, etc.) have progressed well in 2020 in spite of the challenges.

5. UNEP will apply the lessons it learned during its experience in 2020 assisting Article 5 countries under COVID-19 conditions to the future activities presented in this strategy. This includes provision of more online operations (e.g. virtual meetings, webinars, distance training, e-learning and digital platforms), increased communication with Ozone Officers, additional information products and services, backloading of physical meetings to the latter part of the implementation period, and collaborating with the Multilateral Secretariat and sister Implementing Agencies to identify alternative approaches to deliver projects and activities during COVID-19 conditions. UNEP will mitigate the impacts of COVID-19 on its work through a dynamic response that includes contingency planning, redesign of activities, and appropriate scheduling of work at the international, regional and national levels. UNEP acknowledges that the strategy is dynamic and may need to be adjusted in the future depending on the evolving situation of the COVID-19 pandemic. Through its implementation of Multilateral Fund projects and activities under this strategy, CAP will contribute to the wider efforts of "Building Back Better."

OBJECTIVES

6. The strategy is based on UNEP's clearinghouse mandate as per Article 10 (3) (b) of the Montreal Protocol as well as its specific comparative advantages. Within the three years covered by the strategy, UNEP identified eight major outcomes (explained below) that can be grouped into four broad objectives:

- Assisting National Ozone Units and strengthening national Montreal Protocol frameworks (Outcomes 1, 2, 3);
- Assisting Article 5 countries to comply with their HCFC phase-out commitments and sustaining compliance with prior targets. (Outcomes 4, 5, 8);
- Strengthening the refrigeration servicing sector for ozone- and climate-friendly alternatives (Outcome 6); and
- Promoting ratification of the Kigali Amendment and supporting implementation of the HFC phase-down. (Outcomes 7, 5).

STRATEGIC CONTEXT

7. UNEP's work under the Multilateral Fund revolves around certain major thematic areas that are critical for Article 5 countries with respect to their Montreal Protocol obligations and which relate to UNEP's specific mandate. These themes are not static and have evolved since the previous strategy was developed at the end of 2017. This new strategy reflects the current context for Article 5 countries as per the thematic areas outlined below.

8. **HCFC phase-out.** The primary task in front of the Montreal Protocol community continues to be the phase-out of ozone-depleting substances, which today are principally HCFCs. In 2020, Article 5 countries are required to reduce their consumption of HCFCs by 35%, which will be verified in September 2021 once the Article 7 data are reported. Most countries have therefore not yet reached their mid-points in terms of addressing HCFCs and considerable work is still ongoing. Continued actions need to be taken to implement and/or prepare the various Stages (I, II, and III) and tranches of their HCFC Phase-out Management Plans (HPMPs) to achieve compliance with the countries' agreements with Executive Committee. This includes both HPMP development, implementation, monitoring and verification, as well as the elaboration, implementation and enforcement of the related legislative, policy, institutional, capacity building and programmatic measures to phase-out these substances. During the next three years, most Article 5 countries must also prepare and initiate activities to reach the next reduction step of 67.5% by 2025, and begin planning their longer-term strategy of reaching the total phase-out by 2030.

9. **Kigali Amendment.** The Kigali Amendment entered into force on 1 January 2019. By phasing down HFCs, an estimated global warming of 0.4 °C could be avoided by the end of this century. Article 5 countries are currently in the ratification stage. As of 17 August 2020, 100 Parties have ratified the Kigali Amendment of which 65 are Article 5 Parties. Of the latter, 46 have Institutional Strengthening projects with UNEP. While many of the Article 5 countries have progressed, others are at different stages in the process of ratification. The ultimate goal is to achieve the universal ratification of the Amendment and collaborative effort at different levels is needed to make it happen. For the countries that have already ratified, it is of highest priority that all of them establish an enforceable HFC import/export licensing system no later than 1 January 2021 and operationalize and enforce that system from that date forward. Licensing and quota systems will thus require great attention over the next three years. All countries that have ratified the Kigali Amendment before October 2019 will need to report 2019 HFC consumption and production data by 30 September 2020. Article 5 Group 1 Parties to the Kigali Amendment will need to accurately report their HFC consumption to establish their HFC baselines and to determine their starting points for sustained aggregate reductions. The countries that have not yet ratified the Amendment will also need to accurately monitor their HFC consumption during the same time period, to be used for the same two purposes as and when they ratify. Additionally, during this period some Article 5 countries will prepare and begin implementing their Kigali HFC phase-down management plans. Many of the 92 Article 5 countries which have UNEP-assisted Enabling Activities projects will complete their projects in 2021. Those countries will need to reflect on the lessons learned and apply them to early actions for implementing the Kigali Amendment.

10. **National Ozone Units.** Since Article 5 countries are in the driver's seat of Montreal Protocol implementation, then the NOUs are the drivers. They are responsible for managing their national ozone strategies and programmes and informing their countries' decision-making and policy-making. The roles and responsibilities of these units are evolving quickly, given the recent changes to the Montreal Protocol, the multiple sectoral challenges on different fronts, the need to prepare for the simultaneously HCFC phase-out and the HFC phase-down. It is critical that Ozone Officers and their staff have the right capacity and know-how to meet these challenges. Staff turnover in some regions continues to be an important factor and there is a need to ensure business continuity and handover protocols within all NOUs. Some may require specific assistance to strengthen their daily operations related to planning, information/file management, administration and finance. Capacity building of new NOU staff and further strengthening the knowledge and skills of existing staff will further professionalize the Ozone Officer role.

11. **Low-volume consuming countries.** While much has been achieved in recent years in countries that consume low or very low quantities of controlled substances, the overall conditions still prevail – they have fewer human and institutional resources, their economies are small, many are geographically remote, and they are "technology takers." Countries classified as Small Island Developing States or Least Developed Countries also face their own unique challenges. The overwhelming majority of low-volume consuming country (LVC) consumption is in the refrigeration servicing sector. They still need focussed attention and additional support, as testified by decisions in support of this category of country taken in Montreal Protocol fora over the last three years.

12. **Data reporting.** Data are the lynchpin of the Montreal Protocol system. Incomplete, absent or late data submissions can create multiple problems ranging from difficulties in assessing compliance to project submission delays. It is therefore critical that countries report accurate and timely data under Article 7 of the Montreal Protocol and Country Programme data reports. There have been a number of changes to data reporting requirements recently, including revised Article 7 and Country Programme data reporting formats, the introduction of a new online system for submitting Article 7 data, and new requirements related to HFCs for those countries that have ratified the Kigali Amendment. Currently most countries report on a small number of substances and sectors, however with HFC reporting in the next few years (including the complexity of HCFC and HFC-containing blends), the scope of the reporting will substantially increase for Article 5 countries. It is increasingly important that they cross-check the two main data sets, identify and resolve data differences (reconciliation), and ensure that project proposals are consistent with those data. Some NOUs will need support to establish mechanisms to collect and reconcile data from different sources. Article 5 countries will require support for accurate HFC baseline consumption reporting to the Ozone Secretariat. Beyond the reporting requirements, countries also have an opportunity to do more analysis of their own data to help inform the future Montreal Protocol strategies.

13. **Monitoring, reporting, verification and enforcement (MRVE).** Sustained compliance under the Protocol is a long-term process that requires sustained vigilance and action, including for controlled substances whose deadlines have passed. After the recent detection of unexpected emissions of CFC-11, a substance that was phased out globally in 2010, different Montreal Protocol fora emphasized the need to safeguard the gains made and continue the treaty's success by ensuring that all Parties including Article 5 countries have robust MRVE systems. Compliance challenges need to be avoided or addressed at an early stage, and the capacity of developing countries to deal with them needs to be reinforced. Enforcement issues and combating illegal production, consumption and trade in controlled substances are now at forefront. Article 5 countries need to understand the strength and weaknesses of their MRVE systems and identify potential gaps and vulnerabilities. A broad approach towards enforcement that emphasizes prevention up front is needed, in which the regulated communities are made aware and educated about their countries' Montreal Protocol obligations so as to avoid violations in the first place. Some countries need assistance to bolster their legislative and regulatory frameworks, enforce them more vigorously to act as deterrents, and bring those responsible for illegal activities to justice. Both formal and informal approaches should be used, including tools such as the informal Prior Informed Consent (iPIC) mechanism. They also need to consider how to sustain long-term compliance after Multilateral Fund projects have been completed, and consider how ongoing projects can further support enhanced MRVE. Based on the CFC-11 experience, a new approach is needed that considers the role of all actors of different levels in the national compliance and enforcement chain, including Customs, environmental inspectors, enforcement personnel, police, border police including coast guards, prosecutors, and judges. Expanded engagement of these compliance and enforcement stakeholders on Montreal Protocol issues, as well as the related capacity building, is critically needed.

14. ***Customs cooperation and combatting illegal trade.*** The importance of Customs as one of the main stakeholders to enforce the national provisions of this trade-based multilateral environmental agreement was repeatedly emphasized at various Montreal Protocol fora over the last three years. New challenges are emerging for Customs, including growing illegal trade in controlled substances, the complexity of refrigerants that need to be controlled, new data reporting requirements, and the absence of designated Harmonized System (HS) codes for HFCs. The new HS codes will only enter into force on 1 January 2022 and interim code systems are needed for countries that have ratified the Kigali Amendment (noting that the adoption of new HS codes is a complex and lengthy process). There is a need to continue engaging with Customs agencies to integrate Montreal Protocol-related work into their various operations to address such challenges, for example in risk profiling, screening of declarations, on-site inspections and post-clearance auditing. Increasingly, NOUs need to cooperate and coordinate with their Customs agencies (e.g. regional enforcement meetings), and to connect with other regional and international enforcement organisations to fight illegal trade that undermines Montreal Protocol compliance and successes. Capacity building of Customs for effective control of trade of controlled substances will continue to be in high demand, and it should increasingly target both frontline officers as well as the officers who conduct the risk profiling and training. Initiatives such as border dialogues, risk profiling, cooperation with key partners (brokers, dealers, shippers, chemical producers, etc.), awareness raising including awards, have proven their usefulness for fighting illegal trade and will be needed again in the coming phase. Additional efforts will be required to encourage Customs training academies to institutionalize the Montreal Protocol training. A renewed strategic relationship with the World Customs Organisation (WCO) will benefit all Article 5 countries.

15. ***Refrigeration servicing sector.*** There are an estimated 3.6 billion refrigeration and air conditioning devices installed in the world. With an increasing population now living in middle-income countries, that number is growing at a staggering pace and will contribute to the use and emissions of refrigerants. Between 2020-2030, depending on the country, some 80-100% of consumption of controlled substances will be in the refrigeration servicing sector. The sector therefore has a direct bearing on ensuring compliance with the HCFC phase-out, the future phase-down of HFCs, and climate mitigation. Even as the sector continues to grow in importance with the huge projected increase in demand, refrigeration and air conditioning (RAC) technology is evolving at a breakneck pace. Article 5 countries face myriad inter-related issues including, for example, safety, market availability of affordable and cost-effective alternatives, the low competency of some servicing technicians, the informal sector, the lack of critical servicing tools/equipment, contaminated refrigerants, mislabelled/fake refrigerants, disposal of unwanted or unusable refrigerants, and energy efficiency considerations. Single substance interventions need to be replaced by integrated (holistic) approaches to refrigerant management. More interventions are needed, including technology transfer, research and capacity-building. Article 5 countries need to be more aware of what refrigerants and technologies are in their markets, and market signals are needed to promote demand for alternative non-ozone depleting, lower-global warming potential (GWP) products. Specific thematic issues in the refrigeration servicing sector that will need some attention in the coming years include the fast growth of higher-GWP HFC consumption, installation and servicing of RAC equipment (particularly with new refrigerants), prevention of dumping of obsolete and inefficient equipment, and recovery and recycling. National refrigeration associations can be key partners for NOUs in addressing the refrigeration servicing sector challenges and should be further engaged and strengthened. In some cases, regional associations may be required.

16. **Technician training.** Training and capacity-building for RAC servicing remains a high priority for all Article 5 countries. A properly trained servicing workforce that knows how to work safely with the lower-GWP refrigerants is a precondition for Article 5 countries to adopt the new generation of ozone- and climate-friendly RAC technology. The good practices promoted over the past few years need to be extended to reduce HCFC consumption in the servicing sector, to promote safe handling of lower-GWP refrigerants, and to enhance/maintain the energy efficiency of the serviced RAC equipment. This capacity building process takes years to strengthen and it is a long-term investment for this critical consumption sector. Training content needs to be up-to-date to reflect safety issues related to new refrigerants, and include energy efficiency concerns. The training on good practices needs to be intensified, and it needs to be expanded to cover the maximum number of people who will handle flammable refrigerants. Article 5 countries are currently doing an admirable job at delivering RAC technician training, however in most countries there is no link to their Technical Vocational Education and Training (TVET) authorities. To ensure the long-term sustainability of the training, good practices content needs to be integrated into national TVET system, which include for example, the national occupational (competency) standards for RAC servicing technicians, the training curriculum of vocational institutions, and the national qualification certificate system including the Recognition of Prior Learning (RPL). To assist Article 5 countries to gain support from their TVET authorities, partnerships with other existing entities working in this area, such as UNESCO and ILO, will be useful. Technician training contributes to the professionalization of the sector and enhances the reputation of people working in the servicing sector, which in turn further empowers them as partners in Montreal Protocol compliance.

17. **Certification.** Technician training alone is insufficient and skill acquisition must be verified by some means. There has been growing and widespread recognition over the past few years that certification programmes are critical for the success of the Montreal Protocol. In this era of new refrigerants, which includes flammable, toxic and high-pressure alternatives, *all* people who handle those gases should do so in a professional and safe manner that meet at least a minimal industry requirements and codes of practice. Accordingly, all Article 5 countries using flammable refrigerants should consider establishing or adopting *some form* of certification for RAC servicing technicians, either mandatory or voluntary, preferably based on standards or legal frameworks. Only a small number of countries currently have such programmes, therefore significant attention needs to be focused on their development, which can be a long-term process. There is a great diversity of approaches, including certification programmes managed by refrigeration associations, the private sector, government ministries, or in some cases, by NOUs. Since not all Article 5 countries can develop formal, independent certification systems, different levels and types of certification are needed. A mix of full certification systems, hybrid options (like the Refrigerants Driver's License developed by UNEP and industry partners), and education are needed to cover the range of countries.

18. **Food cold chain.** According to the Food and Agricultural Organisation (FAO), some 1.3 billion tonnes of food were lost or wasted yearly worldwide, a phenomenon that produced approximately 8% of global greenhouse gas emissions. Reducing food loss contributes directly to reducing those emissions, and cold chains can help address food loss and ensure that farmers' produce reached markets in good condition and had a longer shelf life, with resulting benefits for the environment, farmers and consumers. The cold chain is one of the fastest-growing sectors with increasing HCFC and/or higher GWP HFC use, which pose challenges to the short term and long term compliance with the Montreal Protocol. The November 2019 *Rome Declaration on the Contribution of the Montreal Protocol to Food Loss Reduction through Sustainable Cold Chain Development* called on all relevant stakeholders to exchange knowledge and promote innovation of energy-efficient solutions and technologies that reduce

the use of substances controlled by the Montreal Protocol in the development of the cold chain, thereby contributing to the reduction of food loss and waste. A sustainable cold chain would reduce greenhouse gases, cut food loss and food waste, and contribute to feeding the planet's growing numbers of inhabitants. The cold chain is a strategic sector for Article 5 countries and therefore requires continued attention in the coming years, particular in terms of information exchange about technologies, sharing best practices and policies, and fostering cooperating with and between relevant stakeholders including FAO, the RAC industry, and NGOs working on cold chain issues.

19. ***Standards and codes of practice.*** Over the past three years, the Parties to the Montreal Protocol have reaffirmed through discussions and decisions the importance of standards for facilitating the expanded and safe use of lower-GWP refrigerants and equipment. Technology-producing countries are reluctant to provide equipment based on highly-flammable refrigerants until proper standards and regulations are in place in technology-receiving countries. Standards committees around the world are in the process of updating various safety standards for the use of flammable refrigerants, however the revision or adoption of existing standards, or the creation of new standards, is a technically-complex and long process. Article 5 countries should continue their efforts to ensure that their national standards are supportive of their national Montreal Protocol objectives and policies, in particular through regular dialogue between NOUs and their national standards technical bodies. Once adopted, industry and government need to jointly enforce those standards in the marketplace and workplace. For non-manufacturing countries, notably LVCs, complex standards related to equipment may be less relevant, therefore the focus should be on promoting codes of practice or guidelines to ensure an adequate level of safety and efficiency that reflect best practice for servicing technicians and installers.

20. ***High ambient temperatures.*** The 34 countries with high ambient temperatures (HAT) face continuing challenges in identifying appropriate and affordable technologies for the RAC sector. In the past three years there have been discussions about the HAT issues in various fora, it has figured in a number of reports of the Technology and Economic Assessment Panel, and various global and regional events have been organized by UNEP, UNIDO and others to identify potential solutions and pathways for HAT countries. UNEP and UNIDO completed successful demonstration projects on promoting alternative refrigerants in air-conditioning for HAT in West Asia (PRAHA-I and II), that showed possibilities and limitations for certain technologies. Continued efforts are still needed to identify appropriate and affordable technologies for all 34 HAT countries, which can be supported through capacity building and knowledge sharing.

21. ***Energy efficiency.*** Maintaining the energy efficiency of existing RAC equipment through best installation and servicing practices and ensuring that new equipment is energy efficient through policies could double the climate benefits of the Kigali Amendment during the transition to lower-GWP alternatives. Awareness-raising, training of servicing technicians, standards, and policies and regulations aimed at maintaining and enhancing energy efficiency of existing and new RAC equipment could contribute to achieving that goal. Experience from a project supported by another financial mechanism indicates that that twinning of National Ozone Officers and energy policy makers worked very well and built momentum for change at the country level. Cooperation with other relevant organizations and alliances (e.g. Cool Coalition) which have energy efficiency mandates would help in achieving the climate aspirations of the Kigali Amendment and enhance the work of the Montreal Protocol.

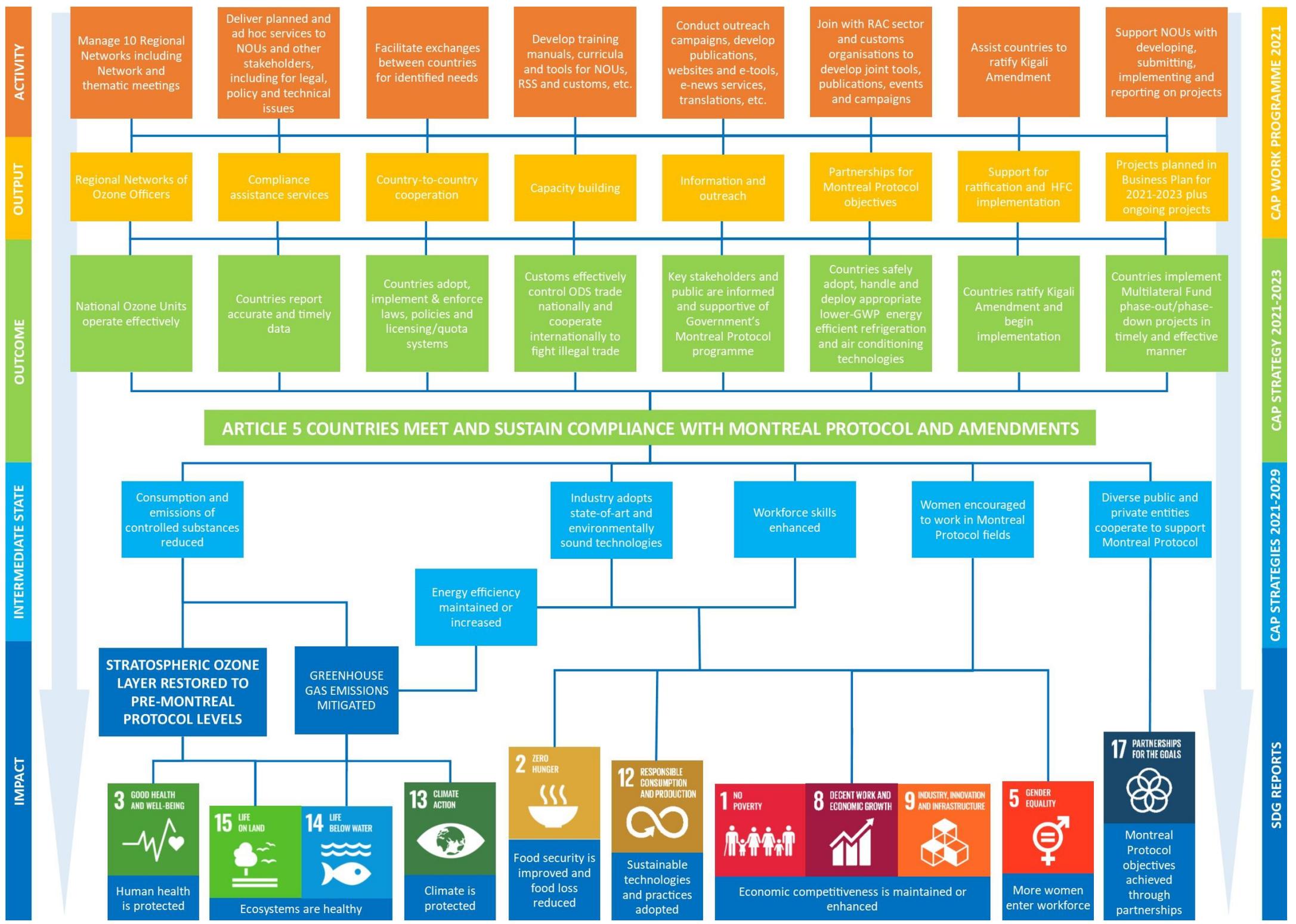
22. ***Gender and diversity.*** Empowering women and promoting gender equality as per SDG Goal 5 is crucial to accelerating sustainable development, of which the Montreal Protocol is a part. At the end

of 2019, the Executive Committee approved the operational policy on gender mainstreaming for Multilateral Fund supported projects and affirmed the importance of gender mainstreaming in Multilateral Fund-supported projects. The gender policy of the UN, including that of UNEP, and the Multilateral Fund's operational policy are being applied to projects, meetings and activities. More gender-relevant information needs to be collected and shared through Regional Network meetings and publications. The historic under-representation of women in both Customs and refrigeration and air conditioning sector continues. Cooperation with leading organisations in those two areas is needed to promote more participation of women in Montreal Protocol activities, highlight role models, and encourage young women to go into those professions.

VISION

23. Based on this strategic context, the following presents the vision or "big picture" of what UNEP in its capacity as an Implementing Agency of the Multilateral Fund (OzonAction CAP) is seeking to achieve through its work during and beyond the three years covered by this strategy. This section explains how the individual actions and outcomes relate to those larger goals. The figure below provides an overview of the causal pathways using a Theory of Change approach.

24. **Activities – "What we do."** These are the actions taken and work performed through which the inputs (CAP staff time, expertise, budget) are mobilized to produce the outputs described above. They change from year to year but the *indicative activities* are included in the Theory of Change diagram. These activities have a short-term timeframe, i.e. one year, and are presented to the Executive Committee in the annual *CAP Work Programme, Budget and Progress Report*, starting with the attached 2021 proposal. As the principal entity contributing to the achievement of these activities, UNEP has direct control.



25. **Outputs – "What we produce."** Outputs are gains in knowledge, abilities and awareness of individuals or within institutions, and the availability of new products and services that result from the completion of activities. The outputs required from UNEP to achieve the above outcomes are effectively managed Regional Networks covering all Article 5 countries; delivery of high-quality compliance assistance services to address specific needs articulated by NOUs; facilitation of country-to-country cooperation to share knowledge and build capacity related to specific identified needs; development and use of high-quality and up-to-date capacity building programmes, including both curricula and tools; development and dissemination of targeted and practical information products and services, as well as effective outreach campaigns; continuation of partnerships with other international, regional and national institutions and initiatives to advance Montreal Protocol objectives; tailored support for countries to encourage ratification of the Kigali Amendment or to initiate implementation of activities to meet existing commitments; and comprehensive support for the life cycle of countries Multilateral Fund projects where UNEP is the Lead, Cooperating or sole Implementing Agency. These outputs have a short-term timeframe, i.e. one year, and are detailed in the annual *CAP Workplan, Budget and Progress Report*, starting with the 2021 proposal (i.e. the first year of this three-year strategy). As one of several entities contributing to the achievement of these outputs, UNEP has direct control.

26. **Outcomes – "What we achieve."** The overarching desired outcome is that all Article 5 countries assisted by UNEP meet and sustain their compliance with the Montreal Protocol and its Amendments. To do so, their NOUs must operate effectively; the countries report data to the Ozone Secretariat and Multilateral Fund Secretariat in a timely and accurate manner; they adopt, implement and enforce their Montreal Protocol-related strategies, policies, legislation and import/export licensing systems; their Customs agencies are properly trained and equipped to enforce trade controls for the controlled substances, and cooperate with partners beyond their borders to fight illegal trade; the general public in Article 5 countries are informed and supportive of their Governments' Montreal Protocol strategies and programmes; the RAC sector in the countries adopt appropriate ozone- and climate-friendly technology in a safe and efficient manner, and they possess a well-trained servicing technician workforce. Additionally, countries must develop and implement their Multilateral Fund projects in a timely and effective manner, to ensure *inter alia* that they meet their commitments under their HCFC Phase-out Management Plan (HPMP) agreements. These outcomes have a medium-term timeframe, i.e. 2021-2023 and are detailed in this *Three-Year CAP Strategy*. As one of several entities contributing to the achievement of these states, UNEP has a direct influence on these outcomes.

27. **Intermediate states – "How we get there."** To achieve these desired impacts, UNEP must help bring about certain intermediate states that include the reduction of consumption and emissions of substances controlled under the Montreal Protocol, improvement of skills in the refrigeration servicing sector (RSS), promoting adoption of state-of-the-art alternative technologies by industry (which as a co-benefit leads to maintaining or improving energy efficiency and the efficient operation of the food cold chain), and more women motivated and assisted to work in Montreal Protocol-related activities, including both the refrigeration servicing sector and Customs. These intermediate states have a long-term timeframe, e.g. nine years, which corresponds to three iterations of the *CAP Strategy*. As one of many entities contributing to the achievement of these states, UNEP has an indirect influence on these intermediate states.

28. **Impact – "Why we do it."** The ultimate goal sought from UNEP's interventions as an Implementing Agency of the Multilateral Fund is to promote compliance with the Montreal Protocol. By doing so, UNEP thereby contributes to the achievement of the UN Sustainable Development Goals (SDGs) in line with the 2030 Agenda for Sustainable Development. Specifically, through this strategy

UNEP will contribute to those related to protection of human health (Goal 3), ecosystems (Goals 14 and 15), and the climate (Goal 13), as well as societal benefits including reducing hunger (Goal 2), enhancing economic opportunity, employment opportunities and industrial competitiveness (Goals 1, 8 and 9), responsible consumption and production (Goal 12) and promoting gender equality (Goal 5), and partnerships for sustainable development (Goal 17). These impacts have a long-term timeframe, i.e. 26 years, which currently in the Montreal Protocol context is the achievement of the final legal obligation under the Kigali Amendment, i.e. 2047. The results leading to these impacts are detailed in the individual SDG Reports of the concerned countries as well as those of the United Nations. As one of many entities contributing to the achievement of these impacts, UNEP has an indirect influence on the impacts.

COMPARATIVE ADVANTAGE – UNEP'S MANDATE AND VALUE ADDITION

29. **Mandate.** When UNEP became an Implementing Agency of the Multilateral Fund on 19 June 1991, the Executive Committee assigned UNEP with the Clearinghouse function as per Article 10 (3) (b) of the Montreal Protocol. That article established the Multilateral Fund to meet agreed incremental costs and to finance the Clearinghouse function to assist Article 5 Parties by: (1) Identifying their needs for co-operation through country specific studies & other technical co-operation (2) Facilitating technical co-operation to meet these identified needs (3) Distributing information and relevant materials, and holding workshops, training sessions, and other related activities (4) Facilitating and monitoring other multilateral, regional and bilateral co-operation. UNEP designs its strategies, work programmes and services according to this unique clearinghouse mandate. As a result of this mandate, UNEP is the only Implementing Agency that exclusively implements "non-investment" projects under the Multilateral Fund.

30. **Value addition.** The following aspects of UNEP's programme, amongst others, makes it particularly well-suited to achieve the vision outlined above:

- **Compliance focus.** Compliance with the Protocol is the key overall indicator of success for UNEP and the other members of the Montreal Protocol family of institutions. UNEP's focus on "compliance assistance " addresses both the "prevention" and "solution" stages. We regularly review compliance status of Article 5 countries, identify potential risk of non-compliance, and provide advice and support accordingly. When an Article 5 country is in danger of not meeting a specific obligation under this treaty, UNEP provides proactive support to enable the country to avoid being in actual non-compliance or quickly return to compliance. UNEP also provides specific, tailored assistance to countries to help them sustain compliance through ongoing direct support for the development and enforcement of legislation, regulations and other policies, assistance with technology issues, data reporting guidance and capacity building activities. This compliance focus and structure is unique amongst Implementing Agencies.
- **National Ozone Unit focus.** The Ozone Officer is the single most important element in a national strategy to comply with the Montreal Protocol. How well the officer and her/his team does in their work – developing projects, managing national strategies, reporting data, developing and enforcing policies, working with national and international institutions – directly or indirectly affects the status of their country's compliance with its obligations under this treaty. National Ozone Units are UNEP's primary "client" and our major mission is to strengthen and support these operational focal points.

- Regional delivery. In 2002, OzonAction strategically reoriented its approaches and delivery mechanisms by creating CAP to help developing Article 5 countries better address the demands of the Protocol's compliance period. The majority of the CAP staff are located in UNEP's Regional Offices (Bangkok, Manama, Nairobi, Panama City) where they closely interact with NOUs on a day-to-day basis to help them reach their compliance objectives. This unique regional presence enables the CAP team to be accessible to NOUs and to interact with them on a regular basis.
- Inter-connectedness. UNEP CAP comprises Regional Networks of Ozone Officers, Compliance assistance services, Country-to-country cooperation, Capacity building, Information and outreach, and Partnerships for Montreal Protocol objectives. These components are interconnected and mutually-supporting, and also between them and the national project implementation support that CAP provides. Lessons learned, information and products developed in one component inform and assist the other components, in a virtuous cycle of continuous improvement that benefits Article 5 countries.
- Diversity of countries. OzonAction has 147 developing country partners that cover a broad spectrum in terms of population, geographic size, location, and level of ODS consumption and production, ranging from Niue, the smallest consuming country, to China, the largest. This varied group of partners includes all 47 countries classified by the UN system as Least Developed Countries and all 38 countries classified as Small Island Developing States. This wide diversity enables UNEP to easily cross-fertilise ideas and information between countries and between regions.
- Ability to work outside of projects. Of all the Implementing Agencies, UNEP has both the mandate and the structure that allows it to assist countries on their compliance efforts outside of individual projects, and for the long-term. In cases where other agencies are no longer active in a particular country, UNEP can provide a degree of CAP support to help the countries overcome certain challenges.
- Skills and knowledge of the CAP team. The Regional and Global CAP teams' deep knowledge of Montreal Protocol issues as well as the NOUs, institutions, programmes, and projects in Article 5 countries, past and present, is unparalleled thanks to their long-term and regular interactions with Ozone Officers and their teams.
- Partnerships. UNEP has an excellent convening power that enables it to bring diverse public, private, regional and international stakeholders together within and across regions to address specific issues. UNEP has a thriving portfolio of partnerships, notably in the refrigeration sector and Customs/enforcement, that continues to bring best practices, support and expertise to Article 5 countries.
- Networks. CAP assists all 147 developing countries through its Regional Networks, a highly-successful and cost-effective capacity building mechanism that promotes the exchange of information, experience and know-how between countries on how to meet the Montreal Protocol commitments, report data, set and enforce policies, adopt technologies and effectively manage their national programmes. CAP manages 10 Networks covering: Africa, Anglophone, Africa Francophone, Caribbean, Central America, Eastern and Central Europe, Pacific Island Countries, South America, South Asia, South East Asia and the Pacific, and West Asia
- UNEP. As an Implementing Agency, UNEP draws on expertise and experience of the entire organisation to inform and assist its activities. This includes notably OzonAction's home in the Law Division, which has expertise in laws, regulations and multilateral environmental agreements and extensive experience in assisting countries in the review, development, implementation and enforcement of these legal instruments, as well as the UNEP Regional Offices where the CAP teams are based, including the high-level support of the respective Regional Directors.

SHIFTING THE NEEDLE IN 2021-2023

31. Within the strategic context described above, UNEP will use its comparative advantages to assist Article 5 countries to meet and sustain compliance with their commitments under the Montreal Protocol and its Amendments. UNEP will reach the eight major desired outcomes by delivering the outputs indicated below over the next three years.

OUTCOME 1
National Ozone Units effectively manage their national Montreal Protocol compliance programmes

32. For this outcome to be achieved, UNEP will deliver the following outputs during this period:

- All Article 5 countries with Institutional Strengthening projects approved for UNEP implementation have NOUs that function effectively and deliver the outputs described in their IS renewal.
- Any NOU requesting region- and country-specific compliance assistance to address specific technical, policy, or operational issues is provided with that support.
- All Ozone Officers and/or their assistants learn from peers and strengthen cooperation at the regional and international levels through participation in Regional Networks of Ozone Officers, which may include physical and/or online regional, sub-regional, and/or thematic meetings.
- All new Ozone Officers and/or their assistants acquire the basic skills, competencies and understanding of the Montreal Protocol and Multilateral Fund.
- Any Ozone Officer who wishes to further enhance her/his management of their NOUs acquires those advanced skills.
- Any NOU requesting or needing specific support is assisted through country-to-country cooperation facilitated by CAP, e.g. NOU-NOU meetings, study tours, technology roundtables.

OUTCOME 2
Article 5 countries report accurate and timely data

33. For this outcome to be achieved, UNEP will deliver the following outputs during this period:

- The status of Article 7 and Country Programme data submissions is regularly monitored and follow-up support is offered to countries in the case of late reporting.
- Any NOU requesting support with collecting, reviewing and reporting accurate Article 7 and/or Country Programme data is assisted to do so, so that they report by (or in advance of) the reporting deadlines.
- All NOUs understand and use the revised reporting formats and use the online reporting systems.
- All NOUs are aware of best practices and methodologies for data collection, cross-checking and reporting requirements for all controlled substances.
- All NOUs are assisted to understand the new data reporting obligations related to the Kigali Amendment.
- All NOUs are offered information or assistance to establish their HFC baselines and the starting points for sustained aggregate reductions in HFC consumption.

- All NOUs of Article 5 Parties to the Kigali Amendment are offered assistance to put their HFC licensing systems in place.

OUTCOME 3

Article 5 countries adopt, implement and enforce Montreal Protocol laws, regulations, licensing and quota systems

34. For this outcome to be achieved, UNEP will deliver the following outputs during this period:

- All NOUs are informed about options, including preventative approaches involving awareness and education, to enhance their national Montreal Protocol monitoring, reporting, verification and enforcement systems.
- All NOUs operate and enforce their HCFC licensing and quota systems as per Montreal Protocol and Multilateral Fund targets.
- Interested NOUs assess their HCFC licensing and quota systems to identify ways to further enhance them.
- All NOUs in countries that have ratified the Kigali Amendment are supported to develop, implement and enforce their HFC licensing and quota systems, and countries that have not yet ratified are encouraged to consider introducing voluntary licensing systems.
- All NOUs are aware of innovative methods that support enforcement of national licensing systems, both at and beyond the Customs check point in domestic markets.
- All NOUs are aware of the benefits and approaches for electronic licensing systems for controlling HCFCs and HFCs.
- All NOUs are encouraged to outreach Montreal Protocol-related MRVE issues to other national enforcement stakeholders and to strengthen their capacity about the same.
- All NOUs participating in the informal Prior Informed Consent (iPIC) mechanism use that system to complement and support their licensing and quota systems, and more countries are encouraged to join.
- All NOUs are informed about existing HCFC and HFC legislation in Article 5 and non-Article 5 countries and offered assistance with developing/enhancing their own.

OUTCOME 4

Customs effectively controls trade of controlled substances nationally and cooperates internationally to support legal trade and fight illegal trade

35. For this outcome to be achieved, UNEP will deliver the following outputs during this period:

- All NOUs requesting support to update, monitor or enforce their national regulations and policies to facilitate and monitor legal HCFC and HFC trade and to combat illegal trade are assisted through an integrated approach.
- All NOUs requesting support to deliver effective enforcement training workshops and related activities as part of approved HPMP projects are assisted.
- All NOUs are encouraged to use existing tools developed by UNEP and its partners during the delivery of their national Customs training, and, as appropriate, training of environmental inspectors and other law enforcement officers.

- All NOUs have increased awareness and understanding about critical Montreal Protocol Customs issues, including best practices, innovative approaches and ways to combat illegal trade in controlled substances.
- All NOUs are encouraged to interact more closely with Customs agencies to promote regional and international action to combat illegal trade.
- Interested national Customs training academies are encouraged and assisted to adopt the UNEP-WCO Customs Training Manual and e-learning into their national curricula.
- Interested regional and sub-regional organizations are encouraged to develop regional and/or sub-regional initiatives or policies to facilitate and monitor legal HCFC trade and to combat illegal trade.
- All NOUs understand the need for establishing national Customs codes as an interim measure for monitoring HFC imports/exports until the 2022 Harmonized System codes enters into force and is adopted by countries.

OUTCOME 5

Key stakeholders and public informed and supportive of Article 5 Governments' Montreal Protocol programmes

36. For this outcome to be achieved, UNEP will deliver the following outputs during this period:

- All NOUs and specific stakeholders are well-informed about specific high-priority topics through printed, online, and/or audio-visual information products.
- All NOUs and other members of the Montreal Protocol community are kept up-to-date about the latest Montreal Protocol developments related to policy, technology and science through weekly and biannual information services and individual responses to queries.
- Interested NOUs are assisted for their national celebrations of World Refrigeration Day (26 June) and World Ozone Day (16 September) to increase public awareness of, and support for, the Montreal Protocol.
- All NOUs as well as key members of the Montreal Protocol community are kept informed about activities of UNEP and its partners through outreach activities.
- NOUs speaking UN languages other than English are provided with information in their languages to the extent feasible.

OUTCOME 6

Article 5 countries safely adopt appropriate lower-GWP and energy efficient refrigeration and air conditioning technology and servicing practices

37. For this outcome to be achieved, UNEP will deliver the following outputs during this period:

Strengthening national capacity

- All NOUs and refrigeration servicing sector stakeholders have the key information and knowledge needed to make informed choices about policies and technologies related to the refrigeration servicing sector.
- All NOUs are offered the refrigeration servicing sector training products and tools developed by UNEP and its partners, and an increasing number incorporate them into their national Montreal Protocol activities.

- National/regional RAC associations are strengthened, interact regularly with NOUs, and exchange best practices so that they have increased engagement in their countries' national Montreal Protocol activities.

Upgrading servicing skills

- All servicing technicians, master trainers, and other practitioners involved in UNEP-assisted capacity-building activities acquire new or updated skills and competencies for minimizing leakages, the sound and safe handling of refrigerants, and maintaining/enhancing energy efficiency of RAC appliances.
- Interested national refrigeration training institutes, NOUs and UNEP establish agreements to cooperate on refrigeration servicing sector training and they adopt UNEP-developed curricula.
- More Article 5 countries reflect gender considerations in their refrigeration servicing sector projects and more female professionals are engaged in refrigeration servicing sector activities, including training.

Promoting certification, standards and codes

- All NOUs are provided with information and offered technical and policy assistance for developing national RAC certification programs.
- All NOUs are encouraged and assisted to increase their cooperation with their Technical Vocational Education and Training (TVET) authorities with respect to RAC servicing sector training and certification programs.
- All NOUs have increased awareness on updating/adopting relevant standards and codes of practice that promote safe handling of flammable, high-pressure and toxic refrigerants, facilitate the introduction of lower-GWP technologies into the market, and promote sound refrigerant management.
- More Article 5 countries adopt the Refrigerant Driving License (RDL) global qualification program either to complement their existing certification programme or as an alternative if they do not yet have a certification programme.
- All NOUs have increased understanding of how to build a local risk assessment methodology for the safe deployment of lower-GWP refrigerants during installation, servicing and handling.
- All NOUs are up-to-date about relevant standards and are encouraged to cooperate with their standards organisations to consider Montreal Protocol issues.

Assisting deployment of alternative refrigerants and technologies

- All NOUs, including those in low-volume consuming countries (LVCs), are supported to promote and exchange experiences about appropriate alternative refrigerants and technologies including not-in-kind technologies.
- More refrigeration servicing sector stakeholders in Article 5 countries have increased awareness of alternative refrigerants and technologies.

Supporting specific sectors

- All NOUs and selected stakeholders in high-ambient temperature (HAT) countries have increased capacity and information to help them address their HCFC phase-out/HFC phase-down challenges.
- All NOUs are encouraged and assisted to provide increased attention to the food cold chain sector and to strengthen their cooperation with stakeholders in that sector.

- All NOUs have increased understanding of the technical and regulatory issues related to HFCs and alternatives used in mobile air conditioning (MAC).
- All NOUs are offered information support to help their countries evaluate COVID 19 implications in the refrigeration servicing sector and assess preparedness to carry out activities under such difficult circumstances.
- All NOUs are informed about key technical and regulatory issues related to HFCs in the foam sector.

OUTCOME 7

Article 5 countries ratify the Kigali Amendment and begin meeting HFC phase-down obligations

38. For this outcome to be achieved, UNEP will deliver the following outputs during this period:

- All NOUs in Article 5 countries that have not yet ratified the Kigali Amendment are assisted to ratify through support provided by CAP in collaboration with the Ozone Secretariat.
- All UNEP-assisted Enabling Activity projects are effectively implemented as per Executive Committee guidelines and deadlines.
- All NOUs are encouraged and assisted to review their institutional arrangements for efficient implementation of HFC phase-down activities.
- Interested NOUs are encouraged and assisted to investigate and understand their countries' overall refrigerant consumption patterns and RAC market to help inform their future HFC phase-down strategies.
- All NOUs have increased awareness and information about Kigali Amendment and ozone-climate interlinkages.
- All NOUs are encouraged to identify and consider linkages between refrigeration servicing sector activities and energy efficiency institutions, programmes, policies and activities with the goal of maintaining or enhancing energy efficiency of existing and new RAC equipment.

OUTCOME 8

Article 5 countries implement Multilateral Fund HCFC phase-out and HFC phase-down projects in timely and effective manner

39. For this outcome to be achieved, UNEP will deliver the following outputs during this period:

- All Article 5 countries with ongoing HPMP Stages or tranches approved for UNEP implementation are assisted to implement them in a timely and effective manner.
- All Article 5 countries with HPMP verification projects approved for UNEP implementation have their HCFC consumption verified in a timely and effective manner.
- All Article 5 countries with UNEP-assisted HCFC verification reports are assisted to implement the recommendations in the verification reports.
- All Article 5 countries requesting UNEP assistance to prepare and submit new HPMP Stages or tranches are supported to do so.
- All Article 5 countries requesting UNEP assistance to conceive, prepare and submit new HFC phase-down projects and developing HFC phase-down strategies are assisted.

PART II: 2021 CAP WORKPLAN AND BUDGET

40. This workplan identifies the activities that UNEP proposes to undertake in 2021 to contribute to achieving the eight desired outcomes comprising the 2021-2023 CAP Strategy. While UNEP will work towards all of those outcomes, priority focus areas for 2021 will be:

- Support NOUs with new data reporting requirements for all substances.
- Assist with implementation of HPMP Stages and tranches to continue the HCFC phase out.
- Support NOUs with maintaining continuity of operations, projects and activities during the COVID-19 pandemic.
- Engage with a wider array of national enforcement stakeholders on MRVE issues and engage in selected capacity building.
- Assist countries with HFC licensing systems and HFC baselines, particularly those with legally-binding obligations.
- Further promoting gender mainstreaming in Montreal Protocol activities.

41. To deliver the planned comprehensive compliance assistance services to Article 5 countries, UNEP requests Executive Committee approval of US\$ 10,771,920 which includes a project cost of US\$ 9,974,000 and programme support costs (PSC) of US\$ 797,920, i.e. 8%. This request is based on a zero-growth scenario for both activities and staff, and corresponds to the same overall funding as that approved in 2019, i.e. two years of zero growth. Further details are presented in Annexes 1 (CAP budget proposal for 2021) and 2 (Financial analysis of CAP budget proposal for 2021). The CAP team that will deliver these services is presented in Annex 3 (CAP organigram for 2021). The main strategic partnerships through which UNEP will develop certain products and services in 2021 are presented in Annex 4. Annex 5 (Logical framework analysis for 2021) indicates the links between with proposed activities and desired outcomes.

42. With regard to COVID-19, there is uncertainty about the evolution of the pandemic therefore it is difficult for UNEP (and others) to envisage the situation in 2021. UNEP takes an optimistic approach therefore this proposal assumes that the resumption of normal activities will be possible, likely after the first quarter of 2021. However, UNEP is realistic and understands that COVID-19-related travel restrictions and social distancing requirements may continue into 2021 and that may affect planned activities. In such cases, UNEP will endeavour to find alternate modalities to deliver its planned activities described below as conditions allow. UNEP will continue to exercise flexibility under such circumstances and do its utmost to implement the planned activities using alternate means. To accommodate this dynamic situation, in line with Decision 84/60 (c)(ii) UNEP will continue extending the prioritization of funding between CAP budget lines to support activities that can be practically delivered during the COVID-19 pandemic. As per customary practice, UNEP will return any unused resources at the end of 2021 to the Executive Committee as per Decision 73/53, including those resulting from activities that could not be conducted due to COVID-19.

ACTIVITIES SUPPORTING OUTCOME 1

National Ozone Units effectively manage their national Montreal Protocol compliance programmes

43. NOUs are responsible for managing their national ozone strategies and programmes and informing their countries' decision-making and policy-making with respect to the Montreal Protocol. Their effective operation therefore has a direct link to their country's compliance with its obligations. Ozone Officers and their staff need to have the right capacity and know-how to meet the multiple challenges before them related to the HCFC phase-out and HFC phase-down. NOUs may require support for Institutional Strengthening projects, compliance assistance, support for addressing specific technical, policy, or operational issues, strengthening of their skills and competencies, and opportunities for exchanging experiences and best practices between peers. To assist NOUs to effectively manage their national Montreal Protocol compliance programme, in 2021 UNEP will:

- Organise Regional Network and Thematic meetings (physical and/or online) in all ten regions for all NOUs to address priority issues, exchange information, and share experiences.³
- Offer capacity-building training to all new Ozone Officers and/or their assistants using the *Training Programme for National Ozone Officers*.
- Pilot the *Advanced Training Programme for National Ozone Officers* for Ozone Officers in select regions.
- Provide all Article 5 countries with Institutional Strengthening projects approved for UNEP with technical assistance to expedite the preparation, implementation, monitoring and reporting of their IS phases as per Annex 6 (Implementation of UNEP-assisted Article 5 country projects in 2021).
- Deliver country-specific services to NOUs as per Annex 7 (Country-specific services and CAP support proposed for 2021) and respond to ad hoc requests.
- Facilitate country-to-country cooperation to address specific priority needs articulated by NOUs.

44. **COVID-19 considerations:** Regular communication with NOUs will be more important than ever and UNEP will maintain regular contact with Ozone Officers throughout 2021. UNEP will schedule physical meetings and training workshops in the second half of the year, as appropriate (i.e. backload). If events that would normally involve physical meetings and participant travel cannot be realized, then UNEP will transform the meeting to being fully online using professional conferencing platforms, with simultaneous interpretation as required by the region concerned. UNEP will also use video conferencing, telephone, and email to deliver country specific services and to facilitate country-to-country cooperation, if physical means are impractical.

ACTIVITIES SUPPORTING OUTCOME 2

Article 5 countries report accurate and timely data

45. Data on controlled substances are the lynchpin of the Montreal Protocol system. Incomplete, absent or late data submissions can create multiple problems ranging from difficulties in assessing compliance to project submission delays. It is therefore critical that countries report accurate and timely data under Article 7 of the Montreal Protocol and Country Programme data reports. NOUs require support with, for example, understanding new data reporting requirements, use of online reporting

³ For example: data reporting, Customs codes, enforcement best practices and challenge, MRVE, standards, licensing and quota systems, illegal trade, good servicing practices, safety for flammable refrigerants, policy developments, energy efficiency, environmental inspection, auctioning of seized goods, labelling of containers, contaminated refrigerants, disposal, gender mainstreaming, etc.

systems, reporting of blends, and learning best practices and methodologies for data collection, cross-checking and reconciliation. Some Article 5 countries will require support for accurate HFC baseline consumption reporting. To support Article 5 countries to report accurate and timely data, in 2021 UNEP will:

- Monitor the status of Article 7 and Country Programme data submissions to track potential late submissions and identify potential risks of non-compliance.
- Provide assistance to any NOU requesting support for accurate and timely Article 7 and Country Programme data.⁴
- Ensure that all NOUs understand the requirements of the new Article 7 and Country Programme reporting formats and help with using the online systems.
- Inform all NOUs about best practices and methodologies for data collection, cross-checking, reconciliation, and reporting, and promote formal institutionalization of the data collection and reporting process.
- Provide information and guidance to all NOUs to help them understand new HFC data reporting obligations related to the Kigali Amendment.
- Assist NOUs from Article 5 Group 1 countries with establishing their HFC consumption baselines.

46. **COVID-19 considerations:** UNEP will use video conferencing, telephone, and email to deliver direct assistance to NOUs if missions are impractical. It will also use virtual meetings to share information and guidance about data reporting issues with sub-regions and regions, as appropriate.

ACTIVITIES SUPPORTING OUTCOME 3

Article 5 countries adopt, implement and enforce Montreal Protocol laws, regulations, licensing and quota systems

47. Sustained compliance under the Montreal Protocol requires a robust, comprehensive and up-to-date legal and regulatory framework that supports national phase-out/phase-down strategies including the country's compliance objectives. NOUs require support for the development, revision, implementation, and enforcement of such policies, notably including licensing and quota systems, as well as support for enhancing existing monitoring, reporting, verification and enforcement systems. Sharing of best practices and examples through both formal and informal exchanges between NOUs should be promoted. Expanded engagement of compliance and enforcement stakeholders on Montreal Protocol issues, as well as the related capacity building, is needed. To assist Article 5 countries to adopt, implement and enforce Montreal Protocol laws, regulations, licensing and quota systems, in 2021 UNEP will:

- Inform NOUs about options, including preventative approaches, to enhance their national Montreal Protocol monitoring, reporting, verification and enforcement systems and facilitate

⁴ Including on: awareness and education of regulated community, cross-checking data from different sources including licensing system, Customs data, reports by importers and wholesalers; and organising training sessions in collaboration with the respective Secretariats.

exchange of experiences⁵ through *inter alia* Regional Network meetings, country-to-country exchanges and information services.

- Review and assess the status of Montreal Protocol laws, regulations and policies in Article 5 countries to identify gaps and promote harmonised approaches within regions.
- Provide information and online tools to help NOUs effectively track and monitor HCFC quota allocation and use.
- Provide information to interested NOUs to help them assess their licensing and quota systems to identify strengths/weaknesses and share best practices.⁶
- Offer assistance to NOUs in countries that have ratified the Kigali Amendment to implement the HFC licensing system and establish HFC national quotas, quota allocation, and to monitor quota usage.
- Encourage and assist NOUs in countries that have not yet ratified the Kigali Amendment to introduce voluntary HFC licensing systems.
- Help NOUs strengthen effective domestic market inspection mechanisms in collaboration with local enforcement authorities.
- Document and share experiences on e-licensing systems through facts sheets and webinars.
- Provide all NOUs with the Best Practices on Penalties under the Montreal Protocol, encourage them to share it with their country's judges and prosecutors, and outreach it to other judicial training programmes.
- Promote the enhanced online informal Prior Informed Consent mechanism and assist in conducting iPIC consultations between countries.
- Collect and categorize information about existing HCFC and HFC legislation and regulations and share this information with NOUs through on a public online platform.
- Offer assistance to interested NOUs for developing/enhancing their Montreal Protocol legislation and regulations.

48. **COVID-19 considerations:** UNEP will use video conferencing, telephone, and email to deliver direct assistance to NOUs if missions are impractical. It will also use virtual meetings to share information and guidance about regulations and legislation with sub-regions and regions, as appropriate. UNEP will also develop and outreach appropriate innovative tools, including smartphone applications and videos as required. Online services for this issue will be provided, as mentioned above.

ACTIVITIES SUPPORTING OUTCOME 4

Customs effectively controls trade of controlled substances nationally and cooperates internationally to support legal trade and fight illegal trade

49. Customs is one of the main stakeholders responsible for data collection and to enforce the national provisions of the Montreal Protocol. They are facing new challenges including growing illegal trade in controlled substances, the complexity of refrigerants that need to be controlled, new data reporting requirements, and the absence of designated HS codes for HFCs. There is a need to continue engaging with Customs and enforcement agencies to integrate Montreal Protocol-related work into their

⁵ For example, on the establishment of new HCFC-based manufacturing facilities, rules on venting controlled substances, import/manufacture of HCFC-based equipment, domestic market surveys, prevention of retrofitting to flammable substances and reverting to use of controlled substances as per their national context,

⁶ With regard to design, implementation and enforcement, through Network meetings and information materials and webinars as appropriate, as well as providing targeted support to specific countries, e.g., assisting them in drawing up terms of reference for legal consultants, sourcing and screening legal consultants, reviewing their outputs, or conducting a review of their proposed regulations.

various operations. Closer cooperation is needed between NOUs and Customs, and also with other regional and international enforcement organisations. Additional efforts are also required to encourage Customs training academies to institutionalize the Montreal Protocol training. To assist Customs to effectively control trade of controlled substances nationally and cooperate internationally to support legal trade and fight illegal trade, in 2021 UNEP will:

- Encourage and assist NOUs to review HCFC and HFC Customs and trade regulations and policies in cooperation with national Customs and trade authorities to mainstream trade control on ODS/HFC into their daily operations.
- Assist NOUs to work with Customs and enforcement personnel in their countries to build their capacity on issues related to controlled substances, through training, intelligence and information exchange, and information materials and tools.
- Promote sustainability Customs training by encouraging adoption of UNEP-WCO Montreal Protocol training curriculum by national Customs training academies and through institutionalized cooperation between Customs and NOUs.
- Outreach and provide existing information and tools developed by UNEP and its partners to NOUs to support the delivery of their national Customs training.
- Support countries to strengthen transboundary cooperation and intelligence sharing in combating illegal trade of controlled substances.⁷
- Provide NOUs and Customs agencies with information about critical Montreal Protocol Customs issues, innovative approaches and best practices.
- Support NOUs and Customs departments to educate Customs brokers/importers on importance of accurate declarations and implications of misdeclaration.
- Organise the sixth edition of the Europe and Central Asia regional Montreal Protocol award for Customs and enforcement officers.
- Cooperate with the World Customs Organization (WCO), related institutions and NOUs on coordinated enforcement operations aiming to detect and deter illegal trade in controlled substances.
- Encourage and assist NOUs to identify and analyse differences between their country's trade data and those reported by other countries with whom they trade.
- Encourage information sharing on seizures and related information and intelligence between Customs, NOUs, RILOs and national contact points through appropriate channels.
- Encourage and assist NOUs to develop Standard Operating Procedures (SOP) and MOUs, as appropriate, on the processes of Customs clearance, seizures/confiscations and levying penalties.
- Work with NOUs to assist interested national Customs training academies with adopting the updated UNEP-WCO Montreal Protocol Training for Customs Officers into their national curricula.
- Assist the Economic Community of West African States (ECOWAS) countries to extend the Tariff and Statistical Nomenclatures linked to the Harmonized System Code (HS) to facilitate the collection and comparison of data concerning the circulation and consumption of HFCs.
- Encourage countries and/or regional Customs organisations to assign specific Customs codes (additional national digits) for HFCs in their current national HS code systems as a temporary measure prior to the 2022 HS code update.

⁷ This may include organising border dialogues, and/or region-specific enforcement meetings with NOUs and Montreal Protocol Customs focal points, as well as collection, sharing of experiences, strategies and best practices on the effective role of Customs in monitoring and combatting illegal trade, documenting and outreaching as appropriate.

50. **COVID-19 considerations:** UNEP will use video conferencing, telephone, and email to deliver direct assistance to NOUs if missions are impractical. It will also use virtual meetings to share information and guidance about Customs issues with sub-regions and regions, as appropriate. E-learning for this issue will be provided and promoted. As it has already done in 2020, UNEP will support and participate in online national Customs training events when requested by an NOU.

ACTIVITIES SUPPORTING OUTCOME 5

Key stakeholders and public informed and supportive of Article 5 Governments' Montreal Protocol programmes

51. To perform at the optimal level, NOUs and key Montreal Protocol stakeholders in Article 5 countries need to be well-informed about critical technical and policy issues based on their articulated needs, and when possible, in their own language. They should be up-to-date on the latest Montreal Protocol developments related to policy, technology and science. They need to organize national awareness-raising events, notably World Ozone Day and World Refrigeration Day to increase public awareness of, and support for, the Montreal Protocol. NOUs need to be aware of these information services and products that respond to their needs are available to them from UNEP's Information Clearinghouse, so that they can integrate them into their projects and national activities and outreach them to relevant national audiences. To help ensure that the key stakeholders and public are well informed and supportive of Article 5 Governments' Montreal Protocol programmes in 2021 UNEP will:

- Prepare and outreach targeted publications, products, tools and services as well as materials from partnerships and other organisations to ensure that key stakeholders and the public are well informed.
- Develop an online 'OzonAction Knowledge Map' to provide a single point of access for basic information related to country's profile and project data.
- Continue to outreach ozone and Montreal Protocol issues at key international, regional and national fora, as well as through regional webinars for NOUs and other stakeholders.
- Maintain and enhance the OzonAction website (www.unenvironment.org/ozonaction) and OzonAction Meeting Portal (www.ozonactionmeetings.org).
- Produce and disseminate the *OzoNews* e-newsletter on a bi-weekly basis.
- Produce and disseminate the *OzonAction Scoop* on topical subjects three times per year.
- Encourage and support national celebrations of *World Ozone Day* on 16 September, including development of specific materials.
- Encourage and support celebrations of *World Refrigeration Day* on 26 June, in cooperation with the World Refrigeration Day Secretariat and other RAC partners.
- Collect and share real-world examples from the Montreal Protocol community about contribution of Montreal Protocol to achieving Sustainable Development Goals.
- Translate prioritised publications and tools into UN languages, depending on regional priorities and available resources.

52. **COVID-19 considerations:** Most clearinghouse activities and services, with the exception of outreach activities, are largely unaffected by COVID-19 since they have digital/online formats and do not require travel for their development. Outreach activities will be conducted electronically in the first

half of 2021, and any physical outreach will only occur when the physical meetings resume. Electronic distribution of information will be emphasized.

ACTIVITIES SUPPORTING OUTCOME 6

Article 5 countries safely adopt appropriate lower-GWP and energy efficient refrigeration and air conditioning technology and servicing practices

53. Most consumption of controlled substances is in the refrigeration servicing sector and that share is growing. The sector therefore has a crucial bearing on ensuring compliance with the HCFC phase-out, the future phase-down of HFCs, and climate mitigation. Even as this sector continues to grow in importance with the huge projected increase in demand, RAC technology is evolving at a breakneck pace. Article 5 countries require support with a myriad of inter-related refrigeration servicing sector issues including, for example, safety, market availability of affordable and cost-effective alternatives, the low competency of some servicing technicians, the informal sector, the lack of critical servicing tools/equipment, contaminated refrigerants, mislabelled/fake refrigerants, disposal of unwanted or unusable refrigerants, and energy efficiency considerations. Cooperation between NOUs and national refrigeration associations should be strengthened. Information products, services, and e-learning developed/delivered by the Global CAP team in 2021 to address these issues are designed to be used by countries during implementation of their HPMPs and HFC-related projects and activities (see Outcome 8). To help ensure Article 5 countries safely adopt appropriate lower-GWP and energy efficient refrigeration and air conditioning technology and servicing practices, in 2021 UNEP will provide:

Strengthening national capacity

- Develop and launch, in cooperation with international RAC partners, information materials and training tools in various formats to cover practitioners in major sub-sectors of the refrigeration servicing sector.
- Outreach the training tools and products described in Annex 4 (CAP partnerships) and encourage NOUs to ensure that these are well integrated in the ongoing and future training programs under HPMPs, IS projects and/or Enabling Activities projects.
- Facilitate dialogues between national/regional RAC associations and NOUs to exchange best practices and increase the associations' engagement in their countries' national Montreal Protocol activities.

Upgrade servicing skills through training

- Launch, translate and promote the *Universal Training Kit* as a flexible training manual to support local training institutes/centres in conducting tailored training programs covering good practices and safe handling flammable of refrigerants.
- Integrate the energy efficiency dimension in the related tools and products offered by OzonAction highlighting the benefits and opportunities.
- Cooperate with partners to provide guidance on minimizing emissions and maintaining energy efficiency during the servicing.
- Support NOUs and local authorities to update their RAC technical and vocational curricula to incorporate good practices.
- Encourage and assist NOUs to work with local Technical and Vocational Education and Training authorities to conduct and sustain good practice training programs .

- Further promote the *Refrigerant Management University Course* as a tool for higher educational levels and support its translation to other UN languages.
- Work with NOUs and international/national partners to promote the further engagement of women in RAC good practices training
- Organize technology exhibitions and industry roundtables including those held under the Ozone₂Climate programme with participation of National Ozone Officers and representatives of RAC associations and experts.

Promoting certification, standards and codes

- Support Article 5 countries to develop, update and enforce local refrigeration servicing sector certification programs, through HPMPs and/or CAP services.
- Exchange experiences and success stories between Article 5 countries in developing and enforcing local certification programs, with particular attention to the informal sector.
- Finalize the pilot stage of the *Refrigerants Driver's License* (RDL) and deploy the program for enrolment by interested countries in 2021.
- In cooperation with expert institutions, design a risk assessment methodology for installation, servicing and handling of flammable refrigerants and promote its use by NOUs, especially in LVCs, to assist in the safe deployment of those refrigerants.
- Provide guidelines and tools to assist NOUs in developing/updating/adopting relevant standards and/or codes with a specific focus on standards related to management of refrigerants containers, recovery and recycling, as well as safe handling and transportation.
- Facilitate country-to-country cooperation to share experiences in the development and enforcement of standards for safe handling of flammable and toxic alternatives.

Assisting deployment of alternative refrigerants and technologies

- Develop and promote technical briefs and outreach tools to NOUs on alternative refrigerants and technologies to promote better understanding of technological opportunities.
- Outreach relevant information and case-studies on not-in-kind technologies and their technical and economic feasibility in Article 5 countries.
- Develop tools to assist NOUs and local stakeholders to deliver trainings on installation and servicing of systems using natural refrigerants (ammonia, carbon dioxide, hydrocarbons)

Support to special sectors

- Provide NOUs and selected stakeholders in all HAT countries with information and opportunities for exchanging experiences to help them address their HCFC phase-out/HFC phase-down challenges.
- Complete the pilot stage of the *Cold Chain Database* and promote the final product to all NOUs as a tool for them to survey, assess and analyse their refrigerant and technology-related needs in relation to HPMP Stages II or III and to prepare for future HFC phase-down activities.
- Assist NOUs to assess the capacity and training needs of the MAC sector to manage existing HFCs-based systems and handling the new MAC technologies.
- In cooperation with expert institutions, provide all NOUs with information and support to help their countries evaluate COVID 19 implications in the refrigeration servicing sector and assess preparedness to carry out activities under difficult circumstances.

54. **COVID-19 considerations:** Most RAC sector information products and tools are largely unaffected by COVID-19 since they have digital/online formats and do not require travel for their

development. Launching and outreach activities will be conducted electronically in the first half of 2021, and any physical outreach will only occur when the physical meetings resume. UNEP will use video conferencing, telephone, and email to collaborate with partners and to deliver direct assistance to NOUs if missions are impractical. It will also use virtual meetings to share information and guidance about RAC sector issues with sub-regions and regions, as appropriate. E-learning, smartphone applications and videos for servicing technicians will be promoted. As it has already done in 2020, UNEP will support and participate in online national RAC training events when requested by an NOU.

ACTIVITIES SUPPORTING OUTCOME 7

Article 5 countries ratify the Kigali Amendment and begin meeting HFC phase-down obligations

55. The Kigali Amendment entered into force on 1 January 2019. Article 5 countries are currently in the ratification stage and are at different stages in the process. The ultimate goal is to achieve the universal ratification of the Amendment and collaborative efforts at different levels are needed to make this happen. For the countries that have already ratified, it is of highest priority that all of them establish and operationalize an enforceable HFC import/export licensing system. Countries that have ratified the Kigali Amendment need to report HFC data and establish HFC baselines. NOUs require support to address all of these new issues. To assist Article 5 countries to ratify the Kigali Amendment and begin meeting HFC phase-down obligations, in 2021 UNEP will:

- In cooperation with the Ozone Secretariat, encourage and assist Article 5 countries that have not yet ratified the Kigali Amendment to do so.
- Provide technical support to the remaining UNEP-assisted countries to complete the implementation and reporting of their Enabling Activity projects.
- Raise the awareness of NOUs about their commitments and national institutional and legal implications arising from Kigali Amendment ratification, including through the development of information materials and outreach activities.
- Encourage the NOUs in the ten countries participating in the *HFC Outlook Model* pilot to use the outputs and analysis tool during their local consultations with different national stakeholders.
- Develop and pilot a simplified *HFC Outlook Model* for a number of LVCs, to better understand the trends in HFC and HCFC current and future usage.
- Organise special sessions in Network meetings to discuss overlapping issues and opportunities between HPMPs and future HFC phase-down plans.

56. **COVID-19 considerations:** UNEP will use video conferencing, telephone, and email to deliver direct assistance to NOUs if missions are impractical. Joint "virtual missions" will be organised with the Ozone Secretariat to promote ratification. UNEP will also use virtual meetings to share information and guidance about ratification and HFC issues with sub-regions and regions, as appropriate. UNEP will support and participate in online national stakeholder workshops or other consultations related to the Kigali Amendment when requested by an NOU. Tools such as the *HFC Outlook* and the *Cold Chain Database* are unaffected by COVID-19 since they have digital/online formats.

ACTIVITIES SUPPORTING OUTCOME 8

Article 5 countries implement Multilateral Fund HCFC phase-out and HFC phase-down projects in timely and effective manner

57. Article 5 countries that have selected UNEP as the Implementing Agency for their Multilateral Fund projects require support for developing, submitting, implementing, and reporting on those projects according to the Executive Committee policies and deadlines. Specific countries require support for verification of HCFC consumption. Support will also be required for new projects as commitments under the Kigali Amendment come into play. To assist Article 5 countries to implement Multilateral Fund HCFC phase-out and HFC phase-down projects in a timely and effective manner, in 2021 UNEP will:

- Assist all Article 5 countries with ongoing HPMP Stages or tranches approved for UNEP implementation to implement them in a timely and effective manner as per Annex 6 (Implementation of UNEP-assisted Article 5 country projects in 2021).
- Ensure that all Article 5 countries with HPMP verification projects approved for UNEP implementation have their HCFC consumption verified in a timely and effective manner.
- Assist all Article 5 countries with UNEP-assisted HCFC verification reports to implement the recommendations in the verification reports.
- Support all Article 5 countries requesting UNEP assistance to prepare and submit new HPMP Stages or tranches.
- Support all Article 5 countries requesting UNEP assistance to conceive, prepare and submit new HFC phase-down projects and to develop HFC phase-down strategies.

58. ***COVID-19 considerations:*** Certain aspects of UNEP's support for projects has been little or only moderately affected by COVID-19. For example, the development and submission of new project proposals to the Executive Committee has proceeded extremely well in 2020 and should continue in 2021. Administrative and financial processes at UNEP are also operating efficiently, which ensures a timely flow of resources to NOUs for their projects. However, UNEP anticipates increasing challenges at the national level that may carry over into 2021, such as restrictions on international consultants to travel to Article 5 countries, limitations on national consultants' ability to collect data in the field, restrictions on workshops and meetings at the national level, etc. This may eventually result in some implementation delays. UNEP will use video conferencing, telephone, and email to deliver direct project assistance to NOUs if missions are impractical. It will also use virtual meetings to share information and guidance with NOUs and consultants to support project implementation.

PART III: 2020 CAP PROGRESS REPORT

INTRODUCTION

59. This report provides details of the progress made by UNEP in the implementation of the CAP and results achieved for the period September 2019 - August 2020, i.e. since the submission of the previous CAP Progress Report. Together with the attached annexes it provides an overview of programme implementation of the main results achieved during the last four months of 2019 and the first eight months of 2020. Progress is presented according to the Overarching Objectives and Specific Project Objectives (SPOs) indicated in the previous CAP Strategy. More information is available in the following annexes: 4 – *OzonAction CAP partnerships*; 8 – *Progress report on four global CAP activities*; 9 – *Report on the use of CAP staff for Multilateral Fund and Montreal Protocol activities*; 10 – *Meetings and workshops organised by CAP*.

OVERARCHING OBJECTIVE 1: Assisting countries to comply with their HCFC phase-out commitments and sustaining compliance with prior targets

SPO 1: Support National Ozone Units for effective management of national Montreal Protocol compliance programmes

- Provided NOUs with technical assistance to expedite the preparation, implementation, monitoring and reporting of their IS phases.
- Provided additional specific support in IS preparation and implementation to: *Caribbean*: Antigua and Barbuda, Dominica, Haiti; *Europe and Central Asia*: Albania, Kyrgyzstan, Moldova; *Latin America, Mexico and Central America*: Bolivia, Dominican Republic, Ecuador, El Salvador, Honduras, Guatemala, Peru, Nicaragua, Paraguay; *Pacific Island Countries*: Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu; *South Asia*: Maldives, Nepal; *South East Asia*: Brunei Darussalam, Cambodia, Lao PDR, Myanmar, Timor Leste, Viet Nam; *West Asia*: Bahrain, Iraq, Kuwait, Qatar.
- Delivered country-specific services to NOUs and responded to ad hoc requests.
- Provided support to NOUs for accurate and timely Article 7 and Country Programme data reporting including: Understanding requirements of the new reporting formats and online systems; CAP facilitated countries to prepare and submit the CP progress report and Article 7 data by reviewing the drafts as appropriate for the individual country to help ensure the accuracy and comprehensiveness as per reporting requirements prior to submission to the Ozone Secretariat and the Multilateral Fund Secretariat and assisting NOUs to cross-check their national data from different sources.
- Followed up and reporting on outstanding CP data for 2018 countries with political instability or other late submissions.
- Special assistance on data collection and reporting was provided to: *Africa Anglophone*: Botswana, Gambia, Ghana, Mozambique, Nigeria, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Tanzania, Uganda; *Africa Francophone*: Cape Verde, Central African Republic, Guinea, Guinea Bissau, Sao Tome; *Europe and Central Asia*: Albania, Armenia, Turkmenistan; *Latin America, Mexico and Central America*: Bolivia, El Salvador, Honduras, Guatemala, Nicaragua, Paraguay; *Pacific Island Countries*: Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tuvalu, Tonga, Vanuatu; *South Asia*: Afghanistan, Bangladesh, Bhutan, DPR Korea, Maldives, Mongolia, Nepal, Pakistan, Republic of

Korea; *South East Asia*: Brunei Darussalam, Cambodia, Lao PDR, Myanmar, Philippines, Thailand, Timor Leste, Viet Nam; *West Asia*: Qatar, Saudi Arabia, State of Palestine (new party), Syria, United Arab Emirates, Yemen.

- Provided assistance to NOUs to obtain HFC import statistics for reconciling among different sources and reporting in Bhutan, Lao PDR, Marshall Islands, Nepal, Timor Leste.
- Encouraged and facilitated exchange of experiences on compliance and enforcement relating to controlled substances, implementation and enforcement of bans on the establishment of new HCFC-based manufacturing facilities and import/manufacture of HCFC-based equipment, as per their national context, through *inter alia* Regional Network meetings and country-to-country exchanges.
- Organised Thematic meetings in Seychelles, Ghana and Uganda (June 2019; September 2019 and November 2019) that covered enforcement activities and good practices, and progress towards extension of imports/export licensing and quota systems to HFCs.
- Twelve countries of Francophone Africa participated in a Border Dialogue in Cameroon, October 2019. that included Customs officers and Ozone Officers to discuss and exchange experiences on the quota and licensing systems, new trends in illegal trade.
- Organised a Thematic meeting with Ozone Officers from all 14 countries and their Customs and Enforcement Officer counterparts in Suriname in October 2019, to strengthen and enhance monitoring, reporting, verification and enforcement (MRVE) to achieve and sustain the HCFC phase-out commitments.
- Organised a Thematic meeting for 19 countries of Latin America that discussed and exchanged experiences on the quota and licensing systems, new trends in illegal trade, tariff codes, the prohibition of new investments in HCFC-based technologies organized in Paraguay, August 2019 including Customs Officers, Ozone Officers and experts of Latin America region.
- Presented lessons learned from the global Montreal Protocol award for Customs and enforcement officers at the ECA meeting in Kiev in September 2019, including examples of enforcement action and seizures.
- Monitored the status of Montreal Protocol legislation, regulations and policies in Article 5 countries, including those planned to be put in place to help identify gaps and promote harmonised approaches within regions.
- Organised a workshop for ECOWAS countries on review and update of the existing ECOWAS Ozone-Depleting Substances Regulations to accommodate the refrigerants affected by the Kigali Amendment.
- Supported China with the revision of its ODS regulation to strengthen enforcement and monitoring related to import, export and use of ODS.
- Worked with several countries in Asia Pacific on the establishment of regulations to ban the import of HCFC-based room air-conditioners and other HCFC-based equipment: Myanmar and Vanuatu, Cambodia, Lao PDR.
- Offered training to new Ozone Officers and/or their assistants using the Introductory Training for Newly Appointed National Ozone Officers (more information can be found in *Annex 8 – Progress report on four global CAP activities*) as well as country-to-country assistance: *Africa Anglophone*: two pilot trainings conducted sub-regionally (20-21 June 2019, Seychelles, for SADC countries; 23-24 September 2019, Ghana for Eastern, Northern and Western Regions). Training was also provided to new Ozone Officers: Ethiopia and Mauritius; *Africa Francophone*: UNEP provided introductory training to new Ozone Officers of Guinea and Burundi, and their assistants; *Europe and Central Asia*: Provided tailor-made and need-based training upon request. *Latin America, Mexico and Central America*: NOU training modules were translated into Spanish; *Pacific Island Countries*: Nauru and Tuvalu; *South Asia*: China, India, Maldives, Mongolia, Nepal, Pakistan *South*

East Asia: Brunei Darussalam, Indonesia, Malaysia, Myanmar, Timor Leste; *West Asia:* Iraq, Palestine, Oman, Saudi Arabia, Syria.

- Assisted NOUs to review and enhance their national tracking systems for methyl bromide used for quarantine and pre-shipment (QPS), specific assistance included: *Africa Anglophone:* Clarification of Methyl Bromide reporting: Nigeria, South Africa, Sudan; *Caribbean:* Nicaragua - Training workshops were organized for 22 officers responsible for the quarantine area of the Institute for Agricultural Protection and Health (IPSA) in March 2020. *Pacific Island Countries:* Fiji, Kiribati, Vanuatu, *South East Asia:* Myanmar; *West Asia:* Saudi Arabia.

SPO 2: Assist with strengthening & enforcing HCFC licensing & quota systems

- Helped NOUs assess their licensing and quota systems to identify strengths/weaknesses and share best practices with regard to design, implementation and enforcement, through Network meetings and information materials and promoted the enforcement of licensing systems beyond the Customs' checkpoint. In addition, specific assistance on issues including labelling, quota tracking, online licencing application systems and market inspection and surveys was provided to: *Africa Anglophone:* Malawi, Sudan; *Europe and Central Asia:* Shared information on labelling requirements for containers in the European Union during the enforcement meeting in Kiev in September 2019 and organised an online meeting on labelling in July 2020 (following the survey results indicating that several ECA countries do not have labelling requirements for cylinders); *Pacific Island Countries:* Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu; *South East Asia:* Brunei Darussalam, Lao PDR, Myanmar, Timor Leste; *South Asia:* Afghanistan, Bhutan, China, Iran, Maldives, Mongolia, Sri Lanka; *West Asia:* Iraq, Jordan, Oman, Saudi Arabia, Syria.
- Assisted countries in the design and development of an e-licensing system: *Pacific Island Countries:* Micronesia, Solomon Islands, Papua New Guinea; *South East Asia:* Cambodia.
- Developed an online application to assist NOUs with planning and tracking their national quotas and licenses for controlled substances (mixtures and pure substances).
- Disseminated CAP tools and information on safety standards, factsheets, videos, mobile applications to NOUs and relevant stakeholders.
- Further improved the informal prior informed consent (iPIC) mechanism and promoted this to all Article 5 countries; assisted in conducting consultations and following up on responses and produced an annual report of its use. Specific assistance on iPIC was provided to: *Africa Anglophone:* Kenya, Zimbabwe; *Caribbean:* The new iPIC platform launched and demonstrated to all 14 countries through a webinar in June 2020; *Europe and Central Asia:* Albania, Armenia, Belarus, Bosnia and Herzegovina, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Montenegro, North Macedonia, Serbia, Russia, Turkey, Turkmenistan, Ukraine, Uzbekistan (as well as trade partners Belize China, European Commission, Israel Kosovo Mali); *Latin America, Mexico and Central America:* The "How to Use iPIC Online" manual was translated into Spanish and it was promoted among all Latin American countries; *Pacific Island Countries:* Kiribati, Marshall Islands, Micronesia; *South Asia:* Mongolia Sri Lanka; *South East Asia:* China, Malaysia; *West Asia:* Iraq, Saudi Arabia, United Arab Emirates.

SPO 3: Strengthen national capacity for effective Customs & trade controls

- Encouraged and assisted NOUs to identify and analyse differences between their country's data and those reported by other countries with whom they trade controlled substances.
- Specific assistance in analysis of trade data was provided to: *Africa Anglophone:* Ethiopia, Kenya, Mozambique, Namibia, Seychelles, Somalia, Rwanda, South Sudan, Tanzania, Uganda,

Zimbabwe; *Caribbean*: Trinidad and Tobago; *Europe and Central Asia*: Albania, Bosnia and Herzegovina, North Macedonia, Russia Serbia, Turkey, Turkmenistan, Uzbekistan; *Pacific Island Countries*: Fiji, Kiribati, Palau, Samoa, Solomon Islands, Tonga; *South East Asia*: China.

SPO 4: Assist countries to achieve the 35% HCFC target in 2020 and prepare for 67.5% target in 2025

- Conducted analysis of national HCFC consumption against the phase-out targets at network meetings, country missions and provided specific information and advice to NOUs and other stakeholders upon request, provided NOUs with policy and technical assistance to implement, monitor and report on their ongoing and new HPMP Stages I, II or III.
- Specific additional assistance in analysis of national HCFC consumption was provided to: *Africa Francophone*: Burundi, Equatorial Guinea, Guinea, Sao Tome & Principe; *Europe and Central Asia*: Albania, Armenia, Kyrgyzstan, Moldova, Serbia; *Latin America, Mexico and Central America*: Dominican Republic, Ecuador, El Salvador, Honduras, Guatemala, Paraguay, Peru; *Pacific Island Countries*: Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tuvalu, Tonga, Vanuatu; *South Asia*: Afghanistan, Bhutan, DPR Korea, Mongolia, Nepal, Pakistan, Republic of Korea, Sri Lanka; *South East Asia*: Brunei Darussalam, Cambodia, Lao PDR, Myanmar, Philippines, Timor Leste, Viet Nam; *West Asia*: Iraq, Kuwait, Oman, Saudi Arabia, Syria.
- Assisted countries to prepare and submit HPMP tranches for Stages I and/or II, and prepare Stages II and III, in coordination with partner Implementing and bilateral agencies.
- Specific additional assistance was provided to: *Africa Anglophone*: Egypt, Ethiopia, Eritrea, Liberia, Malawi, Mozambique, Sierra Leone, Rwanda, Tanzania, Uganda, Zambia; *Africa Francophone*: Benin, Burkina Faso, Cote d'Ivoire, Cameroon, Comoros, Djibouti, Democratic Republic of Congo, Gabon, Guinea Bissau, Mali, Togo, Niger, Senegal; *Caribbean*: Bahamas, Barbados, Dominica, Guyana, Jamaica; *Europe and Central Asia*: Albania, Armenia, Kyrgyzstan, Moldova, Serbia; *Latin America, Mexico and Central America*: Bolivia, Dominican Republic, Ecuador, El Salvador, Honduras, Guatemala, Nicaragua, Peru; *Pacific Island Countries*: Cook Islands, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Samoa, Solomon Islands, Tuvalu, Tonga, Vanuatu; *South Asia*: Afghanistan, China, Mongolia, Sri Lanka; *South East Asia*: Brunei Darussalam, Lao PDR; *West Asia*: Bahrain, Iraq, Kuwait, Syria, Saudi Arabia.
- Implemented HPMP verification projects as approved by the Executive Committee and follow up with countries on the implementation of recommendations from earlier verification reports.
- Specific support and assistance with implementation was provided to: *Africa Anglophone*: Eritrea, Gambia, Malawi, Tanzania, South Sudan, Uganda, Zambia; *Africa Francophone*: Comoros, Cote d'Ivoire, Djibouti, Gabon, Guinea, Senegal, Sao Tome and Principe; *Caribbean*: Dominica; *Pacific Island Countries*: Cook Islands, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Samoa, Solomon Islands, Tuvalu, Tonga, Vanuatu; *South Asia*: Afghanistan, Maldives, Mongolia, Nepal; *South East Asia*: Brunei, Cambodia, Lao PDR, Myanmar; *West Asia*: Bahrain, Iraq.
- Promoted collaboration between NOUs and refrigeration and air conditioning associations and encourage region-specific support to strengthen local institutions under HPMP Stages I, II and III and involve national associations in selected network activities. Specific assistance was provided to: *Africa Anglophone*: Eswatini, Gambia, Malawi, Zambia, Zimbabwe; *Africa Francophone*: Senegal; *Latin America, Mexico and Central America*: Bolivia, Ecuador, Guatemala; *Pacific Island Countries*: Cook Islands, Kiribati, Micronesia, Samoa, Solomon Islands, Tonga, Vanuatu; *South Asia*: China, India, Mongolia, Nepal, Pakistan; *South East Asia*: Lao PDR, Myanmar.

OVERARCHING OBJECTIVE 2: Strengthening the refrigeration servicing sector for ozone & climate-friendly alternatives

SPO 1: Develop, deliver & coordinate capacity building & sustainable technician training in the RSS

- Outreach the training tools and products developed in cooperation with international associations and ensure their incorporation in national projects and activities, and encourage NOUs to integrate them into ongoing and future training programs under HPMPs, IS projects and/or Enabling Activities projects.
- Special sessions at network meetings were organised to further promote the tools and explain benefits of inclusion in projects.
- An assessment of future training and capacity building needs for the MAC servicing sector, including requirements for certification programs is ongoing and will include a special kit for NOUs about MAC technologies, servicing practices and how to assess the local needs (many Kigali Enabling projects being implemented by UNEP, include a component for assessing the MAC sector).
- Regional national master trainer workshops for capacity building and exchange experiences were organised for the delivery of the national training programme as per regional needs (some planned activities were delayed due to COVID-19): *Africa Anglophone*: Eritrea, Ethiopia, Rwanda; *Asia - Pacific*: A regional training of trainers workshop for handling HC-290 systems was organised in Guangzhou, China in December 2019. Afghanistan, Bhutan, Brunei, Lao PDR, Maldives, Mongolia, Myanmar, and Nepal sent respective technicians to the training workshop; *West Asia*: Bahrain, Iraq Oman, Qatar.
- Gender mainstreaming of female technicians and experts the RAC sector to better achieve Montreal Protocol objectives was promoted; examples outreach and participation of women in workshops and training organised by CAP and by Article 5 countries was encouraged, including by collecting and publishing profiles of professional women excelling in refrigeration and air-conditioning professions (some planned activities were delayed due to COVID-19): *Africa Anglophone*: Coordinated the regional award for the best female RAC technicians; *Caribbean*: Barbados, Grenada and Trinidad and Tobago shared examples of their outreach activities on gender mainstreaming within the context of providing support for Refrigeration Associations in the Caribbean; *Europe and Central Asia*: Encouraged inclusion of gender related activities in subsequent HPMP stages, e.g. Albania, Serbia; *Latin America, Mexico and Central America*: Developed a fact sheet on Sustainable Development Goal #5 Gender and the Montreal Protocol; *Pacific Island Countries*: included gender mainstreaming in the IS Project, HPMP Tranche request and HPMP Stage II project documents - Cook Islands, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Samoa, Solomon Islands, Tuvalu, Tonga, Vanuatu; *South Asia*: Included gender mainstreaming in the IS Project, HPMP Tranche request and HPMP Stage II project documents - Afghanistan, Iran, Mongolia, Nepal, Sri Lanka; *South East Asia*: Included gender mainstreaming in the IS Project, HPMP Tranche request and HPMP Stage II project documents - Brunei Darussalam, Myanmar, Lao PDR, Timor Leste, Viet Nam; *West Asia*: Gender related issues were integrated into all newly developed projects for Bahrain and Qatar as well as in conducting regional events.

SPO 2: Advancing sustainable certification & qualification in the RSS

- Promoted the development and implementation of sustainable and appropriate certification programmes for RSS in Article 5 countries as part of HPMPs or through CAP services.

- Provided technical support to countries in building the national RAC certification programs including support in developing TORs, suggesting regional/international experts, review of documents and building the background regulatory framework. Specific additional assistance was provided to: *Africa Anglophone*: Ethiopia, Eritrea, Malawi, Rwanda, Zimbabwe; *Caribbean*: Grenada, Suriname, Trinidad and Tobago; *Europe and Central Asia*: Armenia; *Latin America, Mexico and Central America*: Ecuador, El Salvador, Guatemala, Honduras, Peru; *Pacific Island Countries*: Cook Islands, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Samoa, Solomon Islands, Tuvalu, Tonga, Vanuatu. CAP provided specific support to Solomon Islands in the design of procedures for certification system and facilitated south-south cooperation to share experiences from Fiji to Solomon Islands; *South Asia*: Bhutan, China, Maldives, Mongolia, Nepal, Sri Lanka; *South East Asia*: Brunei Darussalam, Lao PDR.
- Encouraged and assisted NOUs to work with their TVET⁸ authorities to integrate good servicing practices and other key aspects (e.g. safety, recovery, recycling and reclamation, energy efficiency, safe disposal) into their national qualification frameworks (competencies and skills) through curricula updates and certification schemes. Specific assistance was provided to: *Africa Anglophone*: Malawi, Mozambique, Zimbabwe; *Latin America, Mexico and Central America*: Dominican Republic, Ecuador, Honduras, Guatemala; *Pacific Island Countries*: Micronesia, Samoa, Solomon Islands, Tonga, Vanuatu; *South Asia*: Bhutan, China, Mongolia, Sri Lanka; *South East Asia*: Brunei, Lao PDR, Myanmar; *West Asia*: Bahrain, Iraq, Oman, Saudi Arabia.
- The pilot stage of *Refrigerant Driver's License (RDL) for Small Applications* in six countries, i.e. Grenada, Maldives, Rwanda, Sri Lanka, Suriname, Trinidad and Tobago was evaluated and trainings carried out. For more information see Annex 8 – *Progress report on four global CAP activities*.
- Promoted the use of RDL in further pilot countries as a TVET-recognised program in cooperation with respective authorities and relevant international partners.
- Assisted Maldives in conducting a study to explore the option to establish its stand-alone certificate system based on the RDL system.
- The model *Refrigerant Environmental Certificate* developed by international partners based on the experience of West Asia (Bahrain, Kuwait and Qatar) was evaluated and piloted and promoted to other Article 5 countries (Due to COVID-19, some meetings were postponed).

SPO 3: Promote development & enforcement of standards for safe handling of flammable & toxic alternatives

- Sessions in Network meetings on refrigerants, standards and RAC applications were organised in cooperation with international/regional partners, as per the need of each region. Additional specific support was provided to: *Latin America, Mexico and Central America*: Honduras and Guatemala; *South Asia*: Mongolia; *West Asia*: Bahrain, Iraq, Syria.
- A model *National Refrigerant Code* was developed as part of HPMP of Egypt and will be made available for all interested countries as agreed with NOU and local authorities.
- Technical information on good practices including flammable refrigerants, safety and handling, maintenance and leak detection, reducing use/emissions and enhancing energy efficiency in refrigeration servicing sector was updated and outreached, for more information see Annex 8 – *Progress report on four global CAP activities*. Some planned activities were postponed due to COVID-19.

⁸ Technical and Vocational Education and Training

- Supported the updating of national manuals of good practices in Ecuador, Honduras, Timor Leste, India, Mongolia, Myanmar, Viet Nam.

SPO 4: Address high ambient temperature country's needs

- Outputs and results from the PRAHA-I and II projects with all 35 high ambient temperature (HAT) countries were shared.
- Since the planned High Ambient symposium was postponed due to COVID-19, UNEP and in cooperation with UNIDO and ASHRAE organised two Webinars for HAT countries (in English and French) to build their knowledge about HAT related research and outcomes of all relevant projects.
- Developed policy briefs (Special technical briefs and summaries) on the outcomes of PRAHA and EGYPR projects including comparisons with other relevant programs.
- A *Risk Assessment Model for the Safe Handling of Flammable Refrigerants* was produced under the PRAHA-II project in HAT countries for the installation, operation and servicing of small applications. Testing the model in HAT countries is envisaged to be part of future projects.

OVERARCHING OBJECTIVE 3: Building capacity to initiate enabling activities for the HFC phase-down

SPO 1: Facilitate and support ratification of Kigali Amendment

- Raised the awareness of NOUs about the Kigali Amendment before and after ratification, including assisting them to better understand the reasons and benefits of ratifying, and the legal, administrative, cost and technology implications, through Network meetings, information materials and ad hoc support.
- Specific support was provided, including through Enabling Activity projects to: *Caribbean*: Antigua and Barbuda, The Bahamas, Belize, Dominica, Guyana, St. Kitts and Nevis, Suriname; *Latin America, Mexico and Central America*: Bolivia; *Pacific Island Countries*: Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tuvalu, Tonga, Vanuatu; *South Asia*: Afghanistan, Bangladesh, Bhutan, China, Iran, Maldives, Mongolia, Nepal, Pakistan, Sri Lanka; *South East Asia*: Brunei Darussalam, Cambodia, Lao PDR, Myanmar and Timor Leste; *West Asia*: Iraq, Kuwait, Oman, Saudi Arabia, Syria.
- Facilitated sharing of experiences in issues related to Kigali Amendment, including in Albania, Armenia, North Macedonia and Montenegro.
- As part of the HFC Outlook Model project, the ten participating countries⁹ developed “forecasting scenarios” for HFCs to understand how different HFC phase-down strategies align with the Kigali Amendment targets.
- Provided *ad hoc support* as required (in cooperation with Ozone Secretariat) to countries in the ratification process and provided specific assistance to: *Africa Anglophone*: Mauritius, Uganda; *Europe and Central Asia*: Turkmenistan, Georgia; *Pacific Island Countries*: Cook Islands, Fiji, Nauru, Papua New Guinea, Samoa, Solomon Islands, Tuvalu; *South Asia*: Afghanistan, Bangladesh, Bhutan, China, Maldives, Mongolia, Nepal, Pakistan, Sri Lanka; *South East Asia*: Brunei Darussalam, Lao PDR, Myanmar, Timor Leste.
- Special sessions were organised in Network meetings (in collaboration with Implementing Agencies and Multilateral Fund Secretariat) as well as provision of *ad hoc* support to examine how countries address overlapping issues and identify opportunities between HPMPs and HFC phase-

⁹ Bahrain, Bosnia and Herzegovina, Dominican Republic, Gabon, Guatemala, Honduras, Kuwait, Mali, Senegal and Sri Lanka.

down plans. A number of virtual meetings were held. For more information see Annex 10 – *Meetings and workshops*.

Strategic Programme Objective 2: Assist countries to review current data reporting approaches

- Raised the awareness of NOUs on the importance of accurate and reliable HFC baselines, providing guidance on establishing them and assisted NOUs to identify practical methodologies for HFC data collection, analysis and reconciliation to ensure data accuracy. Additional specific support was provided to: *Africa Francophone*: Gabon, Mali, Senegal; *Latin America, Mexico and Central America*: Dominican Republic, Ecuador, Chile, Guatemala, Honduras, Paraguay.
- Provided the opportunity for the Ozone Secretariat to present the new online reporting system for Article 7 data during Network meetings and virtual meetings/webinars.
- The OzonAction smartphone and desktop applications *WhatGas?* and *GWP-ODP Calculator* were updated and improved, translated into other UN languages and further outreached. Accompanying tutorial videos were also created.
- A new application the HCFC Quota and Licence Tracker was launched to assist NOUS with the planning, calculating, monitoring and managing consumption quotas and licences for HCFCs.

SPO 3: Assist with review of licensing systems

- Provided assistance to NOUs to review their existing licensing and quota systems upon request and facilitated the sharing of regional experiences and good practices on ODS and HFC licensing and quota systems through network meetings and webinars. Additional specific assistance on the review of existing HCFC legislation and ‘gap’ analysis related to HFCs was provided to: *Africa Anglophone*: Angola, Botswana, Egypt, Eritrea, Eswatini, Ethiopia, Ghana, Kenya, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Nigeria, Rwanda, Sierra Leone, South Sudan, Tanzania, Uganda, Zambia, Zimbabwe; *Caribbean*: Saint Lucia, St. Vincent and the Grenadines; *Latin America, Mexico and Central America*: Chile, Ecuador, Guatemala, Honduras, Paraguay; *Pacific Island Countries*: Cook Islands, Kiribati, Marshall Islands, Micronesia, Niue, Palau, Samoa, Tuvalu, Tonga, Fiji, Papua New Guinea, Vanuatu; *South Asia*: Afghanistan, Bhutan, China, Iran, Maldives, Mongolia, Nepal, Sri Lanka; *South East Asia*: Bangladesh, Bhutan, Brunei Darussalam, Cambodia, DPR Korea, Lao PDR, Myanmar, Maldives, Sri Lanka, Timor Leste, Viet Nam; *West Asia*: Bahrain, Iraq, Kuwait, Oman, Qatar, Syria.
- Encouraged countries to introduce voluntary HFC licensing systems (even prior to the ratification of the Kigali Amendment), with specific support provided to: *Latin America, Mexico and Central America*: Bolivia, Chile, Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Paraguay; *Pacific Island Countries*: Cook Islands, Fiji, Nauru, Papua New Guinea, Solomon Islands, Tonga; *South Asia*: Afghanistan, Bhutan, Maldives, Mongolia, Nepal, Sri Lanka; *South East Asia*: Brunei Darussalam, Cambodia, Lao PDR, Myanmar, Philippines.
- Encouraged countries to review their national Customs codes in the context of the 2022 WCO HS¹⁰ code update to facilitate their future adoption of HFC codes and share national experiences.
- In cooperation with the WCO, prepared and outreached technical briefing documents on the 2022 update of WCO’s HS codes for HFCs and mixtures in the context of the Kigali Amendment and provide guidance about what countries/regions should do prior to the release of those codes. These were translated in other UN languages.

¹⁰ World Customs Organization Harmonised System codes

- Supported individual countries and/or regions to work with their Customs organisations to assign specific Customs codes (additional digits) for HFCs in their current national HS code systems as a temporary measure, with specific support provided to: *Latin America, Mexico and Central America*: Chile, Ecuador, Guatemala, Honduras Paraguay; *Pacific Island Countries*: Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tuvalu, Tonga, Vanuatu; *South Asia*: Afghanistan, Bangladesh, Bhutan, China, Iran, Maldives, Mongolia, Nepal, Pakistan, Sri Lanka; *South East Asia*: Brunei Darussalam, Cambodia, Lao PDR, Myanmar, Timor Leste, Viet Nam.
- Coordinated with the regional organisations responsible for HS codes to explore options to assign temporary HS codes for HFCs/mixtures: *South East Asia*: ASEAN working group on the use of interim sub regional HS code for HFCs and mixtures under 2017 ASEAN Harmonised Tariff Nomenclature and preparation of HS codes for HFCs and mixture under the 2022 update. *Pacific Island Countries*: Oceania Customs Organization on the use of interim sub regional HS codes for HFCs and mixtures under the Pacific Harmonized Commodity Description and Coding System 2017 and preparation of HS codes for HFCs and mixture under the 2022 update – this was approved and endorsed by the Forum Trade Ministers Meeting.
- Encouraged countries to establish and/or strengthen mandatory reporting by importers and wholesalers. Specific support was provided to: *Pacific Island Countries*: Palau, Samoa, Solomon Islands, Tonga; *South Asia*: Afghanistan, Bhutan, Iran, Maldives, Mongolia, Nepal, Sri Lanka; *South East Asia*: Brunei Darussalam, Cambodia, Lao PDR, Myanmar, Timor Leste.

SPO 4: Support institutional arrangements

- Assisted countries to understand the legal implications of the Kigali Amendment with regard to strengthening existing national laws, regulations and policies and identify new options needed to meet those commitments, through various means including participation of legal experts in Network meetings and virtual seminars. Specific additional support was provided to: *Caribbean*: St. Vincent and the Grenadines; *Europe and Central Asia*: Georgia, Kyrgyzstan, Turkmenistan; *Latin America, Mexico and Central America*: Bolivia, Chile, Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Paraguay; *Pacific Island Countries*: Cook Islands, Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Samoa, Solomon Islands, Tuvalu, Tonga, Vanuatu; *South Asia*: Afghanistan, Bangladesh, Bhutan, China, Iran, Maldives, Mongolia, Nepal, Pakistan, Sri Lanka; *South East Asia*: Brunei Darussalam, Cambodia, Lao PDR, Myanmar, Timor Leste.
- Provided *ad hoc* direct expert guidance to help review existing legislation and regulations that need to be amended to phase down HFCs (with priority being given to countries that have ratified Kigali Amendment). Specific additional support was provided to: *Africa Anglophone*: Mozambique, Rwanda; *Caribbean*: Saint Lucia, St. Vincent and the Grenadines; *Latin America, Mexico and Central America*: Bolivia, Chile, Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Paraguay; *Pacific Island Countries*: Fiji, Micronesia, Papua New Guinea, Tonga, Tuvalu, Vanuatu; *South Asia*: Afghanistan, Bhutan, China, Iran, Maldives, Mongolia, Sri Lanka; *South East Asia*: Brunei Darussalam, Cambodia, Lao PDR.

SPO 5: Implement demonstration projects for non-investment activities

- Special sessions planned at network meetings and international events to showcase the results of the Egypt and Kuwait demonstration projects (not-in-kind technologies for district cooling and central air conditioning applications) were postponed due to COVID-19. Opportunities to support other Implementing Agencies to showcase of outcomes of their completed demonstration projects

at Network meetings were also postponed. UNEP and UNIDO are developing summaries to highlight the outcomes of these projects and promote expansion of concept to other Article 5 countries.

SPO 6: Assist with implementation and monitoring of Enabling Activities projects

- Provided technical support to 93 UNEP-assisted countries to implement and report on their Enabling Activity projects and provide assistance to other countries upon request. UNEP developed guidance and templates to assist countries in implementing and reporting on different activities and achievements under their projects, sample ToRs for hiring national consultants for the preparation of country assessment reports and to documented the lessons learned about how the fast-start activities can support early action on ratifying and implementing the Kigali Amendment. Specific additional support was provided to: *Caribbean*: The Bahamas, Dominica, Guyana, Saint Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines, Suriname; *Europe and Central Asia*: Georgia, Kyrgyzstan, Turkmenistan; *Latin America, Mexico and Central America*: Bolivia, Chile, Dominican Republic, Ecuador, Honduras, Guatemala, Mexico, Paraguay; *Pacific Island Countries*: Cook Islands, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Samoa, Solomon Islands, Tuvalu, Tonga, Vanuatu; *South Asia*: Afghanistan, Bangladesh, Bhutan, China, Iran, Maldives, Mongolia, Nepal, Pakistan, Sri Lanka; *South East Asia*: Brunei, Cambodia, Lao PDR.
- Completed and submitted the final reports of five Enabling Activity projects: Cambodia, Kyrgyzstan, Lesotho, Tonga, Zimbabwe.
- Reviewed the progress during Network meetings and thematic workshops and prepared an Enabling Activity project status report (up to March 2020) of all ongoing Enabling Activity projects that were submitted to the Multilateral Fund Secretariat.
- Specific additional support regarding progress and challenges from the implementation of Enabling Activities was provided to: *Caribbean*: The Bahamas, Dominica, Guyana, Saint Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines, Suriname; *Pacific Island Countries*: Cook Islands, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Samoa, Solomon Islands, Vanuatu; *South Asia*: Afghanistan, Bangladesh, Bhutan, China, Iran, Maldives, Mongolia, Nepal, Pakistan, Sri Lanka; *South East Asia*: Brunei, Lao PDR, Myanmar, Timor Leste.
- Developed and disseminated the ‘Enabling Activities *project Knowledge Resources Toolbox*’, with useful and relevant products/tools including the knowledge resources mapping matrix tool to assist Article 5 countries in identifying and mapping the most appropriate OzonAction knowledge product that can be utilised under each of the main components/activities during the implementation of the Enabling Activities projects.
- Developed and outreached specific information briefings on Kigali Amendment and implications for specific target groups.
- Completed the second phase of the *HFC Outlook Model* project in eight countries (Bosnia and Herzegovina, Dominican Republic, Gabon, Honduras, Guatemala, Mali, Senegal and Sri Lanka), including completing data collection and analysis, development of a user manual and quick start guide and 10 training tutorial videos.
- In cooperation with international RAC association partners, and in support of the data collection and analysis work under the Enabling Activities projects, CAP piloted the *Cold Chain Database Model* in Bahrain, Bosnia, Maldives, North Macedonia, Paraguay and Senegal (ongoing activity).

OVERARCHING OBJECTIVE 4: Leveraging the Clearinghouse mandate

SPO 1: Coordinate ten Regional Networks & facilitate country-to-country cooperation

- Organised Regional Network and Thematic meetings in all ten regions for all NOUs as follows (For more information see Annex 10 – *Meetings and workshops organised by CAP*). Some events were postponed due to COVID-19.
 - West Asia - Capacity Building Workshop for Newly-Appointed Ozone Officers/ Ozone Officers' Assistants (four countries), Beirut, Lebanon, 16-19 September 2019.
 - Enabling Activities Workshop for Countries of East and West African Region- Africa Anglophone Network, Accra, Ghana, 23-25 September 2019.
 - ECA Enforcement Meeting and Global Montreal Protocol Award for Customs and Enforcement Officers from Europe and Central Asia, Kiev, Ukraine, 24-25 September 2019.
 - ECA Network Meeting for Montreal Protocol Officers from Europe and Central Asia, Kiev, Ukraine, 26-27 September 2019.
 - Ozone Officers Training for Countries of East and West African Regions - Africa Anglophone Network, Accra, Ghana, 26-27 September 2019.
 - ECA Enabling Activities project and Stakeholder Consultation Meeting to facilitate Kigali Amendment ratification (jointly with the Ozone Secretariat), Ashgabat, Turkmenistan, 30 September -2 October 2019.
 - Thematic Network Meeting of National Ozone Officers of Haiti, the English-Speaking Caribbean and Customs Officers, Paramaribo, Suriname, 6-9 October 2019.
 - Customs Twinning Workshop and Border Dialogue for Central and East African Francophone Countries, Yaoundé, Cameroon, 23-24 October 2019.
 - National Ozone Unit and Customs Twinning Workshop and Border Dialogues for Countries of the East African Region – Africa Anglophone Network, Kampala, Uganda, 20-22 November 2019.
 - ECA Enabling Activities project and Stakeholder Consultation Meetings to facilitate Kigali Amendment ratification, Tbilisi, Georgia, 27-29 November 2019.
 - Training workshop for New National Ozone Officers/National Ozone Unit staff of Asia and Pacific, Bangkok, Thailand, 3-4 December 2019.
 - Europe and Central Asia (ECA) Ozone₂Climate Meeting with Montreal Protocol Officers & RAC Associations/Experts and Participation in SMEITS/KGH's 50th International HVAC&R Congress and Exhibition, (including technology roundtable and exhibition booth), Belgrade, Serbia, 4-6 December 2019.
 - Workshop with ECOWAS Member States and ECOWAS Secretariat on Harmonization of ODS Regulations for the ECOWAS region and on the possibility of Adopting an Extended HS Code to accommodate the Refrigerants affected by the Kigali Amendment, Guinea Bissau, 18-20 December 2019.
 - Caribbean Network Thematic Meeting and HVAC Technology Tour back to back the Annual ASHRAE Winter Conference, Orlando, United States of America, 1-4 February 2020.
- Due to the COVID-19 pandemic, the planned Regional Network/thematic and other meetings could not be organised as planned; virtual meetings were held in their place. CAP organised **38 virtual meetings and webinars** on various issues during this period. These encompassed CAP organising and delivering meetings virtually, as well as supporting and participating in a number of virtual national events. These virtual meetings and webinars included: National Ozone Officer network meetings and thematic meetings on specific issues, national and regional stakeholder consultations, capacity building for NOOs, trainings for Customs officers and refrigeration & air conditioning

technicians, country-to-country consultations, Kigali and HFC control webinars, high ambient temperature international webinars, as well as events focusing on: the informal prior informed consent mechanism (iPIC), gender mainstreaming, HS codes, the cold chain, the Refrigerant Driving License, etc. Details of these meetings can be found in Annex 10.

- Supported the organisation of a local “Ozone₂Climate” Roadshow and Roundtable Expo in Mongolia in August 2019 and an “Ozone₂Climate” Roadshow and Roundtable workshop during the 2020 China Refrigeration Expo in Chongqing, China (August 2020).
- Organised a technology roundtable on ozone layer and climate-friendly and energy-efficient technologies and exhibition booth at the annual SMEITS / KGH congress in Belgrade in December 2019.
- Facilitated country-to-country cooperation, including the following: *Africa Anglophone*: Customs Officers from neighbouring countries shared experience and exchange ideas on combating illegal ODS trade: Botswana, Eswatini, Lesotho, Zambia, Zimbabwe, Namibia; *Europe and Central Asia*: Visit to hospital with an integrated geothermal energy to produce cooling, heating and hot water for NOOs and RAC experts (Belgrade, December 2020); *Latin America, Mexico and Central America*: Study tour (October to November 2019) in Colombia to visit the vocational institution (SENA), attended by nine instructors from vocational institution (INFOP) and three NOU officials of Honduras and visit to refrigerant collection, recovery and reclamation centre; *Asia-Pacific*: Fiji - Marshall Islands, Nauru, Tuvalu: New NOOs from Marshall Islands, Nauru and Tuvalu learned operation of the National Ozone Unit and Implementation and enforcement of licensing system (September 2019); Malaysia – Brunei Darussalam: Master trainers from Malaysia delivered training on good servicing practices for flammable refrigerant to master trainer of Brunei Darussalam (September 2019); Malaysia – Timor Leste: Master trainers from Timor Leste attended the National Master Trainer Workshop on Good Practices in the Refrigeration and Air-conditioning Servicing Sector (September 2019); Malaysia – Brunei Darussalam: New NOOs from Brunei Darussalam learned operation of the National Ozone Unit and engagement of national stakeholders from Malaysia NOU (October 2019); China - Afghanistan, Bhutan, Brunei, Lao PDR, Maldives, Mongolia, Myanmar and Nepal: China hosted regional ToT training for handling HC-290 systems (December 2019).

SPO 2: Coordinate, develop & outreach capacity building and information services

- Created new and updated information materials, including fact sheets, policy and technical briefs, publications, smartphone applications, etc responding to the requests and needs of Article 5 countries, including the following:

Videos and apps

- RAC Technician Videos - Full Length Films ([link](#))
- GWP-ODP Calculator - Updated and Improved ([link](#))
- *WhatGas?* application update ([link](#))
- New and improved iPIC (Informal Prior Informed Consent) platform ([link](#)) (platform) ([link](#)) (flyer)
- HCFC Quota and Licence Tracker - a simple but powerful tool to assist NOOs with the tasks of planning, calculating, monitoring and managing consumption quotas and licences for HCFCs. ([link](#))
- Gas Card online visualisation tool to provide NOOs, engineers and technicians with summary cards of controlled substances and their alternatives

Factsheets/briefs

- Refrigerant Cylinder Colours - What has changed? ([link](#))

- Updated Refrigerants Designations and Safety Classifications _ 2020 ([link](#))
- Servicing Tail for HCFCs - What is it & Why Does it Matter? ([link](#))
- Cheat Sheet - Proposed Additional HS Code Sub-Headings for HFCs in Advance of the 2022 HS Code Update ([link](#))
- Dealing with Seized ODS - Options for Article 5 Countries ([link](#))
- OzonAction Factsheet: Article 7 Data Reporting on HFCs: When Countries Need to Start Reporting ([link](#))
- HS Codes for HFCs - Advice for countries in advance of the 2022 HS code update ([link](#))
- Cold Chain Technology Briefs (In cooperation with IIR) in French and Spanish.
- Sustainable Development Goal 5 and the Montreal Protocol: Gender (English and Spanish)
- Overview tables for HFC policy and legislative options (ECA).
- Checklists on auctioning of seized refrigerants

Publications

- Women in the Refrigeration and Air-conditioning Industry: Personal Experiences and Achievements ([link](#)) - UN Environment Programme (UNEP), OzonAction, in cooperation with UN Women, has compiled this booklet to raise awareness of the opportunities available to women and to highlight the particular experiences and examples of women working in the sector and to recognise their successes.
- In this period CAP focused on the outreach of the existing as well as new publications, products and tools developed by CAP to ensure that they are well promoted and accessible to Article 5 countries and other relevant stakeholders. Dissemination was carried out through a variety of means, including direct mailing (email) to all NOUs and other relevant stakeholders, sharing through partner organisations and Implementing Agencies, holding briefing sessions in the agenda of meetings to inform on available and upcoming publications and products, highlighting new publication on the OzonAction website and including in OzoNews, regional webinars, etc.
- CAP translated many of these information materials and applications and supported countries to translate into UN and local languages, as appropriate.
- The OzonAction website (www.unenvironment.org/ozonaction) and OzonAction Meeting Portal (www.ozonactionmeetings.org) were maintained up to date with regular postings, encouraging Article 5 countries to prepare and submit relevant news articles and brief meeting reports.
- The OzoNews e-newsletter was prepared and disseminated on a bi-weekly basis; the 15 January 2020 issue marked 20 years of continued service of OzoNews providing a regular and concise news update to the Montreal Protocol community.
- Two editions of the OzonAction Scoop on topical subjects were prepared and disseminated - *The importance of Cold Chain: Extending the Shelf Life of Cut Flowers and Fresh Produce* and *The Montreal Protocol and the Sustainable Development Goals*
- Conducted outreach of Montreal Protocol issues at key international, regional and national fora:
 - Information materials, capacity-building and partnership products outreached at the Meeting of the Parties (Rome), network meetings and through electronic means.
 - Supported the Samoa NOU to organise a side event on the linkages of HCFC phase-out / HFC phase-down and energy efficiency during the Regional Energy & Maritime Ministers Meeting in September 2019.
 - Worked with the Pacific Islands Forum Secretariat to prepare a paper on the Kigali Amendment and its obligations (subsequently endorsed by the Foreign Trade Officials Meeting and the Forum Trade Ministers) to support Kigali implementation in the region.

- Presented the link between the HCFC/HFC based RAC equipment to the ASEAN Inception Meeting on Product Registration Systems & Lighting National Roadmaps in Bangkok, Thailand in February 2020.
- Encouraged and supported national celebrations of *World Ozone Day* on 16 September 2019- awareness-raising activities were complemented with dissemination of information and news related to Montreal Protocol for relevant audiences (including the messages from the Secretary-General and UNEP Executive director)
- Developed, translated and outreached materials related to *World Refrigeration Day* on 26 June 2020, under the theme of “Cold Chain 4 Life” in cooperation ASHRAE, IIR, EPEE, GFCCC and WRD Secretariat. This included a package of support materials, in six UN languages, and provided guidance to NOUs for ideas of celebration in the COVID-19 context. UNEP co-hosted a *World Refrigeration Day* international webinar with the partner organisations and created a webpage for national events.¹¹

¹¹ <https://www.unenvironment.org/ozonaction/celebrating-world-refrigeration-day-around-world-26-june-2020>.

ANNEX 1 – CAP BUDGET PROPOSAL FOR 2021

		Bud Ln	Component	Location	w/m	Grade	CAP 2020 Approved	Proposed CAP 2021
10	PROJECT PERSONNEL COMPONENT							
			Title/Description					
		1101	Head of Branch	Paris	12	D1	266,000	266,000
		1102	Senior Environment Officer - Network & Policy	Paris	12	P5	261,000	261,000
		1103	Montreal Protocol Senior Programme Management Officer - Capacity Building	Paris	12	P5	261,000	261,000
		1104	Montreal Protocol Programme Officer	Paris	12	P4	228,000	228,000
		1105	Montreal Protocol Senior Coordination Officer-ExCom	Paris	12	P5	261,000	261,000
		1106	Montreal Protocol Programme Officer - non ODS Help Desk	Paris	12	P3	191,000	191,000
		1107	Montreal Protocol Programme Officer	Paris	12	P3	191,000	191,000
		1108	ECA Montreal Protocol Regional Coordinator	Paris / ECA	12	P4	228,000	228,000
		1109	Montreal Protocol Coordinator International Partnerships	Paris	12	P5	268,000	268,000
		1121	ROAP Montreal Protocol Regional Senior Coordinator - Asia Pacific	Bangkok	12	P5	220,000	220,000
		1122	ROAP Montreal Protocol Regional Coordinator - SEAP + PICs	Bangkok	12	P4	193,000	193,000
		1123	ROAP Montreal Protocol Programme Officer	Bangkok	12	P4	193,000	193,000
		1124	ROAP Montreal Protocol Programme Officer (SEAP + PICs)	Bangkok	12	P3	156,000	156,000
		1125	ROAP Montreal Protocol Programme Officer - (SA-SEAP)	Bangkok	12	P3	156,000	156,000
		1131	ROWA Montreal Protocol Regional Coordinator (West Asia)	Manama	12	P4	222,000	222,000
		1132	ROWA Montreal Protocol Programme Officer	Manama	12	P3	214,000	214,000
		1141	ROA Montreal Protocol Regional Senior Coordinator (Francophone)	Nairobi	12	P5	245,000	245,000
		1142	ROA Montreal Protocol Regional Senior Coordinator (Anglophone)	Nairobi	12	P5	245,000	245,000
		1143	ROA Montreal Protocol Programme Officer (Anglophone)	Nairobi	12	P3	171,000	171,000
		1144	ROA Montreal Protocol Programme Officer (Francophone)	Nairobi	12	P3	171,000	171,000
		1145	ROA Montreal Protocol Associate Officer (Anglophone)	Nairobi	12	P2	101,000	101,000
		1146	ROA Montreal Protocol Associate Officer (Francophone)	Nairobi	12	P2	101,000	101,000
		1147	Montreal Protocol Programme Officer (Admin and Finance)	Nairobi/Law	12	P3	156,000	156,000
		1151	ROLAC Montreal Protocol Regional Coordinator (Latin America)	Panama	12	P4	194,000	194,000
		1152	ROLAC Montreal Protocol Regional Coordinator (Caribbean)	Panama	12	P4	194,000	194,000
		1153	ROLAC Montreal Protocol Information Manager	Panama	12	P4	194,000	194,000
		1154	ROLAC Montreal Protocol Programme Officer (Caribbean)	Panama	12	P3	165,000	165,000
		1155	ROLAC Montreal Protocol Programme Officer (Latin America)	Panama	12	P3	165,000	165,000
		1301	Principal Assistant HOB	Paris	12	G6	117,000	117,000
		1302	Programme Assistant - Regional Networks	Paris	12	G6	117,000	117,000
		1303	Programme Assistant (Clearinghouse)	Paris	12	G6	117,000	117,000

		Bud Ln	Component	Location	w/m	Grade	CAP 2020 Approved	Proposed CAP 2021	
		1304	Programme Assistant	Paris /ECA	12	G5	105,000	105,000	
		1305	Programme Assistant - Capacity Building/iPIC	Paris	12	G6	117,000	117,000	
		1306	Programme Assistant	Paris	12	G5	104,000	104,000	
		1307	Budget & Finance Assistant	Paris	12	G7	124,000	124,000	
		1308	Temporary assistance CAP			N/A	54,000	54,000	
		1321	ROAP Programme Assistant (SA)	Bangkok	12	G6	68,000	68,000	
		1322	ROAP Programme Assistant (SEAP)	Bangkok	12	G5	55,000	55,000	
		1323	ROAP Administrative Assistant	Bangkok	12	G7	76,000	76,000	
		1332	ROWA Programme Assistant	Manama	12	G6	76,000	76,000	
		1341	ROA Administrative Assistant	Nairobi	12	G7	61,000	61,000	
		1342	Montreal Protocol Global Administrative Assistant	Nairobi/Law	12	G5	37,000	37,000	
		1343	ROA Programme Assistant	Nairobi	12	G6	46,000	46,000	
		1344	ROA Programme Assistant (Francophone)	Nairobi	12	G6	46,000	46,000	
		1345	Montreal Protocol Global Administrative Assistant	Nairobi/Law	12	G5	37,000	37,000	
		1351	ROLAC Administrative Assistant	Panama	12	G5	39,000	39,000	
		1352	ROLAC Administrative Assistant	Panama	12	G7	62,000	62,000	
			Subtotal Staff Personnel				7,069,000	7,069,000	
	1600	TRAVEL							
		1601	Paris staff travel*	Paris			171,000	171,000	
		1610	ECA staff travel	Paris / ECA			25,000	25,000	
		1620	ROAP staff travel (SA)	Bangkok			33,000	33,000	
		1621	ROAP staff travel (SEAP)	Bangkok			33,000	33,000	
		1622	ROAP staff travel (PIC)	Bangkok			50,000	50,000	
		1630	ROWA staff travel	Manama			45,000	45,000	
		1640	ROA staff travel (Francophone)	Nairobi			60,500	60,500	
		1641	ROA staff travel (Anglophone)	Nairobi			60,500	60,500	
		1650	ROLAC staff travel (Caribbean)	Panama			35,000	35,000	
		1651	ROLAC staff travel (Latin America)	Panama			35,000	35,000	
			Subtotal Travel				548,000	548,000	
20/30	REGIONAL ACTIVITIES								
			CONTRACT SERVICE COMPONENT						
		2210	ECA Network Thematic Meetings/South-South cooperation/Regional awareness raising	Paris / ECA			130,000	130,000	
			Subtotal ECA				130,000	130,000	
		2220	ROAP Network Thematic Meetings/South-South cooperation/Regional awareness raising (SA)	Bangkok			92,000	92,000	
		2221	ROAP Network Thematic Meetings/South-South cooperation/Regional awareness raising (SEAP)	Bangkok			70,000	70,000	
		2222	ROAP Network Thematic Meetings/South South Cooperation/Regional awareness raising (PIC)	Bangkok			105,000	105,000	
			Subtotal ROAP				267,000	267,000	
		2230	ROWA Network Thematic Meetings/South-South cooperation/Regional awareness raising	Manama			100,000	100,000	
			Subtotal ROWA				100,000	100,000	

		Bud Ln	Component	Location	w/m	Grade	CAP 2020 Approved	Proposed CAP 2021	
		2240	ROA Network Thematic Meetings/South-South cooperation/Regional awareness raising (Francophone)	Nairobi			175,000	175,000	
		2241	ROA Thematic Meetings/South-South cooperation/Regional awareness raising (Anglophone)	Nairobi			175,000	175,000	
			Subtotal ROA				350,000	350,000	
		2250	ROLAC Network Thematic Meetings/South-South cooperation/Regional awareness raising (Caribbean)	Panama			130,000	130,000	
		2251	ROLAC Network Thematic Meetings/South-South cooperation/Regional awareness raising (Latin America)	Panama			120,000	120,000	
			Subtotal ROLAC				250,000	250,000	
			Subtotal Regional activities				1,097,000	1,097,000	
GLOBAL SERVICES/ CAPACITY DEVELOPMENT PORTFOLIO									
		3210	NOO Training				50,000	50,000	
		3211	Policy & Technical Assistance				130,000	95,000	
		3212	Translation & Outreach				110,000	115,000	
		3213	Legal Framework post Kigali				0	0	
		3214	Refrigeration Servicing Sector Assistance				85,000	160,000	
		3215	Enforcement & Customs				130,000	85,000	
			Subtotal Global Services				505,000	505,000	
MEETINGS									
50		4210	Advisory and Consultative Meetings and Stakeholders Workshops (Emerging needs/Refrigeration Servicing Sector)	Paris/REGIONS			165,000	165,000	
			Subtotal Meetings				165,000	165,000	
			Subtotal Global Services/Meetings				670,000	670,000	
OFFICE OPERATIONS									
60		5210	Office Operations/Communication (equipment, rental, supplies & maintenance)	Paris			290,000	290,000	
		5220	Office Operations/Communication (equipment, rental, supplies & maintenance)	Regions			300,000	300,000	
			Subtotal Office Operations				590,000	590,000	
	99	TOTAL DIRECT PROJECT COST						9,974,000	9,974,000
		<i>Programme support costs (8%)</i>						797,920	797,920
90		GRAND TOTAL						10,771,920	10,771,920

*1601 Participation in meetings: Executive Committee, MOP/OEWG, Inter-Agency Coordination, Regional Network Meetings & outreach activities.

**3210 - 3215 activities & budget to be carried to 2022.

Note on all other Budget Lines unspent balances will be returned.

ANNEX 2 – FINANCIAL ANALYSIS OF CAP BUDGET PROPOSAL FOR 2021

Overview of the proposed 2021 budget

60. While developing this budget proposal, UNEP took into account feedback from Article 5 countries about their needs related to meeting the 35% phase out target for HCFCs in 2020 and, where applicable, their new Kigali Amendment responsibilities, as well as recent developments under the Montreal Protocol. The proposal also reflects UNEP's internal analysis of the CAP structure, staff roles and responsibilities, the distribution of resources within CAP (i.e. between the individual regions, as well as between the regions and Paris), and whether the level and type of services provided by the current CAP team match the new circumstances. It also takes into account the funds returned to the previous Executive Committee as an indication of actual expenditures. UNEP continues to exercise due diligence and optimise activities and costs to ensure the most efficient use of funds.

61. To deliver the planned comprehensive compliance assistance services to Article 5 countries during 2021, during the last year of the 2018-2020 CAP Strategy, UNEP requests Executive Committee approval of US\$ 10,771,920 which includes a project cost of US\$ 9,974,000 and programme support costs (PSC) of US\$ 797,920, i.e. 8%. This request is based on a zero-growth scenario for both staff and activities and is at the same level as that approved in 2019 and 2020. The zero % growth falls well below the maximum 3% increase limit that is allowed by the Executive Committee under Decision 47/24 (a)(iii), which limits the increase in the CAP budget to 3 per cent unless the Executive Committee is given evidence that inflationary pressures justify otherwise. The proposed value for 2021 is also less than the amount indicated in the approved UNEP Business Plan.

62. UNEP undertook an in-depth review of the actual annual expenditures for the CAP for the period 2019-2020 and this was compared with the partial expenditures for the current year up to August 2020 in order to have projections for 2021. In accordance with Decision 84/60 (c)(iv), the following table presents the approved CAP budgets for 2019 and 2020, the actual or estimated expenditures for those years, and the proposed 2021 budget.

Table 1: CAP budget data for the years 2019-2021

Budget item	2019			2020		2021
	Approved	Actual Expenditure	Balance as of 06-Aug-2020	Approved	Estimated expenditure as of 06-Aug-2020	Proposed
Staff personnel and consultants	7,069,000	5,970,987	1,098,013	7,069,000	6,569,000	7,069,000
Travel	548,000	498,958	49,042	548,000	80,000	548,000
Regional activities and meetings	1,262,000	1,262,000	-	1,262,000	200,000	1,262,000
Global services	505,000	467,593	37,407	505,000	250,000	505,000
Space and equipment	590,000	460,895	129,105	590,000	490,000	590,000
Sub-total CAP	9,974,000	8,660,433	1,313,567	9,974,000	7,589,000	9,974,000
Programme Support Costs	797,920	692,835	105,085	797,920	607,120	797,920
Grand total	10,771,920	9,353,268	1,418,652	10,771,920	8,196,120	10,771,920

63. Based on the projected requirements, UNEP proposes a 2021 budget level that is both realistic given the current pandemic and sufficient to cover CAP operations, noting that UNEP continues to return all unspent balances from CAP to the Executive Committee in a timely manner in accordance with Decisions 35/36 (d) and 73/53(b)(ii).

Budget re-prioritisation

64. As per Decision 84/60 (c)(ii), UNEP continues to extend the prioritization of funding between CAP budget lines so as to accommodate these changing priorities. After considering the needs and challenges facing Article 5 countries at this point in time, UNEP proposes the following budget reallocations for 2021:

- BL 3210 – National Ozone Officer Training (US\$ 50,000) will support the activities indicated in 2021 CAP workplan supporting Outcome 1, including: piloting of the *Advanced Training for Experienced National Ozone Officers*. The amount on this line remains unchanged compared to 2020.
- BL 3211 – Policy & Technical Assistance (US\$ 95,000) will support the activities indicated in 2021 CAP workplan supporting Outcome 1, including: development of short publications/factsheets, production of the OzonAction Scoop, development of a publication on Montreal Protocol and Sustainable Development Goals, and an online Knowledge Map.
- BL 3212 – Translation and Outreach (US\$ 115,000) will support the activities indicated in 2021 CAP workplan supporting Outcome 5, including: translation of key documents into UN languages, developing materials for World Ozone Day, and limited outreach activities. The increase of US\$ 5,000 compared to the previous year's budget reflects translations of several substantial documents that were finalized in 2020.
- BL 3214 - Refrigerant Servicing Sector Assistance (US\$ 160,000) will support the activities indicated in 2021 CAP workplan supporting Outcome 6, including: finalizing the pilot stage and deploying the Refrigerants Driver's License (RDL), piloting the Universal Training Kit, developing model codes of practice, technical briefs, and training tools for the sector. The increase of US\$ 75,000 compared to the previous year's budget reflects the development cost of those services.
- BL 3215 – Enforcement and Customs (US\$ 85,000) will support the activities indicated in 2021 CAP workplan supporting Outcome 3, including: online database of Montreal Protocol regulations, and para 44 supporting Outcome 4, including: updating the WCO-UNEP Customs e-learning, and layout of updated Customs training manual. The reduction of US\$ 45,000 compared to the previous year's budget reflects the fact that major deliverables (e.g. Customs training manual) were developed during 2020 as well as the reprioritization of resources to line 3214.

Staffing lines and structure

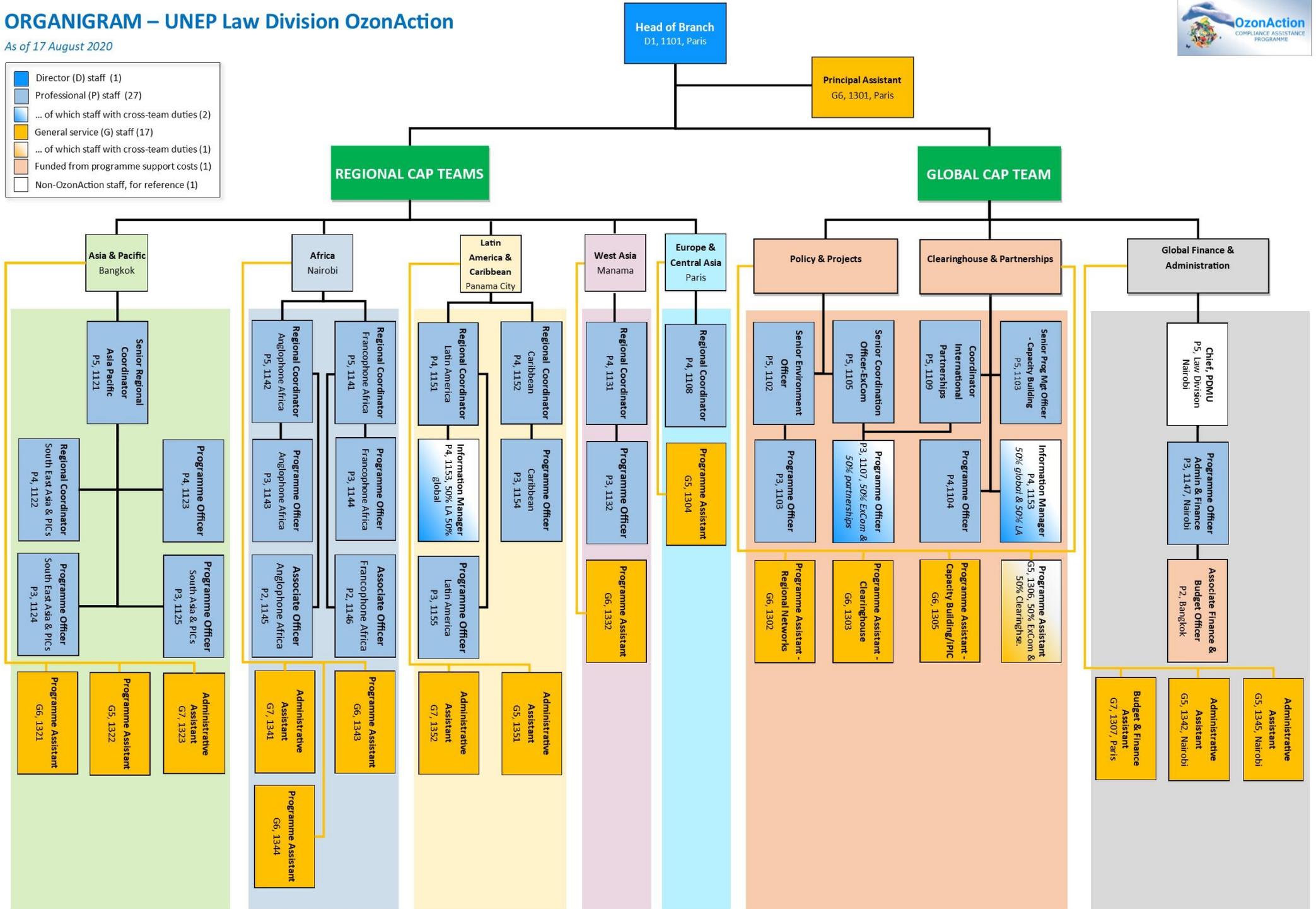
65. UNEP's continued high level of performance as an Implementing Agency of the Multilateral Fund is thanks to the expertise, dedication and hard work of the Regional and Global CAP teams in across five duty stations. Over the years, these Montreal Protocol professionals have evolved both individually and collectively to meet the ever-changing needs of Article 5 countries and to adjust to the progression of the Montreal Protocol, including recently the emerging challenges resulting from the Kigali Amendment. This flexibility and ability to adapt to country needs is one of the hallmarks of CAP. An organigram describing the structure of CAP for 2021 is presented in Annex 3 (CAP Organigram for 2021).

ORGANIGRAM – UNEP Law Division OzonAction

As of 17 August 2020



- Director (D) staff (1)
- Professional (P) staff (27)
- ... of which staff with cross-team duties (2)
- General service (G) staff (17)
- ... of which staff with cross-team duties (1)
- Funded from programme support costs (1)
- Non-OzonAction staff, for reference (1)



ANNEX 4 – OZONACTION CAP PARTNERSHIPS

Since becoming an Implementing Agency of the Multilateral Fund in 1991, UNEP OzonAction has built long-standing partnerships with key international, regional and national industry associations, professional societies, international organisations, government agencies, industry groups, and non-governmental organisations to further the objectives of the Montreal Protocol. These world-recognised partners bring their institutional reputation, expertise, and knowledge products to bear on issues related to implementation or enforcement of this multilateral environmental agreement in Article 5 countries. OzonAction's partnership activities produce and deliver the necessary support, tools and services that Article 5 countries efficiently implement their commitments under the Montreal Protocol and respond to emerging concerns and issues. These partnerships cover most of the important focus areas for the Parties of the Montreal Protocol with the main emphasis in the following:

- Certification of the refrigeration servicing sector technicians.
- Training and education of the refrigeration servicing sector.
- Advancement and deployment of suitable lower-GWP alternatives and technology.
- Surveying and analysing consuming sectors.
- Development and update of codes and standards.
- Customs training, monitoring trade and combating illegal trade.
- Development, enactment, and enforcement of policies and regulations.

The table below includes the partners with whom OzonAction's plans to cooperate in 2021 for different initiatives, products and activities. New partners may be added during the course of the year depending on the need of Article 5 countries

Organisation	Type of organisation	Scope	Type of cooperation with UNEP	Details of partnership
REFRIGERATION AND AIR CONDITIONING				
Brazilian Association of Refrigeration, Air-Conditioning and Ventilation Industry (ABRAVA)	Industry association	National	Member to the Refrigerant Driving License (RDL)	Support the International Advisory Group of the RDL program.
Colombian Association for Air-Conditioning and Refrigeration (ACAIRE)	Industry association	National	Member to the Refrigerant Driving License (RDL)	Support the International Advisory Group of the RDL program.
Air Conditioning and Refrigeration European Association (AREA)	Professional/ Industry Association	Global	Promoting adoption of ozone-friendly lower-GWP and energy efficient RAC technology; online e-learning; materials on the use of new refrigerants; certification of technicians	Sharing experience on strengthening RAC associations, training, certification, technology transfer and innovation with the network countries; developing of a “Universal Training Kit” on sound use of refrigerants to support training centres and programs in Article 5 countries.
Air Conditioning, Heating, and Refrigeration Institute (AHRI)	Industry association	Global	Promoting a global industry approach to qualify refrigeration technicians; cooperating in addressing technical needs for promoting low-GWP alternatives	Develop and deploy a global refrigeration qualification program titled (Refrigerant Driving License); support UNEP in addressing research needs for examining lower-GWP alternatives in high ambient temperature countries.
Air-Conditioning & Refrigeration Equipment Manufacturers Association of Australia (AREMA)	Industry association	National	Member to the Refrigerant Driving License (RDL)	Support the International Advisory Group of the RDL program.
ASHRAE	Professional association	Global	Promoting adoption of ozone-friendly low-GWP and energy efficient RAC technology; e-training; organizing joint international and regional events; strengthening RAC associations in Article 5 countries; supporting	UNEP and ASHRAE have a long-standing cooperation and biennial work plans since 2007. Joint activities include: <ul style="list-style-type: none"> - organising international and regional technical conferences/events; - Developing e-Learning training courses, university course and technical materials. - Developing international guideline (assessment program) for the good

Organisation	Type of organisation	Scope	Type of cooperation with UNEP	Details of partnership
			Montreal Protocol projects in Article-5 countries through promotion of responsible and sound management of refrigerants	<p>management of refrigeration/air-conditioning installations</p> <ul style="list-style-type: none"> - Promoting lower-GWP alternatives and technology through a global Award program and facilitating access of Article 5 countries to ASHRAE's knowledge tools; - supporting/strengthening RAC associations in Article 5 countries; - UNEP is also part of ASHRAE's relevant refrigeration and research committees to ensure that the needs of Article 5 countries are well-tabled in ASHRAE standards, research and global programs.
Italian Association of Refrigeration (ATF)	Professional association	European	Advancing certification programs for refrigeration servicing technicians	Cooperate in building national refrigeration servicing certification model similar to F-Gas certification but tailored to the needs and operating conditions of Article-5 countries (three pilot countries).
Bundesfachschule Kälte-Klima-Technik (BFS)	Training institute	Global	Training and capacity building related to safe use of ozone-friendly low-GWP & energy efficient RAC technology	Co-developing training materials/applications for good practice, safety and low-GWP refrigerants.
China Household Electric Appliances Association (CHEAA)	Industry Association	National	Facilitating South-South cooperation (especially in the SEAP region) to exchange China's experiences with the transition to R290 (propane) in A/C industry to other Article 5 countries; cooperating in risk assessment for A3 refrigerants	Supporting the annual conference of CHEAA; cooperating to assist HAT countries to regarding understanding the needs of using A3 refrigerants -based applications.

Organisation	Type of organisation	Scope	Type of cooperation with UNEP	Details of partnership
Emirates Authority for Standardization and Metrology (ESMA)	Government agency	National	Organizing joint conferences and events about low-GWP alternatives and technologies;	Jointly organised 5 international symposia on alternative refrigerants for high ambient countries; Organizing the sixth international symposium (2021) on alternatives for HAT countries in both air-conditioning and refrigeration sectors.
European Partnership for Energy and the Environment (EPEE)	Industry association	Regional	Exchanging experiences with European Industry about analysing consuming sectors and building scenario models for alternatives availability and potential in markets	Building a scenario model titled “HFCs Outlook” for assessing consuming sectors, availability of alternatives and prospects at short and long terms vis-à-vis compliance scenarios against HCFCs phase-out and HFCs phase-down commitments. The model is piloted in ten (10) Article 5 countries. Future cooperation includes building simplified version of the HFCs Outlook for LVCs.
Global Food Cold Chain Council (GFCCC)	Initiative (Industry and RAC associations)	Global	Mapping the needs of Cold Chain subsectors in relation to lower-GWP technologies while considering the relation to energy and food loss/waste.	Launching of joint initiative “Cold Chain Database Model” which is an in-depth survey for the cold chain subsectors to build better understanding about needs and possible interventions for promoting lower-GWP alternatives and technology while connecting with energy demand, economics and food/loss dimensions.
International Institute of Refrigeration (IIR)	Inter-Governmental Organization	Global	Promoting adoption of ozone-friendly low-GWP and energy efficient RAC technology in the cold chain	Sharing technical information and expertise; organising joint events; co-organizing thematic workshop on alternative technologies for cold chain Jointly develop series of Cold Chain Technology Briefs offering detailed explanation of five main categories of the cold chain, trends, and challenges i.e. Food Production, Processing, Storage, Transportation, Commercial Refrigeration (Retail) and Fisheries/Vessel Applications
Institute of Refrigeration (IOR)	Professional association	National/Regional	Development of training resources for RSS	As IOR is the secretariat of the EU REAL Alternatives Program, UNEP is cooperating with IOR to extract from the program

Organisation	Type of organisation	Scope	Type of cooperation with UNEP	Details of partnership
				resources educational and awareness tools for RSS that suits working conditions in developing countries.
Japan Refrigeration and Air Conditioning Industry Association (JRAIA)	Industry Association	National	South-South cooperation to exchange Japan experience in transition to low-GWP alternatives in A/C industry to other Article 5 countries; cooperating in risk assessment for A2L refrigerants.	Organizing several workshops/sessions and field trip for the air conditioning industry from West Asian HAT countries to Japan; cooperating to assist HAT countries to build risk assessment model for the use of A2L refrigerants. Finalized comprehensive model for Risk Assessment of A2L refrigerants as part of PRAHA-II project.
Pacific Islands Forum Fisheries Agency (FFA)	Inter-Governmental Organization	Regional	Promoting adoption of ozone-friendly low-GWP and energy RAC technology	Collaboration with FFA on implementation of the revised vessel register application form that include (i) type of refrigerant and (ii) capacity of refrigerant system for further analysis and dissemination of MARPOL Annex VI Regulation 12 regarding ban on HCFC containing system or equipment in ships constructed on or after 1 January 2020 to member countries. Collaboration also include identification of activities to support HCFC phase-out under the regional Pacific Island Country HPMP Stage II.
Refrigerant Australia	Industry Association	Regional	Promoting good service practice and maximizing energy efficiency + Member to the Refrigerant Driving License (RDL)	New program to review and analyse the service practices on good management of refrigerants vis-à-vis energy efficiency of serviced units; Support the International Advisory Group of the RDL program.
Secretariat of the Pacific Community (SPC)	Intergovernmental	Regional	Supporting RAC technical vocational training and energy efficiency policy management in the Pacific region	UNEP will continue to collaborate with SPC to (i) promote synergizing of the Montreal Protocol and Energy Efficiency as part of agenda in the existing regional high-level forums in the Pacific region and (ii) explore whether refrigerant information could be included in the product registration system of energy efficient product.

Organisation	Type of organisation	Scope	Type of cooperation with UNEP	Details of partnership
World Refrigeration Day Secretariat	International Initiative	Global	Global public and specialized campaign to highlight the importance of sector and environmental issues in relation to Montreal Protocol	Celebrating annually the World Refrigeration Day (WRD) through international campaigns with other international partners. Two campaigns organized in 2019 and 2020 under the themes “Refrigerant4Life” & “Cold Chain4Life”. Plans are for anew campaign in 2021 addressing the refrigeration servicing sector.
CUSTOMS AND ENFORCEMENT				
Association of Southeast Asian Nations (ASEAN)	Intergovernmental	Regional	Regional collaboration on ratification of the Kigali Amendment, development and adoption of regional HS Code for HFCs and HFC blends, strengthening regional cooperation in combatting illegal ODS trade for the Southeast Asia Network	All SEAP countries (except Timor Leste) are members of ASEAN, which has played a vital role in the region to promote regional collaboration in a number of aspects including environment. UNEP will collaborate with ASEAN through their relevant working groups to promote the ratification of the Kigali Amendment at the regional level. Moreover, ASEAN has established an 8-digit regional HS code system to harmonize the trade of common commodities in the region. UNEP will work with ASEAN to explore the possibility to assign the HS code to HFCs and HFC blends, for further adoption of each member country. The collaboration also includes strengthening regional cooperation in combatting illegal ODS trade for the Southeast Asia Network.
Green Customs Initiative (GCI)	International partnership	Global	Customs training; compliance and enforcement; combatting illegal ODS trade	The GCI partners include the Secretariats of the relevant multilateral environmental agreements (Basel, Cartagena, CITES, Montreal, Rotterdam Stockholm and recently Minamata), Interpol, the Organisation for the Prohibition of Chemical Weapons, UNEP, the United Nations Office on Drugs and Crime (UNODC) and the WCO. The partnership is led and coordinated by UNEP Law

Organisation	Type of organisation	Scope	Type of cooperation with UNEP	Details of partnership
				Division/International Environmental Law Unit.
Gulf Cooperation Council (GCC) Secretariat	Regional	Regional	Monitor the trade ODS and alternatives as well as combat illegal trade.	UNEP is cooperating with GCC and other regional & sub-regional organizations and secretariats to support the development and implementation of strategies or action plans to foster the monitoring the trade ODS and alternatives as well as combat illegal trade.
League of Arab States (LAS) Secretariat	Regional	Regional	Development and dissemination of Codes	Develop jointly the first and second regional refrigeration and air-conditioning code (2010 & 2015), working on updating the RAC code and adding two (2) more codes on District Cooling and Commercial Refrigeration, start the process of update the insulation materials codes as part of the regional building codes. Developing tools for introduction of the developed/updated codes to all Arab Member States.
Oceania Customs Organization Secretariat (OCO)	Regional	Regional	Development and adoption of regional HS Code for HFCs and HFC blends, strengthening regional cooperation in combatting illegal ODS trade for the Pacific Islands Countries Network	OCO has launched the Pacific Harmonized Commodity Description and Coding System 2017 (PACHS17) in June 2018, which aims to establish the regional HS code to standardise names and codes of goods exported and imported by the Pacific region. UNEP is collaborating with OCO to amend the PACHS17 to include regional sub-heading for single HFCs and mixtures containing HFCs based on recommendation of the World Customs Organization (WCO) as an interim solution. The amendment proposal will be submitted to OCO for review in September 2019. In 2021, UNEP will continue to collaborate with OCO to strengthen capacity of the Customs in the region to understand and accurately use HS code for HFC and mixtures

Organisation	Type of organisation	Scope	Type of cooperation with UNEP	Details of partnership
				containing HFCs and to prepare for the adoption of WCO's 2022 HS code in the PACHS22 (to be adopted in 2022). Collaboration also include identification of activities to support HCFC phase-out under the regional Pacific Island Country HPMP Stage II.
World Customs Organisation (WCO)	International organisation	Global	Customs training; e-training; compliance and enforcement; combatting illegal ODS trade	UNEP and WCO have a formal framework for cooperation (MOU). UNEP collaborated with WCO to develop a Montreal Protocol e-learning course for Customs officers, which is hosted by WCO's e-learning platform; mutual participation in relevant events. UNEP cooperates with WCO Headquarters as well as WCO's Regional Intelligence Liaison Offices (RILOs), Regional Offices of Capacity Building (ROCB), and Regional Training Centres (e.g. AKMAL in Malaysia, ROK, India).

ANNEX 5 – LOGICAL FRAMEWORK ANALYSIS FOR 2021

Overarching Desired Outcome: ARTICLE 5 COUNTRIES MEET AND SUSTAIN COMPLIANCE WITH MONTREAL PROTOCOL AND AMENDMENTS			
Outcomes	Outputs	Relevant CAP Strategy 2021-2023 intended Impacts and Intermediate States	Relevant SDG targets
<p>OUTCOME 1 National Ozone Units effectively manage their national Montreal Protocol compliance programmes</p>	<ul style="list-style-type: none"> All Article 5 countries with Institutional Strengthening projects approved for UNEP implementation have NOUs that function effectively and deliver the outputs described in their IS renewal. Any NOU requesting region- and country-specific compliance assistance to address specific technical, policy, or operational issues is provided with that support. All Ozone Officers and/or their assistants learn from peers and strengthen cooperation at the regional and international levels through participation in Regional Networks of Ozone Officers, which may include physical and/or online regional, sub-regional, and/or thematic meetings. All new Ozone Officers and/or their assistants acquire the basic skills, competencies and understanding of the Montreal Protocol and Multilateral Fund. Any Ozone Officer who wishes to further enhance her/his management of their NOUs acquires those advanced skills. Any NOU requesting or needing specific support is assisted through country-to-country cooperation facilitated by CAP, e.g. NOU-NOU meetings, study tours, technology roundtables. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Stratospheric ozone layer restored to pre-Montreal Protocol levels <input checked="" type="checkbox"/> Greenhouse gas emissions mitigated <input checked="" type="checkbox"/> Consumption and emissions of controlled substances reduced <input checked="" type="checkbox"/> Energy efficiency maintained or increased <input checked="" type="checkbox"/> Diverse public and private entities cooperate to support Montreal Protocol <input type="checkbox"/> Workforce skills enhanced <input checked="" type="checkbox"/> Women encouraged to work in Montreal Protocol fields <input checked="" type="checkbox"/> Industry adopts state-of-art and environmentally sound technologies 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Human health is protected (SDG 3) <input checked="" type="checkbox"/> Ecosystems are healthy (SDG 14 & 15) <input checked="" type="checkbox"/> Climate is protected (SDG 13) <input type="checkbox"/> Food security is improved, and food loss reduced (SDG 2) <input type="checkbox"/> Economic competitiveness is maintained (SDG 1, 8 & 9) <input checked="" type="checkbox"/> Sustainable technologies and practices adopted (SDG 12) <input checked="" type="checkbox"/> More women enter workforce (SDG 5) <input checked="" type="checkbox"/> Montreal Protocol objectives achieved through partnerships (SDG 17)
Activities		Indicators	
Provide all Article 5 countries with Institutional Strengthening projects approved for UNEP with technical assistance to expedite the preparation, implementation, monitoring and reporting of their IS phases.		Number of IS phases successfully implemented and monitored	
Deliver country-specific services to NOUs as per Annex 7 (Country-specific services proposed for 2021) and respond to ad hoc requests.		Number and type of services delivered	
Organise Regional Network and Thematic meetings (physical and/or online) in all ten regions for all NOUs to address priority issues, exchange information, and share experiences.		Number of meetings successfully organized	
Offer capacity-building training to all new Ozone Officers and/or their assistants using the Training Programme for National Ozone Officers.		Number of Ozone Officers/assistants trained	
Pilot the Advanced Training Programme for National Ozone Officers for Ozone Officers in select regions.		Number of pilot trainings conducted	

Facilitate country-to-country cooperation to address specific priority needs articulated by NOUs.		Number and type of country-to-country cooperation activities	
Outcomes	Outputs	Relevant CAP Strategy 2021-2023 intended Impacts and Intermediate States	Relevant SDG targets
OUTCOME 2 Article 5 countries report accurate and timely data	<ul style="list-style-type: none"> The status of Article 7 and Country Programme data submissions is regularly monitored, and follow-up support is offered to countries in the case of late reporting. Any NOU requesting support with collecting, reviewing and reporting accurate Article 7 and/or Country Programme data is assisted to do so, so that they report by (or in advance of) the reporting deadlines. All NOUs understand and use the revised reporting formats and use the online reporting systems. All NOUs are aware of best practices and methodologies for data collection, cross-checking and reporting requirements for all controlled substances. All NOUs are assisted to understand the new data reporting obligations related to the Kigali Amendment. All NOUs are offered information or assistance to establish their HFC baselines and the starting points for sustained aggregate reductions in HFC consumption. All NOUs of Article 5 Parties to the Kigali Amendment are offered assistance to put their HFC licensing systems in place. 	<input checked="" type="checkbox"/> Stratospheric ozone layer restored to pre-Montreal Protocol levels <input checked="" type="checkbox"/> Greenhouse gas emissions mitigated <input checked="" type="checkbox"/> Consumption and emissions of controlled substances reduced <input type="checkbox"/> Energy efficiency maintained or increased <input checked="" type="checkbox"/> Diverse public and private entities cooperate to support Montreal Protocol <input type="checkbox"/> Workforce skills enhanced <input type="checkbox"/> Women encouraged to work in Montreal Protocol fields <input type="checkbox"/> Industry adopts state-of-art and environmentally sound technologies	<input checked="" type="checkbox"/> Human health is protected (SDG 3) <input checked="" type="checkbox"/> Ecosystems are healthy (SDG 14 & 15) <input checked="" type="checkbox"/> Climate is protected (SDG 13) <input type="checkbox"/> Food security is improved, and food loss reduced (SDG 2) <input type="checkbox"/> Economic competitiveness is maintained (SDG 1, 8 & 9) <input type="checkbox"/> Sustainable technologies and practices adopted (SDG 12) <input type="checkbox"/> More women enter workforce (SDG 5) <input checked="" type="checkbox"/> Montreal Protocol objectives achieved through partnerships (SDG 17)
2021 Activities		Indicators	
Monitor the status of Article 7 and Country Programme data submissions.		Number of countries with UNEP-assisted IS projects submitting data on time	
Provide assistance to any NOU requesting support for accurate and timely Article 7 and Country Programme data.		Number of NOUs assisted	
Ensure that all NOUs understand the requirements of the new reporting formats and help with using the online systems.		Number of countries correctly submitting data using the online platforms	
Inform all NOUs about best practices and methodologies for data collection, cross-checking and reporting.		Type of support provided	
Provide information and guidance to all NOUs to help them understand new data reporting obligations related to the Kigali Amendment.		Type of support provided	
Assist NOUs from Article 5 Group 1 countries with establishing their HFC consumption baselines.		Type of support provided	
Outcomes	Outputs	Relevant CAP Strategy 2021-2023 intended Impacts and Intermediate States	Relevant SDG targets
OUTCOME 3		<input checked="" type="checkbox"/> Stratospheric ozone layer restored to pre-Montreal Protocol levels	<input checked="" type="checkbox"/> Human health is protected (SDG 3)

<p>Article 5 countries adopt, implement and enforce Montreal Protocol laws, regulations, licensing and quota systems</p>	<ul style="list-style-type: none"> • All NOUs are informed about options and approaches to enhance their national Montreal Protocol monitoring, reporting, verification and enforcement systems. • All NOUs operate and enforce their HCFC licensing and quota systems as per Montreal Protocol and Multilateral Fund targets. • Interested NOUs assess their HCFC licensing and quota systems to identify ways to further enhance them. • All NOUs in countries that have ratified the Kigali Amendment are supported to develop, implement and enforce their HFC licensing and quota systems, and countries that have not yet ratified are encouraged to consider introducing voluntary licensing systems. • All NOUs are aware of innovative methods that support enforcement of national licensing systems, both at and beyond the Customs check point in domestic markets. • All NOUs are aware of the benefits and approaches for electronic licensing systems for controlling HCFCs and HFCs. • All NOUs are encouraged to outreach Montreal Protocol-related MRVE issues to other national enforcement stakeholders and to strengthen their capacity about the same. • All NOUs participating in the informal Prior Informed Consent (iPIC) mechanism use that system to complement and support their licensing and quota systems, and more countries are encouraged to join. • All NOUs are informed about existing HCFC and HFC legislation in Article 5 and non-Article 5 countries and offered assistance with developing/enhancing their own. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Greenhouse gas emissions mitigated <input checked="" type="checkbox"/> Consumption and emissions of controlled substances reduced <input checked="" type="checkbox"/> Energy efficiency maintained or increased <input checked="" type="checkbox"/> Diverse public and private entities cooperate to support Montreal Protocol <input type="checkbox"/> Workforce skills enhanced <input type="checkbox"/> Women encouraged to work in Montreal Protocol fields <input checked="" type="checkbox"/> Industry adopts state-of-art and environmentally sound technologies 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Ecosystems are healthy (SDG 14 & 15) <input checked="" type="checkbox"/> Climate is protected (SDG 13) <input type="checkbox"/> Food security is improved, and food loss reduced (SDG 2) <input type="checkbox"/> Economic competitiveness is maintained (SDG 1, 8 & 9) <input type="checkbox"/> Sustainable technologies and practices adopted (SDG 12) <input type="checkbox"/> More women enter workforce (SDG 5) <input checked="" type="checkbox"/> Montreal Protocol objectives achieved through partnerships (SDG 17)
2021 Activities		Indicators	
<p>Inform NOUs about options and approaches to enhance their national Montreal Protocol monitoring, reporting, verification and enforcement systems and facilitate exchange of experiences through <i>inter alia</i> Regional Network meetings, country-to-country exchanges and information services.</p>		<p>Number of Regional Network sessions, country-to-country exchanges or information services provided</p>	
<p>Monitor the status of Montreal Protocol laws, regulations and policies in Article 5 countries to identify gaps and promote harmonised approaches within regions.</p>		<p>Number of times status monitored</p>	
<p>Provide information and online tools to help NOUs effectively track and monitor HCFC quota allocation and use.</p>		<p>Tool finalised and shared</p>	
<p>Provide information to interested NOUs to help them assess their licensing and quota systems to identify strengths/weaknesses and share best practices.</p>		<p>Number and type of support provided</p>	
<p>Offer assistance to NOUs in countries that have ratified the Kigali Amendment to implement the HFC licensing system and establish HFC national quotas, quota allocation, and to monitor quota usage.</p>		<p>Number and type of support provided to NOUs</p>	
<p>Encourage and assist NOUs in countries that have not yet ratified the Kigali Amendment to introduce voluntary HFC licensing systems.</p>		<p>Number and type of support provided to NOUs</p>	

Help NOUs strengthen effective domestic market inspection mechanisms in collaboration with local enforcement authorities.		Number and type of support provided to NOUs	
Share experiences on e-licensing systems through facts sheets and webinars.		Number of fact sheets and webinars produced	
Provide all NOUs with the Best Practices on Penalties under the Montreal Protocol, encourage them to share it with their country's judges and prosecutors, and outreach it to other judicial training programmes.		Number and type of support provided to NOUs	
Promote the enhanced online informal Prior Informed Consent mechanism and assist in conducting iPIC consultations between countries.		Number and type of support provided to NOUs	
Help NOUs strengthen data reporting mechanisms by building the capacity of the NOUs to analyse and reconcile data from different sources.		Number and type of support provided to NOUs	
Collect and categorize information about existing HCFC and HFC legislation and regulations and share this information with NOUs through on a public online platform.		Number of pieces of legislation and regulations collected and shared	
Offer assistance to interested NOUs for developing/enhancing their Montreal Protocol legislation and regulations.		Number and type of support provided to NOUs	
Outcomes	Outputs	Relevant CAP Strategy 2021-2023 intended Impacts and Intermediate States	Relevant SDG targets
<p>OUTCOME 4 Customs effectively controls trade of controlled substances nationally and cooperates internationally to support legal trade and fight illegal trade</p>	<ul style="list-style-type: none"> All NOUs requesting support to update, monitor or enforce their national regulations and policies to facilitate and monitor legal HCFC and HFC trade and to combat illegal trade are assisted through an integrated approach. All NOUs requesting support to deliver effective enforcement training workshops and related activities as part of approved HPMP projects are assisted. All NOUs are encouraged to use existing tools developed by UNEP and its partners during the delivery of their national Customs training, and, as appropriate, training of environmental inspectors and other law enforcement officers. All NOUs have increased awareness and understanding about critical Montreal Protocol Customs issues, including best practices, innovative approaches and ways to combat illegal trade in controlled substances. All NOUs are encouraged to interact more closely with Customs agencies to promote regional and international action to combat illegal trade. Interested national Customs training academies are encouraged and assisted to adopt the UNEP-WCO Customs Training Manual and e-learning into their national curricula. Interested regional and sub-regional organizations are encouraged to develop regional and/or sub-regional initiatives or policies to facilitate and monitor legal HCFC trade and to combat illegal trade. All NOUs understand the need for establishing national Customs codes as an interim measure for monitoring HFC imports/exports until the 2022 Harmonized System codes enters into force and is adopted by countries. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Stratospheric ozone layer restored to pre-Montreal Protocol levels <input checked="" type="checkbox"/> Greenhouse gas emissions mitigated <input checked="" type="checkbox"/> Consumption and emissions of controlled substances reduced <input type="checkbox"/> Energy efficiency maintained or increased <input checked="" type="checkbox"/> Diverse public and private entities cooperate to support Montreal Protocol <input checked="" type="checkbox"/> Workforce skills enhanced <input checked="" type="checkbox"/> Women encouraged to work in Montreal Protocol fields <input type="checkbox"/> Industry adopts state-of-art and environmentally sound technologies 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Human health is protected (SDG 3) <input checked="" type="checkbox"/> Ecosystems are healthy (SDG 14 & 15) <input checked="" type="checkbox"/> Climate is protected (SDG 13) <input type="checkbox"/> Food security is improved, and food loss reduced (SDG 2) <input checked="" type="checkbox"/> Economic competitiveness is maintained (SDG 1, 8 & 9) <input checked="" type="checkbox"/> Sustainable technologies and practices adopted (SDG 12) <input checked="" type="checkbox"/> More women enter workforce (SDG 5) <input checked="" type="checkbox"/> Montreal Protocol objectives achieved through partnerships (SDG 17)

2021 Activities		Indicators	
Encourage and assist NOUs to review HCFC and HFC Customs and trade regulations and policies in cooperation with national Customs and trade authorities to mainstream trade control on ODS/HFC into their daily operations.		Number and type of support provided	
Assist NOUs to work with Customs and enforcement personnel in their countries to build their capacity on issues related to controlled substances, through training, intelligence and information exchange, and information materials and tools.			
Outreach and provide existing information and tools developed by UNEP and its partners to NOUs to support the delivery of their national Customs training.		Number and type of tools outreached	
Support countries to strengthen transboundary cooperation and intelligence sharing in combating illegal trade of controlled substances.		Number of specific meetings held (e.g. border dialogues) Number and type of support provided	
Provide NOUs and Customs agencies with information about critical Montreal Protocol Customs issues, innovative approaches and best practices.		Regional/global support provided to countries Sessions in network meetings	
Help NOUs and Customs departments to educate Customs brokers/importers on importance of accurate declarations and implications of misdeclaration.			
Organise the sixth edition of the Europe and Central Asia regional Montreal Protocol award for Customs and enforcement officers.		Award scheme completed	
Cooperate with the World Customs Organization (WCO), related institutions and NOUs on coordinated enforcement operations aiming to detect and deter illegal trade in controlled substances.		Number of joint/cooperation activities carried out	
Encourage and assist NOUs to identify and analyse differences between their country's trade data and those reported by other countries with whom they trade.		Number of specific meetings held (e.g. border dialogues) Number and type of support provided	
Encourage information sharing on seizures and related information and intelligence between Customs, NOUs, RILOs and national contact points through appropriate channels.		Number of countries sharing intelligence and seizure information	
Encourage and assist NOUs to develop Standard Operating Procedures (SOP) and MOUs, as appropriate, on the processes of Customs clearance, seizures/confiscations and levying penalties.		Number and type of support provided	
Work with NOUs to assist interested national Customs training academies with adopting the updated UNEP-WCO Montreal Protocol Training for Customs Officers into their national curricula.		Number of Customs academies assisted	
Assist the Economic Community of West African States (ECOWAS) countries to extend the Tariff and Statistical Nomenclatures linked to the Harmonized System Code (HS) to facilitate the collection and comparison of data concerning the circulation and consumption of HFCs.		Nature of support provided	
Encourage countries and/or regional Customs organisations to assign specific Customs codes (additional national digits) for HFCs in their current national HS code systems as a temporary measure prior to the 2022 HS code update.		Number and type of support provided	
Outcomes	Outputs	Relevant CAP Strategy 2021-2023 intended Impacts and Intermediate States	Relevant SDG targets
OUTCOME 5 Key stakeholders and public informed and supportive of Article 5 Governments'	<ul style="list-style-type: none"> All NOUs and specific stakeholders are well-informed about specific high-priority topics through printed, online, and/or audio-visual information products. All NOUs and other members of the Montreal Protocol community are kept up-to-date about the latest Montreal Protocol developments related to policy, 	<input checked="" type="checkbox"/> Stratospheric ozone layer restored to pre-Montreal Protocol levels <input checked="" type="checkbox"/> Greenhouse gas emissions mitigated	<input checked="" type="checkbox"/> Human health is protected (SDG 3) <input checked="" type="checkbox"/> Ecosystems are healthy (SDG 14 & 15)

<p>Montreal Protocol programmes</p>	<p>technology and science through weekly and biannual information services and individual responses to queries.</p> <ul style="list-style-type: none"> All NOUs are assisted for their national celebrations of World Refrigeration Day (26 June) and World Ozone Day (16 September) to increase public awareness of, and support for, the Montreal Protocol. All NOUs as well as key members of the Montreal Protocol community are kept informed about activities of UNEP and its partners through outreach activities. NOUs speaking UN languages other than English are provided with information in their languages to the extent feasible. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Consumption and emissions of controlled substances reduced <input checked="" type="checkbox"/> Energy efficiency maintained or increased <input checked="" type="checkbox"/> Diverse public and private entities cooperate to support Montreal Protocol <input checked="" type="checkbox"/> Workforce skills enhanced <input checked="" type="checkbox"/> Women encouraged to work in Montreal Protocol fields <input checked="" type="checkbox"/> Industry adopts state-of-art and environmentally sound technologies 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Climate is protected (SDG 13) <input type="checkbox"/> Food security is improved, and food loss reduced (SDG 2) <input checked="" type="checkbox"/> Economic competitiveness is maintained (SDG 1, 8 & 9) <input checked="" type="checkbox"/> Sustainable technologies and practices adopted (SDG 12) <input checked="" type="checkbox"/> More women enter workforce (SDG 5) <input checked="" type="checkbox"/> Montreal Protocol objectives achieved through partnerships (SDG 17)
2021 Activities		Indicators	
Prepare and outreach targeted publications, products, tools and services as well as materials from partnerships and other organisations to ensure that key stakeholders and the public are well informed.		Number and type of publications, products, tools and services produced and Number and type of outreach	
Develop an online 'OzonAction Knowledge Map' to provide a single point of access for basic information related to country's profile and project data.		Knowledge Map implemented	
Continue to outreach ozone and Montreal Protocol issues at key international, regional and national fora, as well as through regional webinars for NOUs and other stakeholders.		Number of outreach events conducted	
Maintain and enhance the OzonAction website (www.unenvironment.org/ozonaction) and OzonAction Meeting Portal (www.ozonactionmeetings.org).		Web statistics confirming growth/activity	
Produce and disseminate the OzoNews e-newsletter on a bi-weekly basis.		Prepared and distributed according to schedule	
Produce and disseminate the OzonAction Scoop on topical subjects three times per year.		Prepared and distributed according to schedule	
Encourage and support national celebrations of World Ozone Day on 16 September 2021, including development of specific materials.		Number and type of support provided	
Encourage and support celebrations of World Refrigeration Day on 26 June 2021, in cooperation with the World Refrigeration Day Secretariat and other RAC partners.		Number and type of support provided	
Collect and share real-world examples from the Montreal Protocol community about contribution of Montreal Protocol to achieving Sustainable Development Goals.		Publication produced and outreach	
Translate prioritised publications and tools into UN languages, depending on regional priorities and available resources.		Number of publications and tools translated	
Outcomes	Outputs	Relevant CAP Strategy 2021-2023 intended Impacts and Intermediate States	Relevant SDG targets
OUTCOME 6	<i>Strengthening national capacity</i>	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Stratospheric ozone layer restored to pre-Montreal Protocol levels 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Human health is protected (SDG 3)

<p>Article 5 countries safely adopt appropriate lower-GWP and energy efficient refrigeration and air conditioning technology and servicing practices</p>	<ul style="list-style-type: none"> All NOUs and refrigeration servicing sector stakeholders have the key information and knowledge needed to make informed choices about policies and technologies related to the refrigeration servicing sector. All NOUs are offered the refrigeration servicing sector training products and tools developed by UNEP and its partners, and an increasing number incorporate them into their national Montreal Protocol activities. National/regional RAC associations are strengthened, interact regularly with NOUs, and exchange best practices so that they have increased engagement in their countries' national Montreal Protocol activities. <p><i>Upgrading servicing skills</i></p> <ul style="list-style-type: none"> All servicing technicians, master trainers, and other practitioners involved in UNEP-assisted capacity-building activities acquire new or updated skills and competencies for minimizing leakages, the sound and safe handling of refrigerants, and maintaining/enhancing energy efficiency of RAC appliances. Interested national refrigeration training institutes, NOUs and UNEP establish agreements to cooperate on refrigeration servicing sector training and they adopt UNEP-developed curricula. More Article 5 countries reflect gender considerations in their refrigeration servicing sector projects and more female professionals are engaged in refrigeration servicing sector activities, including training. <p><i>Promoting certification, standards and codes</i></p> <ul style="list-style-type: none"> All NOUs are provided with information and offered technical and policy assistance for developing national RAC certification programs. All NOUs are encouraged and assisted to increase their cooperation with their Technical Vocational Education and Training (TVET) authorities with respect to RAC servicing sector training and certification programs. All NOUs have increased awareness on updating/adopting relevant standards and codes of practice that promote safe handling of flammable, high-pressure and toxic refrigerants, facilitate the introduction of lower-GWP technologies into the market, and promote sound refrigerant management. More Article 5 countries adopt the Refrigerant Driving License (RDL) global qualification program either to complement their existing certification programme or as an alternative if they do not yet have a certification programme. All NOUs have increased understanding of how to build a local risk assessment methodology for the safe deployment of lower-GWP refrigerants during installation, servicing and handling. All NOUs are up-to-date about relevant standards and are encouraged to cooperate with their standards organisations to consider Montreal Protocol issues. <p><i>Assisting deployment of alternative refrigerants and technologies</i></p> <ul style="list-style-type: none"> All NOUs, including those in low-volume consuming countries (LVCs), are supported to promote and exchange experiences about appropriate alternative refrigerants and technologies including not-in-kind technologies. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Greenhouse gas emissions mitigated <input checked="" type="checkbox"/> Consumption and emissions of controlled substances reduced <input checked="" type="checkbox"/> Energy efficiency maintained or increased <input checked="" type="checkbox"/> Diverse public and private entities cooperate to support Montreal Protocol <input checked="" type="checkbox"/> Workforce skills enhanced <input checked="" type="checkbox"/> Women encouraged to work in Montreal Protocol fields <input checked="" type="checkbox"/> Industry adopts state-of-art and environmentally sound technologies 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Ecosystems are healthy (SDG 14 & 15) <input checked="" type="checkbox"/> Climate is protected (SDG 13) <input checked="" type="checkbox"/> Food security is improved, and food loss reduced (SDG 2) <input checked="" type="checkbox"/> Economic competitiveness is maintained (SDG 1, 8 & 9) <input checked="" type="checkbox"/> Sustainable technologies and practices adopted (SDG 12) <input checked="" type="checkbox"/> More women enter workforce (SDG 5) <input checked="" type="checkbox"/> Montreal Protocol objectives achieved through partnerships (SDG 17)
--	---	---	--

	<ul style="list-style-type: none"> • More refrigeration servicing sector stakeholders in Article 5 countries have increased awareness of alternative refrigerants and technologies. <p><i>Supporting specific sectors</i></p> <ul style="list-style-type: none"> • All NOUs and selected stakeholders in high-ambient temperature (HAT) countries have increased capacity and information to help them address their HCFC phase-out/HFC phase-down challenges. • All NOUs are encouraged and assisted to provide increased attention to the food cold chain sector and to strengthen their cooperation with stakeholders in that sector. • All NOUs have increased understanding of the technical and regulatory issues related to HFCs and alternatives used in in mobile air conditioning (MAC). • All NOUs are offered information support to help their countries evaluate COVID 19 implications in the refrigeration servicing sector and assess preparedness to carry out activities under such difficult circumstances. • All NOUs are informed about key technical and regulatory issues related to HFCs in the foam sector. 		
2021 Activities		Indicators	
<i>Strengthening national capacity</i>			
<ul style="list-style-type: none"> • Develop and launch, in cooperation with international RAC partners, information materials and training tools in various formats to cover practitioners in major sub-sectors of the refrigeration servicing sector. 	Number of information materials and training tools		
<ul style="list-style-type: none"> • Outreach the OzonAction training tools and products and those developed in cooperation with partners (see Annex 4 – OzonAction CAP partnerships) and encourage NOUs to ensure that these are well integrated in the ongoing and future training programs under HPMPs, IS projects and/or Enabling Activities projects. 	Number of projects reflecting tools		
<ul style="list-style-type: none"> • Facilitate dialogues between national/regional RAC associations and NOUs to exchange best practices and increase the associations' engagement in their countries' national Montreal Protocol activities. 	Number of dialogues held		
<i>Upgrade servicing skills through training</i>			
<ul style="list-style-type: none"> • Launch, translate and promote the Universal Training Kit as a flexible training manual to support local training institutes/centres in conducting tailored training programs covering good practices and safe handling flammable of refrigerants. 	Universal Training Kit launched and outreached		
<ul style="list-style-type: none"> • Integrate the energy efficiency dimension in the related tools and products offered by OzonAction highlighting the benefits and opportunities. 	Number of tools with the energy efficiency dimension integrated		
<ul style="list-style-type: none"> • Cooperate with partners to provide guidance on minimizing emissions and maintaining energy efficiency during the servicing. 	Number of guidance tools		
<ul style="list-style-type: none"> • Support NOUs and local authorities to update their RAC technical and vocational curricula to incorporate good practices. 	Number of vocational curricula updated		
<ul style="list-style-type: none"> • Encourage and assist NOUs to work with local Technical and Vocational Education and Training authorities to conduct and sustain good practice training programs . 	Number of programs conducted		

<ul style="list-style-type: none"> Further promote the Refrigerant Management University Course as a tool for higher educational levels and support its translation to other UN languages. 	Number of universities adopting the course and number of translations
<ul style="list-style-type: none"> Work with NOUs and international/national partners to promote the further engagement of women in RAC good practices training 	Number and type of promotion activities
<ul style="list-style-type: none"> Organize technology exhibitions and industry roundtables including those held under the Ozone₂Climate programme with participation of National Ozone Officers and representatives of RAC associations and experts. 	Number of events
<i>Promoting certification, standards and codes</i>	
<ul style="list-style-type: none"> Support Article 5 countries to develop, update and enforce local refrigeration servicing sector certification programs, through HPMPs and/or CAP services. 	Number of certification programmes updated/adopted
<ul style="list-style-type: none"> Exchange experiences and success stories between Article 5 countries in developing and enforcing local certification programs, with particular attention to the informal sector. 	Number of experiences and success stories prepared and outreached
<ul style="list-style-type: none"> Finalize the pilot stage of the Refrigerants Driver's License (RDL) and deploy the program for enrolment by interested countries in 2021. 	Refrigerants Driver's License pilot stage completed and deployed
<ul style="list-style-type: none"> In cooperation with expert institutions, design a risk assessment methodology for installation, servicing and handling of flammable refrigerants and promote its use by NOUs, especially in LVCs, to assist in the safe deployment of those refrigerants. 	Risk assessment methodology developed
<ul style="list-style-type: none"> Provide guidelines and tools to assist NOUs in developing/updating/adopting relevant standards and/or codes with a specific focus on standards related to management of refrigerants containers, recovery and recycling, as well as safe handling and transportation. 	Number and type of guidelines and tools developed and outreached
<ul style="list-style-type: none"> Facilitate country-to-country cooperation to share experiences in the development and enforcement of standards for safe handling of flammable and toxic alternatives. 	Number of country-to-country cooperation activities
<i>Assisting deployment of alternative refrigerants and technologies</i>	
<ul style="list-style-type: none"> Develop and promote technical briefs and outreach tools to NOUs on alternative refrigerants and technologies to promote better understanding of technological opportunities. 	Number of technical briefs and outreach tools developed and outreached
<ul style="list-style-type: none"> Outreach relevant information and case-studies on not-in-kind technologies and their technical and economic feasibility in Article 5 countries. 	Number of case-studies prepared and outreached
<ul style="list-style-type: none"> Develop tools to assist NOUs and local stakeholders to deliver trainings on installation and servicing of systems using natural refrigerants (ammonia, carbon dioxide, hydrocarbons) 	Number of tools developed
<i>Support to special sectors</i>	
<ul style="list-style-type: none"> Provide NOUs and selected stakeholders in all HAT countries with information and opportunities for exchanging experiences to help them address their HCFC phase-out/HFC phase-down challenges. 	Number of experience exchanges prepared and shared
<ul style="list-style-type: none"> Complete the pilot stage of the Cold Chain Database and promote the final product to all NOUs as a tool for them to survey, assess and analyze their refrigerant and technology-related needs in relation to HPMP Stages II or III and to prepare for future HFC phase-down activities. 	Cold Chain Database pilot completed and outreached
<ul style="list-style-type: none"> Assist NOUs to assess the capacity and training needs of the MAC sector to manage existing HFCs-based systems and handling the new MAC technologies. 	Number and type of support provided

	<ul style="list-style-type: none"> In cooperation with expert institutions, provide all NOUs with information and support to help their countries evaluate COVID 19 implications in the refrigeration servicing sector and assess preparedness to carry out activities under difficult circumstances. 	Number and type of support provided	
Outcomes	Outputs	Relevant CAP Strategy 2021-2023 intended Impacts and Intermediate States	Relevant SDG targets
OUTCOME 7 Article 5 countries ratify the Kigali Amendment and begin meeting HFC phase-down obligations	<ul style="list-style-type: none"> All NOUs in Article 5 countries that have not yet ratified the Kigali Amendment are assisted to ratify through support provided by CAP in collaboration with the Ozone Secretariat. All UNEP-assisted Enabling Activity projects are effectively implemented as per Executive Committee guidelines and deadlines. All NOUs are encouraged and assisted to review their institutional arrangements for efficient implementation of HFC phase-down activities. Interested NOUs are encouraged and assisted to investigate and understand their countries' overall refrigerant consumption patterns and RAC market to help inform their future HFC phase-down strategies. All NOUs have increased awareness and information about Kigali Amendment and ozone-climate interlinkages. All NOUs are encouraged to identify and consider linkages between refrigeration servicing sector activities and energy efficiency institutions, programmes, policies and activities with the goal of maintaining or enhancing energy efficiency of existing and new RAC equipment. 	<input type="checkbox"/> Stratospheric ozone layer restored to pre-Montreal Protocol levels <input checked="" type="checkbox"/> Greenhouse gas emissions mitigated <input checked="" type="checkbox"/> Consumption and emissions of controlled substances reduced <input checked="" type="checkbox"/> Energy efficiency maintained or increased <input type="checkbox"/> Diverse public and private entities cooperate to support Montreal Protocol <input type="checkbox"/> Workforce skills enhanced <input type="checkbox"/> Women encouraged to work in Montreal Protocol fields <input checked="" type="checkbox"/> Industry adopts state-of-art and environmentally sound technologies	<input checked="" type="checkbox"/> Human health is protected (SDG 3) <input checked="" type="checkbox"/> Ecosystems are healthy (SDG 14 & 15) <input checked="" type="checkbox"/> Climate is protected (SDG 13) <input type="checkbox"/> Food security is improved, and food loss reduced (SDG 2) <input type="checkbox"/> Economic competitiveness is maintained (SDG 1, 8 & 9) <input checked="" type="checkbox"/> Sustainable technologies and practices adopted (SDG 12) <input type="checkbox"/> More women enter workforce (SDG 5) <input checked="" type="checkbox"/> Montreal Protocol objectives achieved through partnerships (SDG 17)
2021 Activities		Indicators	
In cooperation with the Ozone Secretariat, encourage and assist Article 5 countries that have not yet ratified the Kigali Amendment to do so.		Number of countries assisted that ratified	
Provide technical support to the remaining UNEP-assisted countries to complete the implementation and reporting of their Enabling Activity projects.		Number and type of support provided	
Raise the awareness of NOUs about their commitments and national institutional and legal implications arising from Kigali Amendment ratification, including through the development of information materials and outreach activities.		Number and type of support provided	
Encourage the NOUs in the ten countries participating in the HFC Outlook Model pilot to use the outputs and analysis tool during their local consultations with different national stakeholders.		Number of countries using HFC Outlook Model outputs	
Develop and pilot a simplified HFC Outlook Model for a number of LVCs, to better understand the trends in HFC and HCFC current and future usage.		Simplified HFC Outlook Model developed and implemented	
Organise special sessions in Network meetings to discuss overlapping issues and opportunities between HPMPs and future HFC phase-down plans.		Number of sessions in network meetings	

Outcomes	Outputs	Relevant CAP Strategy 2021-2023 intended Impacts and Intermediate States	Relevant SDG targets
<p>OUTCOME 8 Article 5 countries implement Multilateral Fund HCFC phase-out and HFC phase-down projects in timely and effective manner</p>	<ul style="list-style-type: none"> All Article 5 countries with ongoing HPMP Stages or tranches approved for UNEP implementation are assisted to implement them in a timely and effective manner. All Article 5 countries with HPMP verification projects approved for UNEP implementation have their HCFC consumption verified in a timely and effective manner. All Article 5 countries with UNEP-assisted HCFC verification reports are assisted to implement the recommendations in the verification reports. All Article 5 countries requesting UNEP assistance to prepare and submit new HPMP Stages or tranches are supported to do so. All Article 5 countries requesting UNEP assistance to conceive, prepare and submit new HFC phase-down projects and developing HFC phase-down strategies are assisted. 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Stratospheric ozone layer restored to pre-Montreal Protocol levels <input checked="" type="checkbox"/> Greenhouse gas emissions mitigated <input checked="" type="checkbox"/> Consumption and emissions of controlled substances reduced <input checked="" type="checkbox"/> Energy efficiency maintained or increased <input checked="" type="checkbox"/> Diverse public and private entities cooperate to support Montreal Protocol <input checked="" type="checkbox"/> Workforce skills enhanced <input type="checkbox"/> Women encouraged to work in Montreal Protocol fields <input checked="" type="checkbox"/> Industry adopts state-of-art and environmentally sound technologies 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Human health is protected (SDG 3) <input checked="" type="checkbox"/> Ecosystems are healthy (SDG 14 & 15) <input checked="" type="checkbox"/> Climate is protected (SDG 13) <input type="checkbox"/> Food security is improved, and food loss reduced (SDG 2) <input type="checkbox"/> Economic competitiveness is maintained (SDG 1, 8 & 9) <input type="checkbox"/> Sustainable technologies and practices adopted (SDG 12) <input type="checkbox"/> More women enter workforce (SDG 5) <input checked="" type="checkbox"/> Montreal Protocol objectives achieved through partnerships (SDG 17)
2021 Activities		Indicators	
Assist all Article 5 countries with ongoing HPMP Stages or tranches approved for UNEP implementation to implement them in a timely and effective manner.		Number of HPMP Stages/tranches implemented	
Ensure that all Article 5 countries with HPMP verification projects approved for UNEP implementation have their HCFC consumption verified in a timely and effective manner.		Number of HPMP verification projects implemented	
Assist all Article 5 countries with UNEP-assisted HCFC verification reports to implement the recommendations in the verification reports.		Number of countries assisted	
Support all Article 5 countries requesting UNEP assistance to prepare and submit new HPMP Stages or tranches.		Number of new HPMP Stages or tranches submitted	
Support all Article 5 countries requesting UNEP assistance to conceive, prepare and submit new HFC phase-down projects and to develop HFC phase-down strategies.		Number of HFC-related projects submitted	
ASSUMPTIONS			
<ul style="list-style-type: none"> Continued high-level political commitment by all Montreal Protocol Parties 			

- Stable political and economic conditions in Article 5 countries
- Operational National Ozone Units with dedicated, skilled and empowered staff at appropriate level
- Government commitment in Article 5 countries to approve and enforce Montreal Protocol-related legislation, regulations and policies
- Political will in Article 5 countries to ratify Kigali Amendment
- Controls to monitor and control trade in controlled substances are in place and effective/can be implemented
- Constructive cross-border cooperation between Customs and enforcement agencies in neighbouring countries
- Skilled workforce for the servicing of refrigeration and air conditioning equipment, particularly for 'longer term' alternatives
- Climate friendly and energy efficient alternatives are commercially available and affordable in Article 5 country markets
- Cooperation and active participation of other stakeholders

RISKS

- COVID-19 pandemic
- Unstable political and economic situation
- Natural/manmade disasters
- Uncertainties in security situations
- Frequent turn-over of Ozone Officers or changes in national administrations
- Limited human and/organisational capacities of some NOUs
- Delays due to administrative, financial or legal procedures by Implementing Agency and/or country administrations
- Delay or incomplete progress reporting by some countries due to the long process of data verification at national level (particularly in countries with political instability)
- Unstable currency markets fluctuating during project implementation
- Unreliability of information technology in some developing countries; access to email and prompt communication very limited in some countries
- Increased trend of introducing high-GWP alternatives due to lower prices and commercial availability compared to low/lower GWP options particularly for RAC
- Technology and economic related concerns for high-ambient operating conditions
- Difficulties related to harmonising standards and codes at the regional level
- Weak infrastructure of the RAC servicing sector in most developing countries
- RAC servicing sector and Customs not considered attractive professions for young people particularly young women
- Lack of specific Customs codes (HS codes) for HFCs prior to control measures

ANNEX 6 – IMPLEMENTATION OF UNEP-ASSISTED ARTICLE 5 COUNTRY PROJECTS IN 2021

Note: This Annex includes projects already approved and those included in the Business Plan proposed for 2021 (indicated as: ^); verifications proposed for the 86th Executive Committee meeting marked "°".

Country	Project Services					
	Institutional Strengthening Project Implementation	HPMP Preparation *	HPMP Implementation (Stages I, II or III)	HPMP Verification	Enabling Activity Projects (HFCs)**	HFC project preparation ***
Afghanistan	x		x		x	
Albania	x		x			x
Algeria	x					
Angola	x				x	
Antigua and Barbuda	x		under development		x^	
Argentina						
Armenia			x			x
Bahamas	x		x	x	x	
Bahrain	x		x	x	x	
Bangladesh			x		x	
Barbados	x		x	x°		
Belize	x		x	x		
Benin	x		x	x	x	
Bhutan	x		x		x	x
Bolivia, Plurinational State of	x		x		x	
Bosnia and Herzegovina						
Botswana	x		x	x	x	
Brazil						
Brunei Darussalam	x		x		x	
Burkina Faso	x		x	x°		
Burundi	x		x	x°	x	
Cambodia	x		x	x	x (completed)	
Cameroon	x					
Cape Verde	x		x		x	
Central African Republic	x	x				
Chad	x		x		x	x
Chile			x		x	
China			x		x	
Colombia			x			

Country	Project Services					
	Institutional Strengthening Project Implementation	HPMP Preparation *	HPMP Implementation (Stages I, II or III)	HPMP Verification	Enabling Activity Projects (HFCs)**	HFC project preparation ***
Comoros	x		x		x	
Congo	x		x			
Congo, Democratic Republic of the	x		x		x	
Cook Islands	x		x		x	
Costa Rica						
Côte d'Ivoire	x		x	x	x	
Cuba						
Djibouti	x		x	x ^o	x	
Dominica	x		x		x	
Dominican Republic	x		x		x	
Ecuador	x		x		x	
Egypt			x		x	
El Salvador ¹	x		x			
Equatorial Guinea	x		x	x ^o	x	
Eritrea	x		x		x	
Eswatini, Kingdom of	x		x	x ^o	x	
Ethiopia	x		x		x	
Fiji	x		x			
Gabon	x		x	x ^o	x	
Gambia	x		x	x		
Georgia					x	
Ghana			under development		x	
Grenada	x		x			x
Guatemala	x		x		x	
Guinea	x	x	x	x ^o	x	
Guinea-Bissau	x		x	x ^o	x	
Guyana	x		x	x ^o	x	
Haiti	x		x	x ^o		
Honduras	x		x		x	
India			x			
Indonesia						
Iran, Islamic Republic of			x		x	
Iraq	x		x	x	x	
Jamaica	x		x			
Jordan						

Country	Project Services					
	Institutional Strengthening Project Implementation	HPMP Preparation *	HPMP Implementation (Stages I, II or III)	HPMP Verification	Enabling Activity Projects (HFCs)**	HFC project preparation ***
Kenya	x				x	
Kiribati	x		x		x	
Korea, Democratic People's Republic of	x					
Kuwait	x		x	x	x	
Kyrgyzstan (HPMP completed)	x				x (completed)	x
Lao People's Democratic Republic	x		x		x	x
Lebanon						
Lesotho	x				x (completed)	
Liberia	x		x			
Libya						
North Macedonia						
Madagascar	x		x	x ^o	x	
Malawi	x		x		x	x
Malaysia						
Maldives	x		x		x	x
Mali	x		x	x ^o	x	
Marshall Islands	x		x		x	
Mauritania	x		x		x	
Mauritius	x				x	
Mexico			x		x	
Micronesia, Federated States of	x		x	x	x	
Moldova, Republic of	x		x			
Mongolia	x		x		x	
Montenegro						
Morocco	x					
Mozambique	x		x	x ^o	x	
Myanmar	x		x	x ^o	x	
Namibia	x				x	
Nauru	x		x		x	
Nepal	x		x		x	
Nicaragua	x		x			
Niger	x		x			

Country	Project Services					
	Institutional Strengthening Project Implementation	HPMP Preparation *	HPMP Implementation (Stages I, II or III)	HPMP Verification	Enabling Activity Projects (HFCs)**	HFC project preparation ***
Nigeria					x	
Niue	x		x		x	
Oman			x		x	
Pakistan			x		x	
Palau	x		x		x	
Panama						
Papua New Guinea						
Paraguay	x		x		x	
Peru	x		x			
Philippines	x					
Qatar	x		x		x	
Rwanda	x		x		x	x
Saint Kitts and Nevis	x		x	x	x	
Saint Lucia	x		x	x	x	
Saint Vincent and the Grenadines	x		x		x	
Samoa	x		x		x	
Sao Tome and Principe	x		x		x	
Saudi Arabia	x	x	x		x	
Senegal	x		x	x ^o	x	x
Serbia			x			
Seychelles	x					
Sierra Leone	x		x	x ^o	x	
Singapore						
Solomon Islands	x		x		x	
Somalia	x					
South Africa						
South Sudan	x		x	x	x	
Sri Lanka			x		x	
Sudan	x				x	
Suriname	x		x	x ^o	x	
Syrian Arab Republic			x		x	
Tanzania, United Republic of	x		x		x	
Thailand						
Timor-Leste	x		x	x ^o	x	

Country	Project Services					
	Institutional Strengthening Project Implementation	HPMP Preparation *	HPMP Implementation (Stages I, II or III)	HPMP Verification	Enabling Activity Projects (HFCs)**	HFC project preparation ***
Togo	x		x		x	
Tonga	x		x		x (completed)	
Trinidad and Tobago						
Tunisia			x			
Turkey						
Turkmenistan					x	
Tuvalu	x		x		x	
Uganda	x		x		x	
United Arab Emirates						
Uruguay						
Vanuatu	x		x		x	
Venezuela, Bolivarian Republic of						
Viet Nam	x					
Yemen	x					
Zambia	x		x		x	
Zimbabwe	x		x		x (completed)	
Totals	105	3	104	33	93	11

* In cases where UNEP is a Cooperating Agency (not indicated in this table), it will assist in preparation of Stage II. The Lead Agency will submit the project.

** As of June 2020.

*** Planned for submission to the 86th Executive Committee meeting.

¹ The IS project of El Salvador is combined with the HPMP.

ANNEX 7 – COUNTRY-SPECIFIC PROJECT SERVICES PROPOSED FOR 2021

NETWORK AND THEMATIC MEETINGS

The UN Environment Programme (UNEP) provides CAP support to enable all National Ozone Units (NOUs) to participate in the meetings of the Regional Networks of Ozone Officers, and to specific NOUs for thematic meetings, depending on the focus of those meetings. CAP also provides support for NOUs and specific stakeholders for workshops. In 2021, UNEP anticipates providing services in this category to the following Article 5 (and CEIT) countries (noting that the topics of some thematic meetings will be defined later):

<p><u><i>Africa – Anglophone</i></u></p> <ul style="list-style-type: none"> • Network meetings – All 28 countries in the region. • Thematic meetings of National Ozone Officers of English-speaking African Countries on HFC phase-down in a changing global environment and determining HFC baseline. <p><u><i>Africa – Francophone</i></u></p> <ul style="list-style-type: none"> • Network meetings – All 26 countries in the region back-to-back with a Thematic meeting of National Ozone Officers and RAC technicians on the availability of HFC alternatives in Africa and the role of RAC Associations. • Thematic workshop for Customs Officer and National Officers and Customs Officers on a harmonized tariff codes to accommodate HFCs and their implementation in the national mechanisms for the licensing systems. <p><u><i>Caribbean</i></u></p> <ul style="list-style-type: none"> • Network meetings – All 14 countries in the region. • Thematic meetings – Thematic meeting for all countries on strengthening border control for HFCs. <p><u><i>Europe and Central Asia</i></u></p> <ul style="list-style-type: none"> • ECA meetings – All 11 network countries and 7 associated countries with economies in transition (CEIT countries) with selected experts, bilateral partners and Secretariats as expressed needs and priorities of the countries. • Back-to-back meeting with National Ozone Officers and representatives of national RAC associations / experts, in the margin of an international RAC conference / exhibition if possible. • Back-to-back meeting with Ozone Officers, Customs / enforcement officers and winners of the ECA Montreal Protocol award for Customs / enforcement officers (5th edition) including the award ceremony and handover of medals / certificates. 	<p><u><i>South Asia</i></u></p> <ul style="list-style-type: none"> • Network meetings – All 13 countries in the region. • Thematic workshop – All 13 countries in strengthening of RSS management regulation (including vocational education, qualification certification, Recognition of Prior Learning (RPL), RDL etc.), coordination and synergies with other policies (cold chain, public procurement, green building) for effective policymaking. <p><u><i>South East Asia</i></u></p> <ul style="list-style-type: none"> • Network meeting – All 11 countries in the region. • Thematic meetings – Twinning Workshop for the SEA Ozone and Customs Officers on Strengthening Monitoring and Enforcement Mechanism for HCFC Trade Control with all 11 SEA countries. <p><u><i>Pacific Island Countries</i></u></p> <ul style="list-style-type: none"> • Network meeting – All 14 countries in the region. • Thematic workshop to launch the Regional PIC HPMP Stage II (12 PICs) back-to-back with Thematic workshop on Integration of Good Servicing Practices into National Training and Certification Programme for RAC Technicians (12 PICs). <p><u><i>West Asia</i></u></p> <ul style="list-style-type: none"> • Network meetings – All 11 countries (plus one observer country) in the region. • Thematic meeting – All 11 countries (plus one observer country) in the region – Thematic twinning workshop of NOUs and Technical and Vocational Education and Training (TVET) Focal Points on Enhancing and Sustaining Capacity Building of RAC Servicing Sector. • Thematic meetings – All 11 countries (plus one observer country) in the region – Twinning Workshop for the Ozone and Customs Officers on Strengthening Monitoring and Enforcement Mechanism for ODS and HFC Trade Control with all West Asia countries.
--	--

- Monthly online meetings on specific topics as long as COVID-19 prevents physical meetings.

Latin America

- Network meetings – All 19 countries in the region.
- Thematic meetings – 2-3 thematic meetings per subregion on data reporting, policy and enforcement including HFCs, refrigerant management, including alternatives, among others.

COMPLIANCE

UNEP provides compliance assistance services through CAP to NOUs upon request or identified need to help the Ozone Officers ensure that national compliance commitments under the Montreal Protocol are met in a timely and efficient manner. In 2021, UNEP anticipates providing services in this category to the following Article 5 (and CEIT) countries:

Africa – Anglophone

- Compliance monitoring of 35% HCFC reduction target – All 28 countries in the region.
- Preparation for 2025 reduction target of 65% HCFC consumption – All 28 countries in the region.

Africa – Francophone

- Compliance monitoring – All 26 countries in the region.
- Focused assistance – Preparation for 2025 reduction target of 65% HCFC consumption All 28 countries in the region.
- Special Focus on Central African Republic, Algeria, Mauritania, and Bissau Guinea.

Caribbean

- Compliance monitoring – All 14 countries in the region.
- Focused assistance – 4 countries: Antigua and Barbuda, Dominica, Haiti, St. Kitts and Nevis.

Europe and Central Asia

- ECA compliance monitoring – All 11 network countries and 7 associated CEIT countries.
- Monitoring and follow-up on timely data reporting and review of compliance status including HFCs and assistance upon request.
- Monitoring of operational licensing and quota systems including HFCs and assistance upon request.
- Monitoring of trade in controlled substances including HFCs and prevention of illegal trade and assistance upon request.

Latin America

- Compliance monitoring – All 19 countries in the region.
- Focused assistance – Bolivia, Guatemala, Honduras, Paraguay and Peru.

South Asia

- Compliance monitoring – All 13 countries in the region.
- Focused assistance – DPR Korea, assist the development and implementation of plan of action to return to compliance.

South East Asia

- Compliance monitoring – All 11 countries in the region.

Pacific Island Countries

- Compliance monitoring – All 14 countries in the region.

West Asia

- Compliance monitoring – All 11 countries (plus one observer country) in the region.
- Focused assistance – 6 countries: Qatar, Iraq, Saudi Arabia, Syria, Yemen and State of Palestine as an observer country.

POLICY SUPPORT

UNEP provides CAP support to NOUs upon request or identified need to help the Ozone Officers design, review, modify and/or enforce national legislation and policies needed to comply with the Montreal Protocol. In 2021, UNEP anticipates providing services in this category to the following Article 5 (and CEIT) countries:

<p><u><i>Africa – Anglophone</i></u></p> <ul style="list-style-type: none">• 20 countries will be supported to design, review, modify and/or enforce national legislation and policies needed to comply with the Montreal Protocol. <p><u><i>Africa – Francophone</i></u></p> <ul style="list-style-type: none">• All 26 countries will be supported to report CP and Article 7 data.• All 26 countries will be supported to develop a harmonized tariff codes to accommodate HFCs.• All 26 countries will be supported to better collaborate with the RAC association.• Focus on Morocco, Central African Republic and Algeria to restart IS project.• Focus on Guinea Bissau where the NOO passed away. <p><u><i>Caribbean</i></u></p> <ul style="list-style-type: none">• All 14 countries – strengthening the legal framework for HFCs in collaboration with Law Division. <p><u><i>Europe and Central Asia</i></u></p> <ul style="list-style-type: none">• ECA policy support – All 11 network countries and 7 associated CEIT countries.• Monitoring of HFC policy and legislative measures in place, planned to be put in place and not planned to be put in place (tracking table) to allow exchange of experience and to encourage harmonization.• Supporting the development / implementation of national HCFC phase-out strategies including policy setting (Albania, Armenia, Kyrgyzstan, Moldova, Serbia).• Supporting the development and implementation of national HFC phase-down strategies including policy setting upon request (possibly Albania, Armenia, Georgia, Kyrgyzstan, Turkmenistan).• Outreach of policy-related information and tools and encouragement to use them as part of HCFC phase-out and HFC phase-down strategies.	<p><u><i>Latin America</i></u></p> <ul style="list-style-type: none">• All 19 countries in the region.• Focused assistance – Bolivia, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Paraguay and Peru. <p><u><i>South Asia</i></u></p> <ul style="list-style-type: none">• All 13 countries -- exploring policy options to strengthen legal framework for licensing and quota system e.g. strengthening prosecution capacity, coherence and control, in collaboration with Law Division.• Mongolia – support the development of policy options to ban the installation of HCFC-based cold storage.• China – support the management of the recycled ODS.• All 13 countries in the region – gender policy in the implementation of the Montreal Protocol. <p><u><i>South East Asia</i></u></p> <ul style="list-style-type: none">• All 11 countries in the region – exploring policy options to strengthen legal framework for licensing and quota system e.g. strengthening prosecution capacity, coherence and control, in collaboration with Law Division.• Brunei Darussalam - support drafting specific ODS regulation to enable the country to enact different policy options to support Montreal Protocol implementation.• Brunei Darussalam, Cambodia, Lao PDR and Timor Leste - exploring policy options to regulate RAC servicing sector.• Brunei Darussalam and Timor Leste - support establishment of regulation to ban the import of HCFC-based equipment.• All 11 countries in the region – gender policy in the implementation of the Montreal Protocol. <p><u><i>Pacific Island Countries</i></u></p> <ul style="list-style-type: none">• All 14 countries in the region - exploring policy options to strengthen legal framework for licensing and quota system e.g. strengthening prosecution capacity, coherence and control, in collaboration with Law Division.• Cook Islands, Fiji, Kiribati, Micronesia, Samoa, Solomon Islands and Tuvalu - support establishment of regulation to ban the import of HCFC-based equipment.• All 14 countries in the region – gender policy in the implementation of the Montreal Protocol
---	---

	<p><u>West Asia</u></p> <ul style="list-style-type: none"> Assistance with Targeted strengthening of legal framework and licensing systems to include HFC control, and Adoption of specific HS code for HFCs and mixtures containing HFCs Standard Operating Procedures to deal with Illegal trade. in: Bahrain, Jordan, Kuwait, Iraq, Oman, Qatar, Saudi Arabia, Syria, and State of Palestine as an observer country.
--	--

TECHNICAL ASSISTANCE

UNEP provides CAP support to NOUs, the refrigeration and air conditioning sector, Customs, and other industry and government stakeholders with technical support for specific issues (e.g. technology, refrigerant management, standards, certification, safety, energy efficiency awareness) upon request. In 2021, UNEP anticipates providing services in this category to the following Article 5 (and CEIT) countries:

<p><u>Africa – Anglophone</u></p> <ul style="list-style-type: none"> 20 countries will be provided with support to establish RAC standards and certification schemes. 20 countries will be supported to evaluate Covid 19 implications in the RAC servicing sector and assess preparedness to carryout activities under difficult circumstances. Special capacity building assistance will be provided to female RAC technicians in refrigerant management. <p><u>Africa – Francophone</u></p> <ul style="list-style-type: none"> Morocco, Central African Republic and Algeria to restart IS project. Guinea Bissau where the NOO passed way. Special assistance will be provided to female RAC technicians in capacity building in refrigerant management. <p><u>Caribbean</u></p> <ul style="list-style-type: none"> All 14 countries: supporting countries with National and or Regional Associations to strengthen HPMP implementation and HFC Phase Down implementation. All 14 countries in the region in safety standards. Subject to partnership with the OCES and CARICOM. <p><u>Europe and Central Asia</u></p> <ul style="list-style-type: none"> ECA technical assistance – All 11 network countries and 7 associated CEIT countries. 	<p><u>South Asia</u></p> <ul style="list-style-type: none"> 13 countries - Assistance with integration of good and safe servicing practices including handling flammable refrigerants into national curriculum and certification systems. Mongolia, Nepal, Sri Lanka, Pakistan, Maldives, Bangladesh - Training on good practices in handling low GWP alternatives (NH₃, CO₂, HC) in RAC application. Maldives- support the country to build its technician certificate system on refrigerant management Mongolia, Nepal -Support to development of e-licensing system. <p><u>South East Asia</u></p> <ul style="list-style-type: none"> All 11 countries in the region - Integrated approaches to strengthen operation of the Customs in ODS and HFC trade control. Brunei Darussalam, Cambodia and Lao PDR – Modality and procedures on RAC certification on good servicing practices Timor Leste - sustaining RAC servicing sector through integration of good servicing practices and flammable refrigerant into training curriculum/module of existing TVET system. Cambodia and Myanmar - Training on good practices in handling low GWP alternatives (NH₃) in RAC application. <p><u>Pacific Island Countries</u></p> <ul style="list-style-type: none"> All 14 countries in the region – Standard Operating Procedures for the safe handling of flammable refrigerant Cook Islands, Kiribati, Palau – Modality and procedures on RAC certification on good servicing practices.
---	--

<ul style="list-style-type: none"> • Monitoring of RAC sector action (tracking table) to allow exchange of experience and to provide inspiration. • Supporting the development / implementation of national HCFC phase-out strategies including technical assistance (Albania, Armenia, Kyrgyzstan, Moldova, Serbia). • Supporting the development and implementation of national HFC phase-down strategies including technical assistance upon request (possibly Albania, Armenia, Georgia, Kyrgyzstan, Turkmenistan). • Involvement of RAC associations / experts in network activities and meetings. • Outreach of technology-related information and tools and encouragement to use them as part of HCFC phase-out and HFC phase-down strategies. <p><u>Latin America</u></p> <ul style="list-style-type: none"> • Technical assistance to Bolivia, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Paraguay and Peru in technology, refrigerant management, standards, certification, safety and energy efficiency awareness. 	<ul style="list-style-type: none"> • Fiji, Micronesia, Samoa, Solomon Islands, Tonga and Vanuatu - sustaining RAC servicing sector through integration of good servicing practices and flammable refrigerant into training curriculum/module of existing TVET system. <p><u>West Asia</u></p> <ul style="list-style-type: none"> • All 11 countries: Focused assistance on updating the training curriculum/modules and RAC certification schemes by integrating of Best Practices in Handling Long Term Refrigerants.
---	--

DATA REPORTING

UNEP provides CAP assistance to Ozone Officers to help them comply with data reporting requirements under Article 7 of the Montreal Protocol and Country Programme data under the Multilateral Fund. CAP also provides support NOUs upon request for support with responding to Implementation Committee requests. In 2021, UNEP anticipates providing services in this category to the following Article 5 (and CEIT) countries:

<p><u>Africa – Anglophone</u></p> <ul style="list-style-type: none"> • All 28 countries in the region. <p><u>Africa – Francophone</u></p> <ul style="list-style-type: none"> • All 26 countries in the region. <p><u>Caribbean</u></p> <ul style="list-style-type: none"> • All 14 countries in the region. • All 14 countries – follow up training on Online Article 7 data reporting for new Ozone Officers and new training for online CP data reporting. <p><u>Europe and Central Asia</u></p> <ul style="list-style-type: none"> • ECA data reporting assistance: All 11 network countries and 7 associated CEIT countries. • Assistance for accurate and timely data reporting including HFCs (Article 7 and country programme data) upon request. 	<p><u>South Asia</u></p> <ul style="list-style-type: none"> • All 13 countries in the region: reminder for the timely collection and submission of CP and Article 7 data, review the raw data. <p><u>South East Asia</u></p> <ul style="list-style-type: none"> • All 11 countries in the region - reminder for the timely collection and submission of CP and Article 7 data, review the raw data. <p><u>Pacific Island Countries</u></p> <ul style="list-style-type: none"> • All 14 countries in the region- reminder for the timely collection and submission of CP and Article 7 data, review the raw data. • Nauru and Marshall Islands-Special assistance on data collection and reconciliation. <p><u>West Asia</u></p> <ul style="list-style-type: none"> • All 11 countries with focus on Qatar, Iraq, Palestine, Saudi Arabia, and Syria.
--	---

- Demonstration of updated online reporting platforms at network meetings and troubleshooting upon request.

Latin America

- All 19 countries of the region.

AWARENESS AND INFORMATION

In addition to global information, communication and education services, UNEP also provides CAP assistance to support awareness and information activities at the national and regional levels, both within and outside of the Institutional Strengthening projects. In 2021, UNEP anticipates providing services in this category to the following Article 5 (and CEIT) countries:

Africa – Anglophone

- Disseminate and outreach UNEP awareness materials through ROA-E Network meetings and regular communication within the Network - All 28 countries in the region.

Africa – Francophone

- All 26 countries in the region.

Caribbean

- All 14 countries in the region - Disseminate and promote OzonAction tools such as awareness materials and Application.
- Promotion of WRD, WOD and emerging overarching topics such as gender mainstreaming

Europe and Central Asia

- Awareness raising and information outreach: All 11 network countries, 7 associated CEIT countries and other regional stakeholders.
- Outreach of awareness and information materials of UNEP and from other sources through 8 dedicated dissemination lists and the meeting USB.
- Encouragement to celebrate World Ozone Day and World Refrigeration Day and no-cost regional activities upon request.
- Query response for network countries, associated CEIT countries and other stakeholders upon request.
- ECA Montreal Protocol award for Customs / enforcement officers to raise awareness of the Customs and enforcement community (award ceremony of 5th edition and launch of 6th edition).
- Translation of key policy and technical Montreal Protocol related documents into Russian.

Latin America

South Asia

- All 13 countries in the region including
 - Disseminate and promote OzonAction tools such as awareness materials and mobile applications.
 - Develop messaging for specific outreach materials (e.g. posters, information briefs, short video), assist countries to develop through local design competitions (in parallel with South-South cooperation).

South East Asia

- All 11 countries in the region including.
 - Disseminate and promote OzonAction tools such as awareness materials and mobile applications.
 - Develop messaging for specific outreach materials (e.g. posters, information briefs, short video), assist countries to develop through local design competitions (in parallel with South-South cooperation).

Pacific Island Countries

- All 14 countries in the region including.
 - Disseminate and promote OzonAction tools such as awareness materials and application.
 - Develop messaging for specific outreach materials (e.g. posters, information briefs, short video), assist countries to develop through local design competitions (in parallel with South-South cooperation).

West Asia

- All 11 countries (plus State of Palestine as an observer country) in the region.
- Regional competition for RAC technicians to be organized as part of the celebration the World Refrigeration Day.

- Promotion and outreach of the WOD, the WRD, Gender mainstreaming, etc., including the translation of OzonAction communication products and capacity building tools in all 19 countries in the region.

KIGALI AMENDMENT RATIFICATION AND ASSOCIATED ACTIVITIES

UNEP provides CAP assistance to support Article 5 countries on Kigali Amendment-related issues including monitoring the status of ratification, helping Ozone Officers understand its implications for their countries, supporting the ratification process and/or initial activities required to implement its provisions, including assistance with Enabling Activities projects. In 2021, UNEP anticipates providing services in this category to the following Article 5 (and CEIT) countries:

Africa – Anglophone

- 22 countries in the region.
- Support countries to fast-track implementation of Enabling Activities and prepare assessment reports.
- Review status of ratification of Kigali Amendment and provide special assistance to remaining countries to ratify.

Africa – Francophone

- All 26 countries in the region.
- Support countries for the implementation of Enabling Activities and prepare progress reports.
- Review status of ratification of Kigali Amendment and provide special assistance to remaining countries to ratify.

Caribbean

- All 14 countries in the region.
- Focused assistance - 6 countries: Antigua and Barbuda, The Bahamas, Dominica, Guyana, St. Kitts and Nevis, Suriname.

Europe and Central Asia

- ECA Kigali Amendment ratification: All 11 network countries and 7 associated CEIT countries
- Monitoring of ratification status and review of the status of enabling activities projects including outreach on progress and lessons learned.
- Completion of enabling activities projects and submission of final reports (Georgia, Turkmenistan).
- Special missions jointly with partner agencies and the Ozone Secretariat upon request.

Latin America

- All 19 countries in the region.
- Focused assistance – Bolivia, Dominican Republic, El Salvador, Guatemala and Nicaragua.

South Asia

- All 13 countries in the region - Support HFC data collection, reconciliation and report for the baseline year of 2020 of Group 1 countries, HS code for HFCs, and the HFC quota allocation options .
- Bhutan, Maldives, Sri Lanka - Support the development of HFC phase-down strategies.

South East Asia

- All 11 countries in the region – Support HFC data collection, reconciliation and report for the baseline year of 2020 of Group 1 countries, HS code, HFC quota allocation options .
- Timor Leste and Myanmar on ratification of the Kigali Amendment and amendment of regulation to include HFC licensing system.

Pacific Island Countries

- All 14 countries in the region – Support HFC data collection, reconciliation and report for the baseline year of 2020 of Group 1 countries, and HFC quota allocation options.
- All 14 countries in the region - adoption of specific HS code for HFCs and mixtures containing HFCs under the Pacific Harmonized Commodity Description and Coding System 2017.
- All 14 countries in the region - assistance to develop Pacific Harmonized Commodity Description and Coding System 2022 for HFCs and mixtures containing HFCs.
- Nauru, Papua New Guinea and Solomon Islands on ratification of the Kigali Amendment and amendment of regulation to include HFC licensing system.
- Cook Islands, Kiribati, Marshall Islands, Federated States of Micronesia, Nauru, Niue, Palau, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu — support the development of regional HFC phasedown strategies.

West Asia

- All 11 countries in the region.

	<ul style="list-style-type: none"> • Review of status of Kigali Ratification and sharing of lessons learned amongst region to promote and facilitate ratification. • Continue implementation of remaining enabling activities – Qatar
--	---

SOUTH-SOUTH COOPERATION

UNEP provides CAP assistance upon request to facilitate cooperation between two or more countries to address specific targeted needs identified by Ozone Officers. This cooperation may take the form of bilateral country-to-country (South-South, North-South) assistance or arrangement involving several countries, depending on the needs. The cooperation may entail visits, technical missions, or study tours and varies in nature from one year to another. In 2021, UNEP anticipates providing services in this category to the following Article 5 (and CEIT) countries (noting that for most regions, the activities will be determined upon a case-by-case request by countries and upon assessing the needs of the countries):

<p><u><i>Africa – Anglophone</i></u></p> <ul style="list-style-type: none"> • Study visit for Liberia, Nigeria, and Sierra Leone to Ghana to discuss preparatory activities towards the implementation of energy efficiency programme at the country, including key pillars and modalities to have in place to ensure that it works. • Study visit for Angola to Mozambique to share expediciencies in the implementation of Montreal Protocol activities. • Study visit of a few countries to Zimbabwe to discuss with the Zimbabwe Bureau of Standards on the establishment of RAC standards. <p><u><i>Africa – Francophone</i></u></p> <ul style="list-style-type: none"> • Organize some visits between countries upon request in order to share experience. • Guinea Bissau to visit Senegal. • Central African Republic to visit Chad. • Senegal RAC technician to assist Guinea on RAC training workshop. <p><u><i>Caribbean</i></u></p> <ul style="list-style-type: none"> • Grenada-St. Vincent and the Grenadines: to exchange best practices regarding establishment of and implementation of an e-licensing and quota system (eLQS). Subject to fund availability and resources. • Grenada-St. Kitts and Nevis: to exchange best practices for improving efficiency within the NOU. <p><u><i>Europe and Central Asia</i></u></p> <ul style="list-style-type: none"> • ECA country-to-country assistance: Discontinued due to the reduced ECA network budget. • Country-to-country online meetings on specific topics for smaller groups of interested countries upon request. 	<p><u><i>Latin America</i></u></p> <ul style="list-style-type: none"> • Upon requests and needs of different client countries, UNEP facilitates south-south and north-south cooperation in the field of partnership building in the refrigeration, certification, standards and communication fields. <p><u><i>South Asia</i></u></p> <ul style="list-style-type: none"> • Afghanistan, Bangladesh, Iran, Pakistan – sub regional border dialogues. • Mongolia –China and/India assist the delivery of Training of Trainers on handling ammonia and R-290 RAC equipment. • Others - subject to fund availability and resources upon request. <p><u><i>South East Asia</i></u></p> <ul style="list-style-type: none"> • Malaysia – Brunei: border dialogue to strengthen land-border trade control. • Cambodia and Myanmar – China /Thailand assist the delivery of the Train the trainers for handling ammonia and R290 based RAC equipment. • Others - subject to fund availability and resources upon request. <p><u><i>Pacific Island Countries</i></u></p> <ul style="list-style-type: none"> • Samoa/Micronesia with Marshall Islands, and Fiji-Kiribati - RAC expert to visit to another country to support the delivery of Good Service Practice for RAC technician. • Others - subject to fund availability and resources upon request. <p><u><i>West Asia</i></u></p> <ul style="list-style-type: none"> • Subject to availability of resources;
--	---

<ul style="list-style-type: none"> • Encouragement and facilitation of bilateral cooperation and information exchange between countries. 	<ul style="list-style-type: none"> • Bahrain – Iraq: Iraq NOU to visit Bahrain NOU to exchange experiences on operation of e-licensing system, HPMP implementation, and engagement with national stakeholders. • Qatar – Oman: Qatar NOU to visit Oman NOU to increase knowledge of operation of the NOU, operation of e-licensing system, HPMP implementation, and engagement with national stakeholders.
---	--

MONITORING AND CONTROL OF ODS TRADE

UNEP provides CAP assistance to support NOUs, Customs and enforcement officers in their work to implement their national licensing and quota systems for substances controlled under the Montreal Protocol, to detect and prevent illegal trade in these chemicals, and to facilitate the legal trade. In 2021, UNEP anticipates providing services in this category to the following Article 5 (and CEIT) countries:

<p><u><i>Africa – Anglophone</i></u></p> <ul style="list-style-type: none"> • All 28 countries in the region. <p><u><i>Africa – Francophone</i></u></p> <ul style="list-style-type: none"> • All 26 countries in the region. <p><u><i>Caribbean</i></u></p> <ul style="list-style-type: none"> • All 14 countries in the region. - promotion of iPIC. <p><u><i>Europe and Central Asia</i></u></p> <ul style="list-style-type: none"> • ECA monitoring and control of ODS trade: All 11 network countries, 7 associated CEIT countries and main trade partners. • Involvement of Customs / enforcement officers in ECA network activities and meetings. • ECA enforcement award for Customs / enforcement officers (award celebration of 5th edition for 2019-2020 and launch of 6th edition for 2021-2022). • Encouragement to use iPIC, to analyse discrepancies in reported trade data, to designate Montreal Protocol Customs focal points, to report and publicize illegal trade and seizures, to enhance regional cooperation and information sharing. <p><u><i>Latin America</i></u></p> <ul style="list-style-type: none"> • All 19 countries in the region including the promotion and extended use of the iPIC platform. • Focused assistance to Bolivia, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Paraguay and Peru. 	<p><u><i>South Asia</i></u></p> <ul style="list-style-type: none"> • All 13 countries in the region including <ul style="list-style-type: none"> • Promote iPIC and risk profiling for ODS trade control. • Sharing of experiences in establishing mechanism for inspection and monitoring of refrigerants in domestic market. • Promote good practices in licensing e.g. e-licensing system <p><u><i>South East Asia</i></u></p> <ul style="list-style-type: none"> • All 11 countries in the region including <ul style="list-style-type: none"> ○ Promote iPIC and risk profiling for ODS trade control. ○ Sharing of experiences in establishing mechanism for inspection and monitoring of refrigerants in domestic market. • Myanmar and Timor Leste -Assist the country to set up mandatory labelling of HCFC cylinders, and implement post-clearance reporting requirement for cross checking data. • Lao PDR, Myanmar and Timor Leste – Support the country to conduct tracking and reconciliation of data from the HCFC quota, license and actual import. <p><u><i>Pacific Island Countries</i></u></p> <ul style="list-style-type: none"> • All 14 countries in the region including. <ul style="list-style-type: none"> ○ Promote iPIC and risk profiling for ODS trade control. ○ Support the establishment of mechanism for mandatory labelling of HCFC cylinders and inspection and monitoring of refrigerants in domestic market to curb illegal trade.
--	--

	<ul style="list-style-type: none"> All countries in the region except Fiji – support country to conduct tracking and reconciliation of data from HCFC quota, license and actual import. <p><u>West Asia</u></p> <ul style="list-style-type: none"> All WA countries: Promote iPIC and risk profiling for ODS trade.
--	---

NOU CAPACITY BUILDING

UNEP provides CAP assistance to support learning and skill growth of Ozone Officers and their staff through sharing the collective wisdom of the wider community of Ozone Officers who are leading NOUs. In 2021, UNEP anticipates providing services in this category to the following Article 5 (and CEIT) countries (noting that for some regions, it will be determined upon a case-by-case request by countries and upon assessing the needs of the countries):

<p><u>Africa – Anglophone</u></p> <ul style="list-style-type: none"> To be determined by case-by-case requests by countries and upon assessing the needs. Special attention will be to new ozone officers. <p><u>Africa – Francophone</u></p> <ul style="list-style-type: none"> Guinea Bissau new National Ozone Officer to visit Senegal. Central African Republic National Ozone Officer to visit Chad. Senegal RAC technician to assist Guinea on RAC training workshop <p><u>Caribbean</u></p> <ul style="list-style-type: none"> Introductory NOO training in Guyana. Advance NOO training in remaining 13 Countries when available. <p><u>Europe and Central Asia</u></p> <ul style="list-style-type: none"> ECA capacity building of NOU staff: All 11 network countries and 7 associated CEIT countries. Regular capacity building of NOU staff through regional network and clearinghouse activities. Participation of selected additional NOU staff with dedicated responsibilities in ECA meetings or other capacity building events. Tailor-made training events for new MOPs in cooperation with partner agencies upon request (possibly Moldova). 	<p><u>Latin America</u></p> <ul style="list-style-type: none"> Training for Bolivia, El Salvador, Guatemala and Peru. <p><u>South Asia</u></p> <ul style="list-style-type: none"> Introductory training for Bhutan, China, Mongolia; Advanced training for all countries, subject to availability. Afghanistan, Bhutan, Nepal, Bangladesh, Pakistan, Sri Lanka - Assist the NOU to assess effectiveness of training activities conducted for technicians and Customs officers under HPMP. <p><u>South East Asia</u></p> <ul style="list-style-type: none"> Introductory training for Indonesia, Lao PDR, Philippines, and Timor Leste. Brunei Darussalam, Cambodia, Lao PDR, Myanmar and Timor Leste - Assist the NOU to assess effectiveness of training activities conducted for technicians and Customs officers under HPMP. <p><u>Pacific Island Countries</u></p> <ul style="list-style-type: none"> Introductory training for Tuvalu, Tonga, Vanuatu, Fiji, Kiribati and Nauru. All countries except PNG - Assist the NOU to assess effectiveness of training activities conducted for technicians and Customs officers under HPMP. <p><u>West Asia</u></p> <ul style="list-style-type: none"> Subject to availability of funding; 6 countries: Jordan, Iraq, Saudi Arabia, Qatar, Syria and State of Palestine (observer country). Dedicated support to the NOU in Yemen in order to put the Montreal Protocol portfolio back on track.
--	--

OTHER

UNEP is called upon by Article 5 (and CEIT) countries to provide tailored CAP assistance to help address country-specific needs that do not fall into the above categories. In 2021, UNEP anticipates providing services in this category to the following Article 5 (and CEIT) countries (noting that these emerging needs will be determined in the coming months upon a case-by-case request by countries and upon assessing the needs of the countries):

<p><u><i>Africa – Anglophone</i></u></p> <ul style="list-style-type: none">• No need yet identified <p><u><i>Africa – Francophone</i></u></p> <ul style="list-style-type: none">• To be determined by case-by-case requests by countries and upon assessing the needs. <p><u><i>Caribbean</i></u></p> <ul style="list-style-type: none">• Continue to develop partnership with OCES in developing regional standards for safe handling of refrigerants <p><u><i>Europe and Central Asia</i></u></p> <ul style="list-style-type: none">• ECA offers support to assess the online connectivity of the countries, to build skills to conduct online meetings and to use online tools and to provide trouble shooting services as long as Covid-19 prevents physical meetings upon request.• ECA offers support to the Ozone Secretariat and Fund Secretariat to connect to the countries and to conduct online consultations / meetings upon request.• ECA offers support for the designation of new NOOs and project managers upon request.	<p><u><i>Latin America</i></u></p> <ul style="list-style-type: none">• Any ad-hoc request by individual or group of countries that falls under the CAP mandate. <p><u><i>South Asia</i></u></p> <ul style="list-style-type: none">• No need yet identified <p><u><i>South East Asia</i></u></p> <ul style="list-style-type: none">• No need yet identified <p><u><i>Pacific Island Countries</i></u></p> <ul style="list-style-type: none">• No need yet identified <p><u><i>West Asia</i></u></p> <ul style="list-style-type: none">• To be determined by case-by-case requests by countries and upon assessing the needs.
---	---

ANNEX 8 – PROGRESS REPORT ON FOUR GLOBAL CAP ACTIVITIES

In accordance with Executive Committee Decision 82/57(c)(i), this annex provides detailed information on the activities for which the global funds were used during the period September 2019 – August 2020. These multi-year activities, namely the Refrigerant Driving License, Global training for the refrigeration servicing sector, the National Ozone Officer training programme, and ODS management in fishing sector, were originally approved in the 2016 CAP Work Programme and Budget. This annex is divided into two sections: the first provides a brief update of the substantive progress and outcomes, and the second provides an overview of the cumulative expenditures.

A. Substantive progress of global activities

1. Development of a Refrigerant Driving License (RDL)

The Refrigerant Driving License (RDL) is an initiative that aims to introduce a globally-recognised qualification program for the sound management of refrigerants. RDL aims to set minimum competencies and skills for the heating, ventilating, air conditioning and refrigeration (HVAC&R) servicing network (individuals and companies) and creates an international recognition program through industry and governments.

The initiative was launched as a concept by UNEP OzonAction and the Air-Conditioning, Heating and Refrigerating Institute (AHRI) at the 37th Open-Ended Working Group meeting in July 2015. Since then, AHRI and UNEP have promoted the RDL amongst key HVAC&R associations. An RDL Advisory Committee was established consisting of key industry associations namely ABRAVA, ACAIRE, AREA, AREMA, EPEE, JRAIA, Refrigerants Australia, the Alliance for Responsible Atmospheric Policy and ASHRAE.¹²



The Advisory Committee serves as the technical advisory and review body for RDL to review and clear all technical documentation, evaluate the work at different stages, review the outcomes of the pilot stage and comment/clear the final operation model of the RDL program. Other international and regional associations expressed interest to join the RDL program as supporter and to be part of the advisory group, but as their request came at later stage it was decided to defer their engagement till finalizing the pilot stage and have the program ready for enrolment in order to restart discussion again about concepts, definitions, and technical documentation that already concluded by the existing Advisory Committee.

¹² ABRAVA: Brazilian trade association that represents refrigeration, air conditioning, ventilation, heating, and air treatment equipment manufacturers, ACAIRE: Colombian air conditioning and refrigeration association that represents business, institutes, professional members, technicians, correspondents, and students in the industry, AREA: Air conditioning and Refrigeration European Association, AREMA: Air conditioning and Refrigeration Equipment Manufacturers Association of Australia, ASHRAE: American Society of Heating, Refrigerating and Air-Conditioning Engineers, EPEE: European Partnership for Energy and the Environment & JRAIA: Japan Refrigeration and Air Conditioning Industry Association.

Progress

During 2016-2018, AHRI and UNEP worked in consultation with the RDL Advisory Committee to review and analyse¹³ the existing globally recognised certification programs, to explore the qualification categories and agree on the operational modality. After a thorough analysis and in-depth consultations, the RDL Advisory Committee adopted four initial categories for RDL (Table 1). Additional categories will be considered in the future, such as handling ammonia and CO₂ applications.

Table 1: RDL categories

Competency Requirements	(A) Small Applications	(B) Commercial Refrigeration	(C) Commercial Air-Conditioning	(D) Enterprises
Basic knowledge (environment, refrigerants classifications/types, applications and relevant policies)	X	X	X	
Handling, transportation, storage and management of refrigerants' containers	X	X	X	
Servicing skills of leak detection, R&R, evacuation, charging and system tightness	X	X	X	
Logging and record keeping		X	X	X
Tools and equipment for the job	X	X	X	X
Employment skills, training and certification				X

The RDL Advisory Committee considered and agreed upon the following definitions of RDL categories:

- **Category (A) Small Applications:** Air conditioners and heat pumps with less than a 20kW/65kBtu/h cooling capacity and, refrigeration equipment with less than a 6kW/20kBtu/h cooling capacity. (Examples: packaged AC, ductless mini-split AC, multi-capacity AC, heat pumps, refrigerators, dehumidifiers, display cases, coolers and other unitary and hybrid equipment).
- **Category (B) Commercial Refrigeration:** Commercial refrigeration equipment with greater than a 6kW/20k Btu/h cooling capacity. (Examples: Storage and display refrigerators, freezers, commercial unit coolers, condensers, chillers, heat exchangers, vending machines and other traditional and hybrid equipment).
- **Category (C) Commercial Air-Conditioning:** Commercial air conditioners with greater than a 20kW/65k Btu/h cooling capacity. (Examples: Split AC, unitary large AC, VAV AC, CAV AC, VRF AC, chilled beams, heat pumps and other traditional and hybrid equipment).

However, the RDL Advisory Committee concluded that the **pilot stage should only focus on Category-A (RDL-Small Applications)** in order to measure feedback and adjust the program before developing the technical documentation of the other categories.

The development of comprehensive technical documentation for RDL Category-A (RDL-Small Applications) included several steps:

- Development of competencies/skills documentation (benchmarking) required for Category-A.

¹³ A comprehensive report about major certification programmes around the globe, and their characteristics, was developed as part of the preparatory stage of the RDL programme.

- Development of bank of questions for the testing.
- Development of sample training materials for train-the-trainers and following training sessions including syllabus and power point presentations.
- Development of comprehensive documentation for procedures of conducting the training, exam, preparatory work, qualification of trainers/assessors, setup of hands-on sessions and practical checks, evaluation and monitoring and roles of local stakeholders i.e. National Ozone Units vs. training centres.
- Development of supporting tools, i.e. checklists, guidance for exams, printing plans, etc.

All above materials were discussed, reviewed and endorsed by the RDL Advisory Committee. Regional CAP teams extended invitations to interested Article 5 countries to pilot RDL through special sessions conducted in the margins of the Regional Network meetings. These sessions were used to present and discuss the RDL with detailed explanations about possible options for linking RDL to ongoing training and/or certification programs, or to use the RDL program as alternate qualification programmes for countries that are facing difficulties in building local certification schemes. After several rounds of discussions and with the support from the regional CAP teams, the following countries expressed interest and agreed to pilot the RDL in conjunction with ongoing training activities under HPMPs:

1. Grenada.
2. Maldives.
3. Rwanda.
4. Sri Lanka.
5. Suriname.
6. Trinidad and Tobago.

Before the start-up of the training sessions, five (5) international experts were identified to be the International Master Trainers for delivering train-the-trainers' sessions in the six (6) pilot countries. Special coordination session was organized for the International Master Trainers to go through the details of the process, materials and ensure that delivery will be consistent across all pilot countries.

Between June and August 2019, six (6) train-the-trainers' sessions were successfully completed. Plans were made to start second phase of the pilot of training technicians during last quarter of 2019 and complete all remaining sessions by 3rd quarter of 2020. Two training technicians' sessions were completed during November-December 2019, however due to the COVID-19 pandemic, the rest will be rescheduled at nearest possible date, hopefully before the end of 2020.

RDL Curriculum

- Agenda of refrigerant management knowledge areas
 - Theoretical Training: Installation, Service, Safety, Types of refrigerant, Tools
 - Practical Training: Leak Checking, Evacuation, Charging, Recovery
- Syllabus of RDL training
- PowerPoint presentations of refrigerant management skills
- Training guidance of RDL Job Task Analysis knowledge areas
- Hand-outs and flyers with information on refrigerant management
- Training videos
- RDL Exam "How to take the Exam" information
- RDL Pre-test "How to take the Pre-test" information
- Checklist for preparations and printing plans
- Checklist of practical training tasks
- Working and marking sheets for the hands-on tests for each trainee
- Checklists for monitoring the process



Pilot Country	Train-the-Trainer	Technician Training
The Maldives	July 8-11, 2019	November 26-28, 2019
Sri Lanka	July 22-25, 2019	December 16-18, 2019
Rwanda	June 24-27, 2019	Planned for Spring 2020 but postponed till later 2020 due to COVID-19
Grenada	August 19-22, 2019	
Suriname	August 19-22, 2019	
Trinidad & Tobago	August 13-16, 2019	

The results from the train-the-trainers sessions were thoroughly analyzed by an international group of experts, AHRI and UNEP, following standard scoring analysis methodology, where for the level of trainers a minimum of score of 75 (for theoretical exam) was set to determine trainers along with a pass/fail practical test. The table below shows that there is limited number of trainers managed to pass the RDL exam as a trainer, except for one country.

Pilot Country	Passed (to be a Trainer)	Attempted	Average Theoretical Exam Score (points)	Average Practical Exam Score (%)
Country A	6	8	77	97
Country B	2	11	66	91
Country C ¹⁴	0	11	55	92
Country D	5	14	64	95
Country E	2	18	66	99
Country F	5	16	67	99

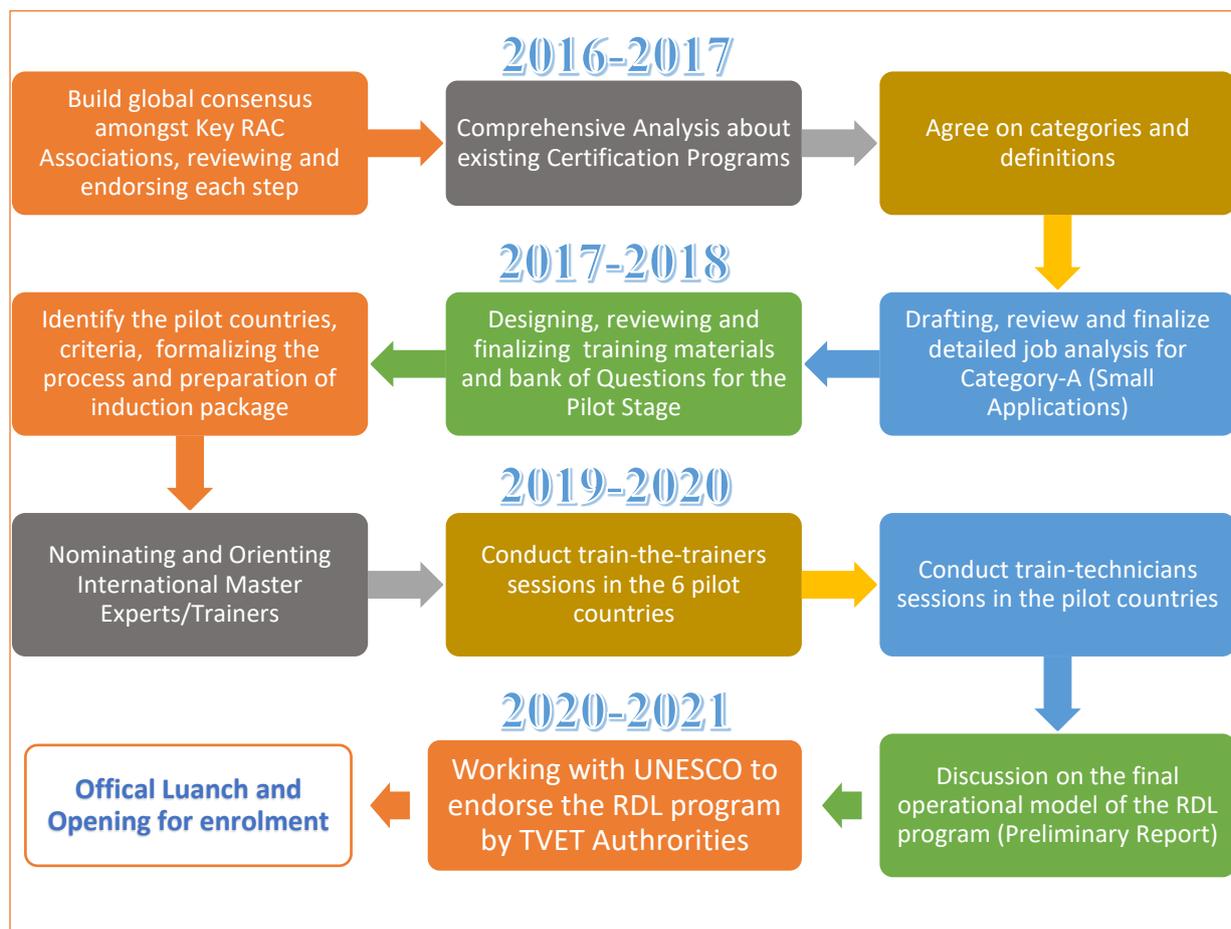
As for the technician's level, since the pilot stage is not completed yet an initial minimum score was set at 69 points for the theoretical exam, plus the standard pass/fail hands-on exam. Although the results were not as expected and only a fewer number of applicants passed the test compared to what envisaged, the seriousness of the exam was well received by both NOUs and local TVET authorities where some of them already started negotiating with UNEP how to endorse the RDL as parallel qualification program at their institutes similar to the ICDL (International Computer Driving License) which is being offered by many TVET centers around the globe.

There several lessons learned from the pilot stage so far, and may be more to come by completing the pilot stage, which helping in adjusting the program and the content to ensure its universality and feasibility to the operating conditions in developing countries without compromising the value and quality of the minimum skills and competencies that should be acquired by the servicing technicians. Among the lessons learned was recognizing that while English may be one of a country's official languages, technicians in the field may speak a variety of languages, which complicates the decision of

¹⁴ Only one country where no local trainer managed to pass the RDL exam. Another train-the-trainers session will be offered to this country within the pilot the stage.

which language the exam should be in. Others were mixtures of SI and Imperial units, how to ensure technicians remember RDL training once alternative refrigerants are available, allowing study time between training and the exam, expand the bank of questions, and ensuring a consistent list of minimum support equipment in the training/testing labs to ensure consistency and comparability of the final certificate around the globe.

AHRI and UNEP, in cooperation with the RDL Advisory Committee, are working out on solutions for above issues which will be part of the final setup. Two experts' meetings are scheduled, during August 2020, to fine tune the technical documentation and the exam procedures as per the comments and feedback collected, so far, during the pilot stage. In summary, below graph shows the progress achieved in the RDL and plan to complete all remaining activities.



While pursuing completing the pilot stage and extract lessons to help in put RDL documentation in final format for global enrolment. RDL Administration are working on drafting the final operational setup and procedures to allow offering RDL widely to all interested NOUs, training centers and individuals. In principle, three tracks are being examined for the final operational model of RDL which are:

- **Track-A:** RDL to be the local refrigerant management qualification program managed by the NOU in cooperation with local respective authorities.
- **Track-B:** RDL a parallel qualification program acknowledged by local the technical and vocational education training (TVET) authority.
- **Track-C:** RDL to be offered as standalone industry qualification program led by the private sector for interested applicants.

The multi-tracks setup will allow RDL the needed flexibility to cater for different needs of servicing technicians and markets in Article 5 countries in supporting local certification programs or filling gaps. Additional piloting will be needed during 2020 to ensure the feasibility of the final model, as several more NOUs have expressed interest to use the RDL program.

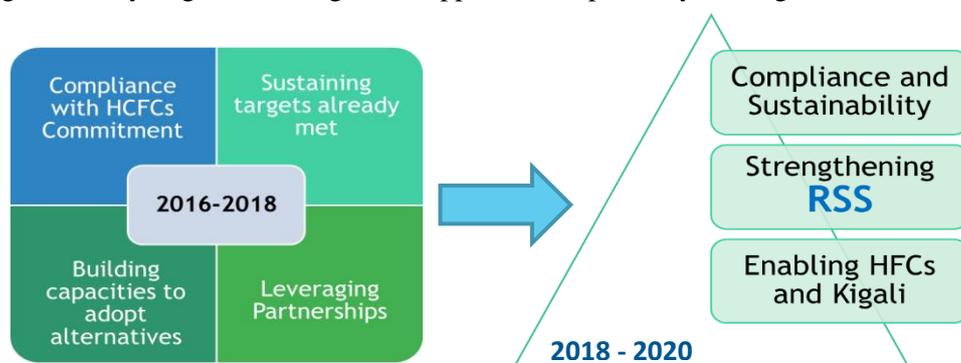
UNEP OzonAction is also working with AHRI and the international partners in concluding the operational model of the RDL program considering the following elements:

- The program should complement to previously, or ongoing, implemented certification programs supported by MLF in any country that would enrol for using RDL;
- Cost of training should be comparable to similar costs offered by MLF for training and certification programs in A5 countries;
- Endorsement, as applicable, of the RDL program by local TVET authorities as complimentary parallel qualification (certificate) that is focussed on Refrigerant Management;
- Ensure continuity of offering the program beyond the funding period of any HPMP or other MLF support through having longstanding business model between RDL administration and the local institute offering RDL; and
- Ensure the availability of independent monitoring third-party that can assure the sustainable conduction of the program as per the set criteria and quality.

Finally, it is worth mentioning that despite of the lengthy process of building, testing and finalizing the program; the RDL is foreseen as long-term investment for qualifying servicing technicians. The learning curve in developing such ambitious program shows three important features which are **Technology Impartial, Global Recognition, and Topnotch Program**.

2. Global training programme for the refrigeration servicing sector (RSS)

The 2018-2020 CAP Strategy included several initiatives that address specific training needs of the refrigeration servicing sector (RSS), including the development of capacity building and outreach tools. These activities were further elaborated in the CAP revised 3 year rolling strategy (2018-2020), which noted the importance of the RSS as a separate overarching objective, especially given that it will be the remaining HCFC-consuming sector for more than 80 Article 5 countries. The RSS will remain a priority for CAP given the synergies, challenges and opportunities posed by the Kigali Amendment.



Accordingly, CAP addressed the training needs for the RSS in a holistic approach through exhaustive consultation with all global stakeholders, including other Implementing Agencies and HVAC&R associations. In 2016, CAP organized *the First International Stakeholder Workshop on the RSS* that was attended by international associations and other Implementing Agencies and bilateral agencies as

well as experts from all regions. The workshop focused on the training needs for the RSS and discussed a roadmap for addressing gaps and mobilizing potential capacities to upscale training tools and services. In 2018, OzonAction maintained this global consultation platform for RSS by organizing the *Second International Stakeholder Workshop on Refrigeration Servicing Sector* with a broader objective to discussing means and exploring tools for joint actions to “Change the Mindset of RSS.” While the first meeting managed to identify gaps and suggested potential areas of work in relation to training materials for RSS, the second meeting looked at synergizing efforts to outreach all available tools and resources and how these could be integrated in a more structured manner with ongoing phase-out programs funded by the Multilateral Fund.

An important aspect of CAP support to RSS is ensuring diversity of products and tools in a way that can meet different backgrounds of RSS clients as well as offering so through different platforms to ease access to the knowledge and skills. In relation to RSS clients, CAP tools are designed to reach:

- Field technicians, or practitioners, who can attend face-to-face training sessions
- Field technicians, or practitioners, who doesn't have time or can't attend face-to-face training
- Non-field personnel who need to be aware about refrigerants related considerations
- Training institutes/centres that need flexible materials to tailor courses according to market
- Informal technicians or those with limited literacy capacity
- Higher-level engineering students
- Professional engineers and operators

Therefore, CAP designed its line of service for RSS to be available in many formats, and languages as feasible, where it can reach all clients regardless their background or limitations. In addition, CAP also ensured that whatever being developed should be easily and quickly updated, every now and then, noting the dynamics and pace of technology development. The type of tools offered by CAP for RSS clients includes factsheets/quick guides, training guides, educational tool, mobile applications, e-learning platform and short videos.



Progress

Over the last three years, i.e. 2018-2020, and in cooperation with international partners, OzonAction developed and initiated several activities and products to respond to the training needs of this sector. The following is an update of their status:

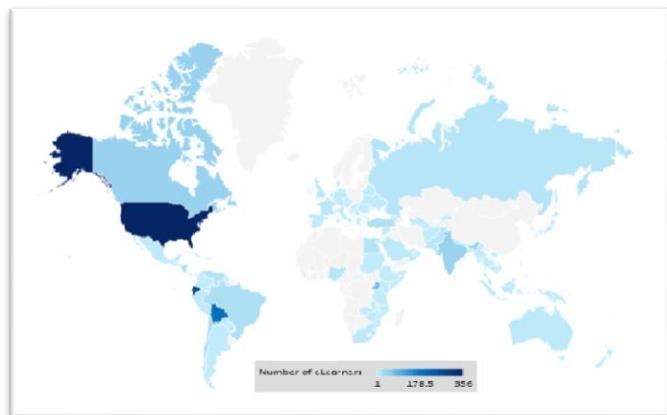
- **Refrigerants Literacy e-Learning Course, *in cooperation with ASHRAE***: a first of its kind course for non- specialists about refrigerants. The course is currently offered in English, French and Spanish. It becomes very useful and handy tool for NOUs, government officers, and even for RAC experts who are not familiar with the dynamics of refrigerants.

The course consists of four main chapters address the relevant environmental issues, refrigerants classification and safety, Refrigerants applications and uses, and principles of refrigerant management. The course offers an international Certificate of Completion signed by ASHRAE.

- Sound Management of Refrigerants e-Learning Course, *in cooperation with ASHRAE*:** This is a dedicated course for refrigerants good service practices addressing the needs of field practitioners i.e. servicing technicians and engineers. The course covers five main topics which are: Refrigerants and environmental issues, Refrigerants designation and classifications, Lubricants and Applications, Servicing good Practice (two parts: the 3Rs and General service practice), and Refrigerant containers and safety aspects. and issues related to new and flammable refrigerants. The course also offers an international Certificate of Completion signed by ASHRAE. It is currently offered in English and will be available shortly in other UN Languages.



The e-learning courses are being used by stakeholders from most of countries, even non-Article 5 countries. The map to right shows the density of registered applicants noting that data from West Africa is not yet collected since the French version was released early 2020.



OzonAction and ASHRAE currently work on extracting face-to-face versions of the two courses to maximize the use the materials and make it available for NOUs to use with flexibility at different platforms and events. The face-to-face versions shall be available for launch within 2020.

- University Course on Refrigerant Management:** OzonAction teamed up with the American University in Beirut (AUB) and developed a special course for undergraduate engineering students. The course is the first of its type, globally, to be developed in accordance with academic requirements targets engineering universities/colleges. It is a full semester elective course (16 weeks) designed with full supporting documentation i.e. Syllabus, Lecture Notes, Power-point presentations, Activity Sheets as well as guidelines for lecturers. Through the cooperation with ASHRAE and its university networks (more than 450 engineering universities/colleges worldwide),



As of June 2020, 37 universities in Article-5 countries enrolled and are using course in full or partially, see table to the right, not mentioning others from non-Article 5 which demonstrates that the course is seen as useful product and is covering a gap in the engineering educational process.

Country	No. universities
Bolivia	1
Brazil	4
Egypt	2
Honduras	1
India	8
Indonesia	1
Lebanon	1
Malaysia	1
Nigeria	1
Pakistan	3
Peru	1
Philippines	4
Singapore	2
Serbia	1
Trinidad and Tobago	1
Turkey	1
UAE	2
Venezuela	1
Total	36

In order to facilitate quick access to all courses and enroll instantaneously, ASHRAE developed special portal for accessing all products being developed by ASHRAE in cooperation with UNEP OzonAction. NOUs and stakeholders can now register for the e-courses and the university course through the following link: www.ashrae.org/ashraeunepportal

- **Universal Training Kit, *in cooperation with AREA:***

This will be a live training kit covering skills and knowledge about different types of refrigerants and applications. It will replace UNEP’s old training manuals providing comprehensive, but flexible, tool for NOUs and local training institutes/centres in Article 5 countries.



The kit is designed in a modular format enabling the users to tailor their training programs in accordance with the local needs. The Universal Kit will be offered, by end of 2020, through special portal that will give the opportunity for users to “**Build your Course**” by selecting the topics and areas that need to cover in the training course they intend to offer. Stage-I of the project will offer detailed documentation covering servicing residential and light commercial refrigeration and air-conditioning applications that are being serviced either with flammable or non-flammable refrigerants.

By accessing the Portal of Universal Training Kit, users will be able to extract, based on their preference of topics, the following:

- Pre-assessment
- Venue requirements including equipment
- Minimum qualification of instructors.
- Instructors guide
- Power-point presentations
- Syllabus and supporting material
- Sample final test/checks



The portal is also designed to automatically notify NOUs about training institutes/centres that are enrolling to use the Training Kit in order to ensure connection with HPMPs and NOU's work as well avoid using the materials for commercial purposes.

- The list of mobile apps, videos, factsheets and quick guides designed to serve the needs of RSS includes the following products:

- **Update on New Refrigerants Designations and Safety Classifications** (*In cooperation with ASHRAE*)

A factsheet produced by ASHRAE in cooperation with UN Environment OzonAction, which provides information on refrigerants designation and safety classification, the factsheet is updated every 6 months to indicate the new refrigerants which are assigned “R” numbers ASHRAE designations.

- **Refrigerant Cylinder Colours - What has changed?**

A factsheet about the changes in the international guideline of refrigerant cylinders colour codes for new (virgin) refrigerants and what the consequences are

- **Good Servicing Flammable Refrigerants Quick Guide**

Small booklet that includes most important background, information, best practices and safety when servicing with flammable refrigerants

- **RAC Technicians Videos (Short/long versions)** (*In cooperation with BFS*)

Series of short instructional videos that can support all training courses and curricula covering all basic parts related to sound management of refrigerants including equipment, tools, tubing, charging, evacuation, recovery, leak check, etc. Also, available through a mobile application and on OzonAction YouTube



- **Smart App mobile applications for RAC technicians:**

- **RAC technician video smartphone application:** consisting of a series of short instructional videos on techniques (14), safety and best practice for refrigeration and air conditioning (RAC) technicians (in 7 languages); and
- **Refrigerant Identifier App:** Identification of ozone depleting substances using refrigerant identifiers,
- **Refrigerant charge size calculator:** To calculate room size and charge size for flammable refrigerants



- **Special Training Kit for RSS informal sector** (*In cooperation with IOR*)

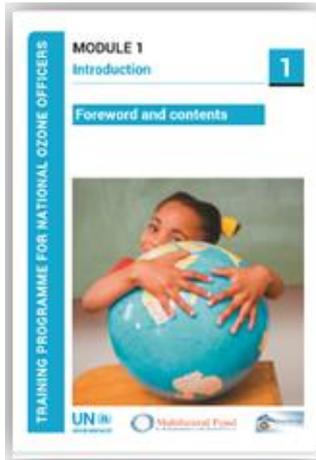
Training materials in simplified, illustrated and concise format aiming at building the knowledge and capacity of RSS informal sector especially those who can't attend physical training programs and are illiterate or with limited literacy. The package is under development in cooperation with the Instructed of Refrigeration (IOR) being the secretariat of EU Real Alternatives Program where there are substantial materials available in many languages including three UN ones. The kit is under development and will be ready by end of 2020.

- **MAC Kit**

With the Kigali Amendment, Mobile Air-Conditioning will eventually become back one of the main sectors that will contribute notably to the compliance with HFC phase-down targets in most Article5 countries. CAP OzonAction is currently preparing a special kit with the necessary information about servicing requirements for MAC systems using either HFCs or alternatives. The kit is being prepared with international MAC partners. *(in progress)*



3. National Ozone Officer (NOO) Training Programme



Progress

The National Ozone Officer (NOO) Training Programme has been completed and the NOO training is fully operational. UNEP organised three training workshops in 2019 using the methodology, resources and modules of newly-developed NOU training programme:

1. **Training Programme for new National Ozone Officers of the Southern African Development Community (SADC)**, 20-21 June 2019, Victoria, Mahe, Seychelles. The following National Ozone Officers or assistants participated in the training programme: Angola, Botswana, Eswatini, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, Tanzania, Zambia, Zimbabwe and Ghana.

Participants' post-training evaluation questionnaires indicate very positive results (reports available upon request). Two additional questions asked yielded the following responses:

- *What aspects of the course that are most useful for NOU work?* Most participants highlighted the subjects on Montreal Protocol Projects and CP and Article 7 data reporting presentations. Many participants highlighted usefulness of practical exercises.
- *How can UNEP improve the training course in future?* Most participants request increasing the duration of the training perhaps up to three days. Ozone officers highlighted that more time is required to enable better interaction and understanding.

2. **Training Programme for National Ozone Officers from countries of the Eastern, Northern and Western Region of the Africa Anglophone Network**, 23-24 September 2019, Accra, Ghana. The following National Ozone Officers or assistants participated in the training programme: Egypt, Eritrea, Ethiopia, Gambia, Ghana, Kenya, Liberia, Nigeria, Rwanda, Sierra Leone, South Sudan, Sudan, and Uganda.

Participants' post-training evaluation questionnaires indicate very positive results (reports available upon request). Two additional questions asked yielded the following responses:

- *What aspects of the course that are most useful for NOU work?* Most of participants indicated that the practical exercises are most useful and educational. The module on the Multilateral Fund project modalities and implementation was also highlighted by most of participants. OzonAction tools (e.g. the “WhatGas” app) were found to be very useful and important.

- *How can UNEP improve the training course in future?* As in previous workshops, most of participants wished to have had more time (the duration of the training to be extended). A few participants indicated that there were too many presentations for one day.

3. Training programme for new **National Ozone Officers/National Ozone Unit staff of Asia and Pacific Countries** on 3-4 December 2019, Bangkok, Thailand. The following countries participated in the training programme: Brunei Darussalam, India, Indonesia, Malaysia, Maldives, Mongolia, Myanmar, Nepal, Pakistan, Singapore, Sri Lanka, Thailand, Timor Leste, and Tuvalu. The team tried to accommodate recommendations of the previous workshops in organising this training. The team reduced time for presentations and allocated more time for discussions and practical exercises.

Participants' post-training evaluation questionnaires indicate very positive results (reports available upon request). Two additional questions asked yielded the following responses:

- *What aspects of the course that are most useful for NOU work?* Most of comments praised sessions which were creatively executed with practical exercises. Participants appreciated very interactive sessions.
- *How can UNEP improve the training course in future?* Most of participants again highlighted that the training could be further improved by maximizing the training duration (at least up to 3 days). Reducing the printing materials was also suggested by several participants.

UNEP concluded that the possibility to organise three-day workshops can be further explored considering the number of participants for specific workshops. The experience shows that a two-day workshop is efficient when there are 10 to 12 participants. If the number of participants is increased up to 15 to 20 trainees, this may require having an additional day as discussions and engagement of each participant in practical exercises require much more time.

Through these workshops, UNEP supported the capacity building efforts of new National Ozone Officers to better understand the context in which they are operating. Many Officers have difficulties in collecting relevant information to properly manage HCFC phase-out activities at the national level. It is increasingly important to provide accurate, well-structured and comprehensive information about the Montreal Protocol framework, which can greatly assist NOOs to extend and identify the best approaches in managing HCFC phase-out as well as HFC phase-down actions in future. The results of questionnaires and discussions with Ozone Officers also confirm the need to enhance capacity building efforts that improve networking and further enhance the knowledge of officers on a crucial aspect of refrigerants management. The CAP team observed that capacity building of Ozone Officers results in enhancement of his/her performance and, hence, leads towards successful introduction of supportive policy measures and effective implementation of projects portfolio at national level.

UNEP hired consultants to translate these modules and supporting documents into French and Spanish. The translated documents are drafted and at present the CAP team is reviewing the documents, with the goal of making the final versions available by the end of 2020.

UNEP also started revision of modules on Article 7 data and Country Programme data reporting in accordance with the recent decisions of MOP and Executive Committee on the data reporting. The revised modules will be available by the end of 2020.

Advanced (refresher) training for experienced NOOs

The training package and components for the advanced (refresher) training for experienced NOOs is drafted and are currently under review. This programme has been designed to provide advanced training for National Ozone Officers, assistants and other staff of National Ozone Units, as well as the consultants who work with them. The main objective of this training programme is to support and strengthen the work of National Ozone Officers and National Ozone Units. It aims to provide NOU staff with tools and information to enable them to support their national government in meeting the commitments agreed by all countries under the Montreal Protocol, including the Kigali Amendment on HFCs.

The package of training materials contains a series of modules. Modules 1 - 10 contain the documents used during the 2-day training course. Each module typically contains:

- A training presentation (PowerPoint slides)
- A handout copy of the PowerPoint slides - for participants to annotate or make notes during the presentation
- A practical exercise for participants
- Background information resources.

The contents list provides a list of all documents contained in this training package. The Annexes contain administrative documents for the training organisers and background documents.

The advanced training programme addresses the following areas:

- Details of the Kigali Amendment on HFC phase-down, including legal aspects, agreed principles and points, and implications for Article 5 countries
- Calculation of the GWP of blends/mixture; calculations of the HFC production/consumption baselines and first reduction steps in CO₂e, and related monitoring and reporting
- Near-term steps for ratifying and implementing the Kigali Amendment
- Longer-term steps for implementing the Kigali Amendment, including policy measures and options
- Checklist for identifying stakeholders in HFC sub-sectors, and tools for building capacity and furnishing stakeholders with the information they need
- Optimising Multilateral Fund projects
- Updated information on CP data reporting to the Fund Secretariat
- Updated information on Article 7 data reporting to the Ozone Secretariat
- Project management skills and other useful skills
- Quizzes and crossword puzzle
- Information resources on each topic
- Administrative information for trainers and course organisers

The advanced modules for experienced NOOs are planned to be completed by the end of 2020 which will enable inclusion of pending Executive Committee decisions on the HFC cost guidelines.

4. Management of ODS in the fishing sector

UNEP completed this specifically-funded global CAP activity in 2018 as reported in that year's CAP Progress Report. However, CAP continued its regular work related to refrigerant management in the fishery sector, especially in the Pacific Island Country region:

- Continued Attention in Specific Regional Network Meetings. During the Network and Thematic Meetings of the Pacific Islands Countries' Ozone Officers "Next Step: Implementation of the Initial Obligations and HPMP organized in September 2018, data collection on ODS (and HFC) usage in the fisheries sector was discussed. Bilateral discussions with fisheries authority and fisheries industry were also conducted during country mission. The challenges identified to grasp accurate data in refrigerant supply, use and demand in the fisheries sectors could be attributed to many factors, including the complicated ownership structure. Issues identified included: Non-docking of locally-flagged fishing vessels at national ports, Potential uncaptured high leakage rate Vessel age, and Absence of legal frameworks.
- Support Marine Stewardship Council (MSC) on refrigeration systems reporting requirements. With CAP assistance, the Forum Fisheries Agency (FFA) presented a proposal to the Marine Stewardship Council (MSC) to approve two new columns on the FFA's Vessel Register application form, i.e. the type of refrigerant, and the capacity of refrigerant system in kilograms. The proposal was approved and adopted by the MSC through Decision MCSWG20 in March 2018 and has been implemented by the FFA member countries, noting that this only applies to newly-registered vessels after the adoption of the decision.
- Address fishing sector under HPMP Stage II. Under the regional HPMP Stage II preparation project, CAP assisted the PIC NOUs with developing a specific questionnaire to collect data from the fisheries sector, in particular the vessel information, type of refrigerants, holding capacity, etc. taking into account the challenges identified from the 2018 Network meeting. Data collection is underway and it is envisaged that information collected from the survey will assist the countries to better understand their national situation and make further decisions about the phase-out of HCFC after 2020.

ANNEX 9 – REPORT ON THE USE OF CAP STAFF FOR MULTILATERAL FUND AND MONTREAL PROTOCOL ACTIVITIES

Decision 70/10 (iii) requested UNEP to provide a status report to the 71st Executive Committee meeting on the extent to which UNEP implemented measures to ensure that all staff time paid with CAP funds was used for the Multilateral Fund Montreal Protocol activities, in line with decision 50/26(a)(iii). Moreover, Decision 70/10(d)(ii), requested UNEP to continue providing reports according to the following five categories in the context of annual progress and financial reports on utilisation of CAP staff:

- Projects and services approved by the Executive Committee;
- Pursuing synergies or implementing joint activities with other non-Multilateral Fund partnerships and initiatives;
- Mobilizing resources for ozone protection activities from entities outside of Multilateral Fund;
- UNEP-wide processes and activities; and
- Administrative activities.

For the period September 2019 through August 2020, UNEP continued to ensure that all staff paid through CAP were dedicated to the delivery of the activities, services and projects approved by the Executive Committee via the Business Plan and CAP Work Programme. This was done primarily through:

- Work planning. All Regional Coordinators and Global Activity Leaders have developed their individual e-Performance work plans in close consultation with the Head of OzonAction, and all other staff have developed theirs in close consultation with the Regional Coordinators or the Global Fund Management Officer. The individual work plans reflect the goals and priorities set for the staff member for this reporting period. Collectively, the implementation of these work plans reflected the projects and services approved by the Executive Committee for the reporting period.
- Monitoring of legal instruments. The Head of OzonAction reviews all proposed legal instruments with countries and organisations, commercial companies, terms of reference for consultants, as well as requests for payments and associated outputs.
- Regular communication with CAP teams. Through regular communication with Regional Coordinators and other team members, review of outputs and deliverables, and participation in events/missions organised by CAP, the Head of OzonAction keeps an overview on activities undertaken by CAP staff. The Regional Coordinators also play a key role in monitoring use of CAP staff time. Regional Coordinators report to the Head of OzonAction as their First Reporting Officer and to the UNEP Regional Director as their Second Reporting Officer (Decision 70/10 (d) (iv)).
- Staff accountability. As part of UNEP's accountability framework, all staff are individually responsible for the use of their time and delivery of their own work, which is to deliver Multilateral Fund outputs.

The following table provides estimates for the use of CAP staff time during this period:

CAP team	Projects and services approved by the Executive Committee (% time)	Pursuing synergies or implementing joint activities with other non-Multilateral Fund partnerships and initiatives (% time)	Mobilising resources for ozone protection activities from entities outside of Multilateral Fund (% time)	UNEP-wide processes and activities (% time)	Administrative activities for CAP and Multilateral Fund projects (% time)
Africa – Anglophone	75	5	0	0	20
Africa – Francophone	75	5	0	0	20
Caribbean	75	5	0	0	20
Europe & Central Asia	75	5	0	0	20
Latin America	75	5	0	0	20
Pacific Island Countries	75	5	0	0	20
South Asia	75	5	0	0	20
South East Asia	75	5	0	0	20
West Asia	75	5	0	0	20
Paris (Global including Management)	55	10	0	5	30

In collaboration with Ozone Officers, CAP staff continue to explore opportunities for co-financing and climate co-benefits through interactions with non-Multilateral Fund organizations, including but not limited to those indicated in Annex 4 – CAP partnerships.

ANNEX 10 – MEETINGS AND WORKSHOPS ORGANISED BY CAP

During the period 1 September 2019 – 31 May 2020, UNEP organised the following events as part of CAP services. The documentation is available on the OzonAction Meeting Portal at www.ozonactionmeetings.org.

Network and thematic meetings (physical)

1. *West Asia - Capacity Building Workshop for Newly Appointed Ozone Officers/ Ozone Officers' Assistants (four countries)*, Beirut, Lebanon, 16-19 September 2019.
2. *Enabling Activities Workshop for Countries of East and West African Region- Africa Anglophone Network*, Accra, Ghana, 23-25 September 2019.
3. *ECA Enforcement Meeting and Global Montreal Protocol Award for Customs and Enforcement Officers from Europe and Central Asia*, Kiev, Ukraine, 24-25 September 2019.
4. *ECA Network Meeting for Montreal Protocol Officers from Europe and Central Asia*, Kiev, Ukraine, 26-27 September 2019.
5. *Ozone Officers Training for Countries of East and West African Regions - Africa Anglophone Network*, Accra, Ghana, 26-27 September 2019.
6. *ECA Enabling Activities project and Stakeholder Consultation Meeting to facilitate Kigali Amendment ratification (jointly with the Ozone Secretariat)*, Ashgabat, Turkmenistan, 30 September -2 October 2019.
7. *Thematic Network Meeting of National Ozone Officers of Haiti, the English-Speaking Caribbean and Customs Officers*, Paramaribo, Suriname, 6-9 October 2019.
8. *Customs Twinning Workshop and Border Dialogue for Central and East African Francophone Countries*, Yaounde, Cameroon, 23-24 October 2019.
9. *National Ozone Unit and Customs Twinning Workshop and Border Dialogues for Countries of the East African Region – Africa Anglophone Network*, Kampala, Uganda, 20-22 November 2019.
10. *ECA Enabling Activities project and Stakeholder Consultation Meetings to facilitate Kigali Amendment ratification*, Tbilisi, Georgia, 27-29 November 2019
11. *Training workshop for New National Ozone Officers/National Ozone Unit staff of Asia and Pacific*, Bangkok, Thailand, 3-4 December 2019.
12. *Europe and Central Asia (ECA) Ozone2Climate Meeting with Montreal Protocol Officers & RAC Associations/Experts and Participation in SMEITS/KGH's 50th International HVAC&R Congress and Exhibition, (including technology roundtable and exhibition booth)*, Belgrade, Serbia, 4-6 December 2019.
13. *Workshop with ECOWAS Member States and ECOWAS Secretariat on Harmonization of ODS Regulations for the ECOWAS region and on the possibility of Adopting an Extended HS Code to accommodate the Refrigerants affected by the Kigali Amendment*, Guinea Bissau, 18-20 December 2019.
14. *Caribbean Network Thematic Meeting and HVAC Technology Tour back to back the Annual ASHRAE Winter Conference, Orlando, United States of America, 1-4 February 2020.*

Other meetings organized/co-organized by CAP (physical)

15. *Technical Conference on Relevant Heating, Ventilating and Air Conditioning & Refrigeration (HVAC&R) and Building Codes*, Amman, Jordan, 27 September 2019.

16. *West Asia- Experts Meeting and Meeting to Complete the Review and Update of Arab Codes for Refrigeration/Air-Conditioning & Insulation Materials (foam) in the margins of the Permanent Committee at the League of Arab State (LAS), Amman, Jordan, 26-28 September of 2019.*
17. *West Asia - Fourth Regional Technical Forum and Roundtable Meeting on Sustainable Alternatives and Technical/ Policy Challenges for the Foam Sector in the margins of the Big Five Building Expo, Dubai, United Arab Emirates, 23-25 November 2019.*

Virtual meetings organized by CAP

The following events were organized or supported by CAP following the outbreak of COVID-19. National events are indicated by "*."

18. *Qatar Customs Training on Best Practices under the Montreal Protocol and Combating Illegal Trade of ODS, Virtual meeting, 21-23 April 2020.**
19. *Qatar Train-the-Trainers for Refrigeration & Air Conditioning Technicians – F-Gas Certified (Implemented), Virtual meeting, 30 March-1 April 2020.**
20. *National Stakeholder Consultation and Awareness Workshop on Safety and Energy Efficiency Standards for Refrigeration and Air conditioning Equipment in Mongolia, Virtual meeting, 30 April 2020.**
21. *1st ECA Online Meeting on OEWG arrangements (including technology check), Virtual meeting, 7 May 2020.*
22. *Saudi Arabia Capacity Building for HPMP and ISP Implementation and Data Reporting, Virtual meeting, 11 May 2020.**
23. *Latin America and Caribbean: Regulations and procedures for control of substances under Montreal Protocol, Virtual meeting, 22 May 2020.*
24. *Consultation Meeting for the Preparation of Regional HPMP Stage II of PICs, Virtual meetings, 26 May 2020.*
25. *Series of Consultation Meetings for the Preparation of Regional HPMP Stage II of PICs, Virtual meetings, 4, 10, 17, 24 June 2020.*
26. *Iraq Capacity Building for HPMP and ISP Implementation and Data Reporting, Virtual meeting, 4 June 2020.**
27. *LAC: Fast Forward to the Kigali Amendment, Virtual meeting, 10 June 2020.*
28. *International Webinar “Alternative Refrigerants for High Ambient Temperature (HAT) Countries”; English Version, Virtual meeting, 10 June 2020.*
29. *Gender Mainstreaming into the Montreal Protocol for Latin American Network, Virtual meeting, 11 June 2020.*
30. *Thematic Workshop for Finalization of the Regional PIC HPMP Stage II Project Document, Virtual meeting, 11-12 June 2020.*
31. *2nd ECA Online Meeting on How to Prevent Import of Contaminated Refrigerants and ECA Needs and Priorities, Virtual meeting, 12 June 2020.*
32. *Stakeholder Consultation Workshop for the HPMP Stage II Development in Mongolia, Virtual meeting, 15 June 2020.**
33. *International Webinar “Alternative Refrigerants for High Ambient Temperature (HAT) Countries”; French, Virtual meeting, 17 June 2020.*
34. *LAC: Law in the time of Covid-19: Implementing Legal Frameworks for the Kigali Amendment, Virtual meeting, 17 June 2020.*
35. *Stakeholder Consultation Workshop for the HPMP Stage II Development in Nepal, Kathmandu, Nepal (UNEP joined virtually), 18 June 2020.**

36. *ECA Country-to-Country Meeting for Eurasian Economic Union member countries*, Virtual meeting, 19 June 2020.
37. *LAC: Enabling Activities for Kigali Amendment in Bolivia*, Virtual meeting, 19 June 2020.*
38. *LAC: Article 7 Online Reporting Training Class*, Virtual meeting, 24 June 2020.
39. *ECA Country-to-Country Meeting on Training and Checklist for Environmental Inspectors*, Virtual meeting, 3 July 2020.
40. *ECA Country-to-Country Meeting on Albania's Experience in Dealing with Contaminated Refrigerants*, Virtual meeting, 3 July 2020.
41. *Consultation Meeting for the Preparation of Regional HPMP Stage II of PICs*, Virtual meetings, 8 July 2020.
42. *3rd ECA Online Meeting on Labelling of Refrigerant Cylinders*, Virtual meeting, 8 July 2020.
43. *iPIC: Streamlined and Updated – How Can Your Country Benefit?* Virtual meeting Caribbean region, 8 July 2020.
44. *Meeting of the South Asia Network of Ozone Officers*, Virtual meeting, 8 July 2020.
45. *Meeting of the Southeast Asia Network of Ozone Officers*, Virtual meeting, 9 July 2020.
46. *Finalization of Lao PDR HPMP II*, Vientiane, Lao PDR (UNEP joined virtually), 9 July 2020.*
47. *Meeting on the Harmonized System codes for HFCs, and HFC Blends and Planning and Organization of World Ozone Day Celebration 2020 for the South Asia Network and the Southeast Asia Network*, Virtual meeting, 30 July 2020.
48. *United Arab Emirates Virtual Customs Training on Best Practices under the Montreal Protocol and Combating Illegal Trade of ODS*, Virtual meeting, 23 July 2020.*
49. *Qatar Virtual Customs Training on Best Practices under the Montreal Protocol and Combating Illegal Trade of ODS*, Virtual meeting, 26-27-July 2020.*
50. *Sub-Regional Consultation Meeting on HFCs Reporting Requirements and Licensing System Establishment under the Kigali Amendment - Lebanon, Jordan and Oman*, Virtual meeting, 28 July 2020.
51. *4th ECA Online Meeting on Gender Considerations in Project Design*, Virtual meeting, 5 August 2020.
52. *Anglophone Africa Webinar - iPIC Streamlined and Updated: How can your country benefit?"* Virtual meeting, 19 August 2020.
53. *Experts Meeting of the Refrigerant Driving License Program*, Virtual meeting, 19 August 2020.
54. *Asia-Pacific: Thematic Meeting for Sustaining Capacity Building of RAC Servicing Sector through Integration of Good Servicing Practices into National Vocational Training and Certification Programme for RAC Technicians*, Virtual meeting, 20 August 2020.
55. *IIR-UNEP Workshop on Cold Chain in Hot Climates (in the margins of the 6th IIR International Conference on Sustainability and the Cold Chain (ICCC2020))*, Virtual meeting, 26 August 2020.

Other major meetings in which CAP participated

During the period 1 September 2019 – 31 May 2020, UNEP participated in the following (physical) events organized by other organisations:

56. *Green Customs Initiative, 14th Partners' Annual Meeting*, 2-4 October 2019.
57. *2nd Inter-Agency Coordination Meeting*, Montreal, Canada, 9-11 October 2019.
58. *62nd Meeting of the Implementation Committee*, Rome, Italy, 2 November 2019.
59. *31st Meeting of the Parties to the Montreal Protocol*, Rome, Italy, 4-8 November 2019.
60. *84th Executive Committee Meeting*, Montreal, Canada, 16-20 December 2019.
61. *Inter-Agency Coordination Meeting*, Montreal, Canada, 25-27 February 2020.