

MAGOZONE



**WE WILL ADDRESS
CLIMATE CRISIS
THROUGH APPROPRIATE
AND EFFECTIVE
CLIMATE ACTIONS.**

OIC Assistant Secretary for Environment
and concurrent EMB Director,
Jacqueline A. Caancan, CESO III

EMB celebrates World Ozone Month 2024, Montreal Protocol: Advancing Climate Action

Since 1988, the Philippines has been unwavering in its commitment to becoming an ozone-sensitive and climate-friendly nation. On September 14 of that year, we proudly joined the international community in signing the Montreal Protocol, a groundbreaking treaty dedicated to phasing out substances that deplete

the ozone layer, a vital shield protecting life on Earth.

Through the tireless efforts of the Environmental Management Bureau through the Philippine Ozone Desk, our country has steadfastly upheld its obligations under the Montreal Protocol. Our mis-

sion is not only to ensure compliance but also to foster a deeper understanding among Filipinos of the critical importance of protecting the ozone layer.

Our journey has been one of continuous action and innovation, for the ozone layer and climate system.



We have championed the cause of the Montreal Protocol through a multifaceted approach that includes nationwide awareness campaigns, educational initiatives, stakeholder consultations, and robust partnerships. The implementation of an online permitting and monitoring system, along with specialized training programs for the private sector and industry associations, has further strengthened our commitment.

These collective efforts have yielded positive and promising results. The ozone layer is healing—a testament to the power of global cooperation. A recent study published in *Nature Climate Change* by researchers from the University of Bristol

underscores this progress, highlighting the remarkable recovery of the ozone layer and a significant reduction in atmospheric hydrochlorofluorocarbons (HCFCs), once potent ozone-depleting substances.

Here in the Philippines, we remain vigilant. We ensure that importers, dealers, resellers, retailers, and service providers are not only compliant with our policies but are also well-informed about the Montreal Protocol's objectives. Our efforts extend beyond mere compliance; they are driven by a genuine desire to contribute to a healthier, more sustainable planet.

As we look ahead, our focus is expanding.

The Philippines is proud to be the 141st country to endorse the Kigali Amendment to the Montreal Protocol, committing to the phase-down of hydrofluorocarbons or HFCs. While HFCs do not deplete the ozone layer, their impact on global warming is profound. These substances contribute to rising temperatures, ocean warming, biodiversity loss, food insecurity, and increased risks to human health.

Our resolve to combat climate change is evident in the stringent licensing controls we have imposed on HFC imports. These regulations are designed to accelerate the transition to more climate-friendly refrigeration and air conditioning (RAC) technologies, ensure the responsible handling of refrigerants, and mandate the proper treatment of spent refrigerants.

Moreover, our ongoing efforts to develop an inclusive and effective Kigali Implementation Plan and HFC Phase-Down Management Plan reflect our dedication to global climate action.

This year marks a significant milestone. We are freezing the importation of HFCs in the Philippines, and by 2045, we aim to achieve an 80% reduction. The potential impact of fully implementing the Kigali Amendment is profound—up to 0.5 degrees Celsius of global warming could be averted by the end of this century.

As we celebrate this year's World Ozone Day, under the theme "Montreal Protocol: Advancing Climate Actions," we acknowledge the dual victories this treaty offers,

a sort of hitting two birds with one stone, so to speak.

Not only are we witnessing the healing of the ozone layer, but we are also making strides in safeguarding our global climate against the perils of HFCs.

The Philippine Ozone Desk will continue to spearhead activities that honor the legacy of the Montreal Protocol and the Kigali Amendment. Throughout this month, we will amplify our efforts to raise awareness about ozone layer depletion and climate change.

Importantly, we will call on our stakeholders, industry partners, and government agencies to join us in this crucial endeavor. Together, we will champion this cause.

Each of us has a role to play in protecting the ozone layer and mitigating climate change. Every action, whether large or small, contributes to the protection of our planet and the well-being of future generations. United in purpose, we will realize the vision of an ozone-sensitive and climate-friendly Philippines.



Department of Environment and Natural Resources
Environmental Management Bureau
Philippine Ozone Desk



MONTREAL PROTOCOL: ADVANCING CLIMATE ACTION

WORLD OZONE MONTH | SEPTEMBER 2024

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Vienna Convention
MONTREAL PROTOCOL

OZONE MONTREAL PROTOCOL
►COOL ADVANCING
***ZONE** CLIMATE ACTION

EMB-POD maximizes digital space and aims to increase awareness about the ozone layer and climate system

The Philippine Ozone Desk, during the celebration of the World Ozone Month in September 2024, started a campaign entitled “knOWZONE layer,” or simply, Know about the Ozone Layer.

These materials aim to increase awareness and understanding about the ozone layer and climate system. There are daily postings of the research-based materials from September 16-20, 2024.

The unit utilizes the digital space, through the Environmental Management Bureau Central Office Facebook page, to reach a wider audience all over the Philippines.



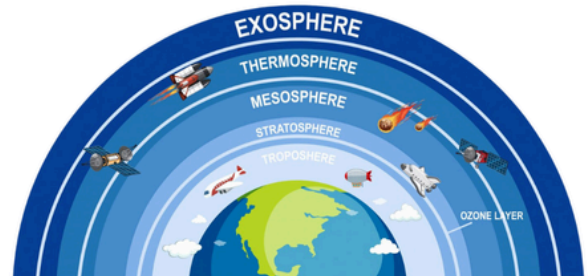
KNOWZONE LAYER

Celebrating World Ozone Month aims to raise awareness about the importance of the ozone layer to the planet and people. Here are some facts we must know to help protect and preserve the shield of Earth.



The Ozone Layer is a thin, fragile shield that envelops the entire earth which efficiently and effectively filters and screens almost all the harmful ultraviolet rays.

The ozone layer sits in the stratosphere between 15 km and 30 km above the Earth.



KNOWZONE LAYER



The Ozone Layer is a thin, fragile shield that envelops the entire earth which efficiently and effectively filters and screens almost all the harmful ultraviolet rays.

THREE CATEGORIES OF UV RAYS

A

Most UV-A is able to reach the earth's surface.

B

90% of UV-B is blocked off by the ozone layer.

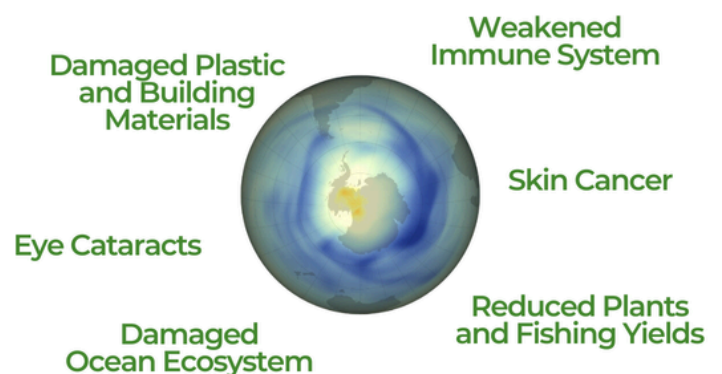
C

100% of UV-C is blocked off by the ozone layer.



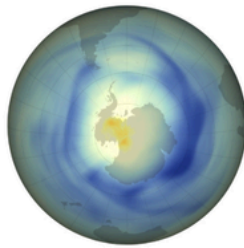
KNOWZONE LAYER

Ozone Layer Depletion can lead to...



KNOWZONE LAYER

In the early 1980s, scientists began to realize that Earth's natural sunscreen was thinning dramatically over the South Pole each spring. This thinning of the ozone layer over Antarctica came to be known as the ozone hole.



Certain substances that upset the ozone balance are called Ozone Depleting Substances (ODS). These are usually found in refrigerators and air-conditioners.



KNOWZONE LAYER

MONTREAL PROTOCOL

In 1987 an historic international agreement was signed (the Montreal Protocol) which came into force in 1989 and set deadlines for reducing and eliminating the production and use of ozone depleting substances.

KIGALI AMENDMENT

The Parties to the Montreal Protocol reached an agreement at their 28th Meeting of the Parties on 15 October 2016 in Kigali, Rwanda to phase down HFCs. While not ozone depleting substances themselves, HFCs are greenhouse gases which can have high or very high global warming potentials



KNOWZONE LAYER



United Nations-backed Scientific Assessment Panel to the Montreal Protocol on Ozone Depleting Substances (ODS) reported in January 2023 in quadrennial assessment report the phase out of nearly 99% of banned ODS.

DO YOU HAVE THESE?

These equipment may contain ODS that harm and deplete the ozone layer.



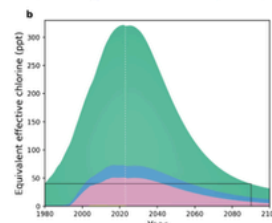
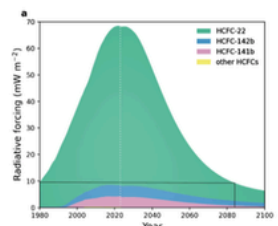
KNOWZONE LAYER

MONTREAL PROTOCOL CONTRIBUTES TO THE SUSTAINABLE DEVELOPMENT GOALS



KNOWZONE LAYER

A recent report published in Nature Climate Change, led by researchers from the University of Bristol, highlights a remarkable recovery of the ozone layer and a significant decline in atmospheric levels of hydrochlorofluorocarbons (HCFCs), potent ozone-depleting substances (ODS).



The international study reveals that the total amount of ozone-depleting chlorine in all HCFCs peaked in 2021, five years earlier than predicted. Despite a less than 1% drop between 2021 and 2023, HCFC emissions are clearly on a downward trend.



EMB-POD facilitates 3rd Quarter HCFC and HFC Importers' Meeting

On September 9, 2024, at the DENR Compound, Visayas Avenue, Quezon City, the Third Quarterly Hydrochlorofluorocarbon (HCFC) and Hydrofluorocarbon (HFC) Importers Meeting came to an end. The Environmental Management Bureau (EMB) and the Philippine Ozone Desk (POD) gathered HCFC and HFC importers in the country. Some of the participants joined the meeting virtually.

The current HFC consumption percentage and remaining quota allocation were provided to importers. The POD reminded the participants about the responsible and sensible distribution and consumption of chemicals that deplete the ozone layer and affect the global climate.

This importers meeting also allowed the EMB-POD to discuss the proposed policy implementation of HFC quota allocation. Moreover, the unit presented the calendar of activities in line with the celebration of World Ozone Month. The importers were encouraged to participate in the mentioned activities to increase their level of awareness about the policies and mandates that

concern the sector.

There was discussion about updates to the Online Permitting and Monitoring System (OPMS) during the meeting. The OPMS is an initiative of the EMB to thoroughly supervise the issuance of clearances for all ozone-depleting substance importations and the registration compliance of all dealers and service providers.



EMB-POD observes World Ozone Day through PODE Pala seminar and promotes ozone-sensitive and climate-friendly substances

SEPTEMBER 16 - In line with the world's celebration of the International Day for the Preservation of the Ozone Layer, the Philippines conducted PODE PALA: Discovering Alternatives to Hydrofluorocarbons and Other Powerful Climate-Warming Gases for Ozone-Friendly and Climate-Sensitive Philippines.

This seminar aims to provide ODS and HFC importers, dealers, retailers, resellers, and service providers with regulatory information to help in advocating for the ozone layer and climate system. Significantly, this activity provided the participants with the alternatives to hydrofluorocarbons (HFCs) and best practices in the servicing sector.

Various government agencies were invited to share information that is important to the sector, including the Department of Trade and Industry—Bureau of Philippine Standards (DTI-BPS), the Department of Trade and Industry—Fair Trade Management Bureau (DTI-FTEB), and the Bureau of Customs (BOC).

The activity was also participated in by Uniwestech Philippines, Inc., Delsa, Inc., and the United Nations Development Programme.

“We continuously and proactively campaign for the success of the international treaty through various strategies. Our sustainable actions and contributions have led to

positive and encouraging results. The ozone layer is healing and recovering,” OIC Assistant Director Engr. Esperanza A. Sajul in her welcoming remarks.

The first part of the seminar includes discussion about the highlights and updates on the Montreal Protocol by Mr. Onofre Escota, Project Evaluation and Monitoring Officer of the Philippine Ozone Desk, while Dr. Aldrin Calderon presented the Kigali Implementation Plan and Kigali Hydrofluorocarbons Phasedown Management Plan.

Philippine National Standards for Refrigeration and Air-conditioning Equipment and Safety Standards were discussed by DTI-BPS; the DTI-FTEB,





on the other hand, presented the Application and Accreditation Procedures on RAC and MAC services. The Bureau of Customs also participated in the seminar and discussed the Customs Modernization Act.

Through Uniwestech Philippines Inc. and Delsa, Inc., respectively, the private sector was also invited to contribute essential information, such as hydrofluorocarbon substitutes and best practices in the RAC servicing industry.

After each presentation, the participants were allowed and encouraged to raise their inquiries and concerns in the open forum.

This year, the theme of the World Ozone Month is "Montreal Protocol: Advancing Climate Action."

That is why, in line with the seminar, some importers of ODS and HFCs participated in the Store To Restore, an exhibit enabling them to showcase their ozone-sensitive and climate-friendly materials, equipment, appliances, and tools.

OIC Assistant Secretary for Environment and concurrent EMB Director

Jacqueline A. Caancan, CESO III, highlighted the importance of partnership, collaboration, and unity in championing the country's advocacy to be an ozone-sensitive and climate-friendly Philippines. The EMB Director also underscored the importance of the role that each sector plays, public or private.





EMB-POD conducts Climate Classmate, a platform for climate change advocates

SEPTEMBER 17 - The theme of this year's celebration is "Montreal Protocol: Advancing Climate Action." As the world celebrates the achievements of the Montreal Protocol in phasing out ozone-depleting substances (ODS), parties for the Montreal Protocol also reflect and realize the equal importance of the climate system for the people and for the environment.

The Environmental Management Bureau-Philippine Ozone Desk

spearheaded "Climate Classmate" on September 17, 2024. This is a forum that aims to update the EMB regional offices about the present status of climate change in the country, as well as the ODS and HFC importers, dealers, service providers, retailers, and resellers who contribute to ozone layer depletion and climate change.

The Director of the Department of Environment and Natural Resources-Climate Change Service, Elenida DR. Basug,

highlighted the effects of climate change in different specific sectors, including physical, social, and economic, and nature's crucial services at risk in a warming world.

In terms of global gas emissions trend, Director Basug noted that the Philippines emits an average of 1.98 metric tons of carbon dioxide equivalent (CO₂e) per capita in 2020, or considerably below the global average of four metric tons per capita and contributes less than 1% of global emissions.

Moreover, the DENR-CCS Director emphasized the projects and programs by the government to mitigate the worsening impacts of climate change, including the Nationally Determined Contribution (NDC) Implementation Plan, the National Adaptation Plan of the Philippines, and more.

Ms. Maraida Licerio, the Senior Technical Advisor of GIZ, Philippines, discussed the the Proklima Programme established in 1995 in the context of implementing technical projects for ozone protection under the Montreal Protocol. In 2016, the Kigali Amendment broadened the focus from

ozone to climate protection. Some initiatives of the GIZ Philippines includes Cool Contributions Fighting Climate Change I and II, Accelerating Air Conditioning Transformation through Enhanced Standards and Labeling in the ASEAN Region and Climate and Ozone Protection Alliance.

Different environmental and climate advocates were invited to raise their concerns and present their advocacy and climate actions.

Rachelle Junsay, NCR Regional Coordinator of Youth Advocates for Climate Action Philippines (YACAP PH), raised the issue about oil spill and reclamation and its effects on people, particularly in their livelihood, housing, and balance in the ecosystem.

“Our leaders must facilitate the transformation of our unsustainable, profit-oriented, carbon-based economy into a more sustainable one that promotes the well-being of both our planet and its people,” Junsay stated.

Mark Joseph Tiniao, Director of Lasallian Institute for Environment, De La Salle

Philippines, shared the Environmental Education and Effective Communication in Digital and Social Media. Director Tiniao also provided anthropogenic sources to establish environmental and climate awareness. He also mentioned that consent curation should be timely, relatable, engaging, beneficial, and have a storyline.

Katherine Reyes and Sweet Brien Margen are both from the Bulacan State University Student Government, representing the students. During their advocacy speech, the student leaders stated their initiatives to protect and preserve the climate system, such as plating activities, awareness drives, and more strategies that involve not just the students within their university but also the communities outside.

The editor of Agriculture Magazine of the Manila Bulletin Publishing Corporation also participated in the forum; Junephrey Ocampo represents the media sector. Ocampo shared how broad the platform of media is in disseminating information and raising awareness, which should be



maximized by the government to promote causes like environmental issues and climate change. He said that the two entities should not compete with each other but instead work together to champion different advocacies and causes.

The EMB recognizes the efforts, initiatives, and actions of various non-government organizations for the environment and for the climate and is motivated to adopt some strategies that may help them achieve their mission and vision.

The OIC Assistant Secretary for Environment and

concurrent EMB Director Jacqueline A. Caancan, CESO III, affirmed that we cannot change the fact that the world is changing, in different forms, in different ways, and in different phases, but we have the authority and control to maneuver toward a more climate-friendly Earth.

The EMB Director expressed her full support and stated that, "We, from the EMB, wholeheartedly express our support to different sectors, in fact, to every unit in our country.

This is also a call to everyone to appreciate, recognize, and adhere to the plans and programs of

different regulatory offices concerning the environment. We believe that protecting the planet is a shared responsibility; everyone can contribute, and everyone can make an impact. We pledge that in the future, we will take part in addressing the climate crisis by taking appropriate and effective climate actions."

Indeed, Climate Classmate became a platform for every sector represented to hear and address environmental issues from different perspectives and establish networks to provide solutions and climate actions.



EMB-POD supports fight against ozone layer depletion and climate change, calls for collective and inclusive ozone and climate actions

The Philippines is highly vulnerable to the impacts of climate change, and we can already feel its impacts; its effects on the environment, ecosystems, and people are visible to our naked eyes. From the insecurity of food we produce and consume to the spread of diseases caused by flooding to health issues and mortality, everyone is vulnerable, everyone is at risk.

As climate change increasingly brings dangerous temperatures and extreme storms and floods, we must be alert and not risk the health and safety of humanity and the planet.

In 2022, the World Risk Index ranked the Philippines as the country with the highest disaster risk. Moreover, the Philippines, a country rich in natural resources that has flourishing ecosystems, is being threatened by climate change. Coral loss, declining rice yields, intensified droughts, higher sea level rise, and water scarcity are some of the alarming effects that the country should watch for and address.

Without action and properly addressing this crisis, the World Bank estimates that annual

economic damages from climate change in the Philippines could reach 13.6 percent of the country's gross domestic product. The impacts of climate change on different sectors are interrelated, and there is no better time to act right and responsibly than now.

We, from the EMB, further our commitment to protect, restore, and enhance environmental quality towards good public health, environmental integrity, and economic viability.



We aim to establish a clean and healthy environment that enhances the Filipino quality of life for the present and future generations. We are motivated to advance climate actions to mitigate climate change impacts and provide climate justice

Part of the bureau's mandate is to implement national environmental laws, like Presidential Decree 1586 (Environmental Impact Statement System), Republic Act 6969 (Toxic Substances and Hazardous and Nuclear Waste Control Act of 1990), Republic Act 8749 (Clean Air Act of 1999), Republic Act 9003 (Ecological Solid Waste Management Act of 2000), Republic Act 9275 (Philippine Clean Water Act of 2004), Republic Act 9512 (Environmental Awareness and Education Act of 2008), and more. These laws are vital to address different environmental problems, including climate change, so we make sure that these were effectively implemented and monitored all over the country.

The country also advances international commitments and foreign-assisted projects, like the Vienna Convention and Montreal Protocol on the Protection of the Ozone Layer.

We are united with the whole world, together with diverse motivated countries, in advocating for a planet that puts the Earth and its people first.

The bureau conducts various initiatives, strategies, and efforts, like awareness and information drives, trainings and workshops, and formulation of plans and policies, to achieve our mission and vision.

We guarantee that every action we pursue is effective and inclusive. From the central office, we make sure that the regional offices implement the plans and programs and promote public information and education to encourage the participation of an informed citizenry in environmental quality planning and monitoring.

These are just some of our many ways to address environmental problems, including climate change, and another way, which everyone of you was part of, is the celebration of World Ozone Month. We celebrate this momentous event annually during the month of September. We remember the positive effects that the Montreal Protocol brings to our planet.

Looking back, the Philippines signed the Montreal Protocol on September 14, 1988, and ratified it on March 21, 1993. We hope to protect and preserve our ozone layer from depletion caused by substances that destroy ozone molecules in the atmosphere.

The Philippine Ozone Desk (POD) of the Department of Environment and Natural Resources (DENR)—Environmental Management Bureau (EMB) is the national coordinator of programs for the implementation of the Montreal Protocol. The mission of POD is to ensure the country's compliance with the Montreal Protocol and promote the protection of the ozone layer among Filipinos.

Our sustainable actions and contributions have led to positive and encouraging results. The ozone layer is healing and recovering. A recent report published in Nature Climate Change, led by researchers from the University of Bristol, highlights a remarkable recovery of the ozone layer and a significant decline in atmospheric levels of hydrochlorofluorocarbons (HCFCs), potent ozone-depleting substances.

Moreover, the United Nations-backed Scientific Assessment Panel to the Montreal Protocol on Ozone Depleting Substances (ODS) reported in January 2023 in quadrennial assessment report the phase out of nearly 99% of banned ODS.

Furthering our efforts, the Philippines is the 141st country to endorse the Kigali Amendment and commits to phasing down the consumption of hydrofluorocarbons (HFCs), which are widely used in the heating and cooling industries. HFCs are non-ozone-depleting substances, but they harm our global climate and ecosystems.

The amendment aims to reduce greenhouse gas emissions and support our net-zero emissions ambition.

HFCs imported into the country have been subject to licensing controls. These regulations aim to shift the market towards more climate-friendly RAC technologies and equipment, require the proper handling of refrigerants during servicing works, and

mandate the collection and proper treatment of spent refrigerants from decommissioned RAC equipment.

We make sure that importers, service providers, dealers, retailers, and resellers realize the major role they play in phasing down HFCs. The private sector, countries, and industries must abide by laws and regulations under ODS and HFCs.

This year, we are freezing the importation of HFCs in the country, and by 2045, we expect an 80% reduction. If the amendment is fully ratified and implemented, up to 0.5 degrees Celsius of warming could be avoided by 2100. Moreover, for the past months, we have dedicated our time, effort, and resources to contributing to the creation of an inclusive and effective Kigali Implementation Plan and HFC Phase-Down Management Plan.

We do not only care for our climate system but also our people and industries and its purposes to the majority. We make sure that these plans are effective and inclusive. We recognize the

importance of the cooling and heating systems and technologies in the present; it is part of our lives and contributes so much to our success as a country; it may have negative impacts on the environment, but it is up to us how to properly manage them.

We cannot change the fact that the world is changing, in different forms, in different ways, and in different phases, but we have the authority and control to maneuver toward a more climate-friendly Earth.

We, from the EMB, wholeheartedly express our support to different sectors, b in fact, to every unit in our country. This is also a call to everyone to appreciate, recognize, and adhere to the plans and programs of different regulatory offices concerning the environment. We believe that protecting the planet is a shared responsibility; everyone can contribute and everyone can make an impact. We pledge that in the future, we will take part in addressing the climate crisis by taking appropriate and effective climate actions.

SEPTEMBER 18 - In line with the celebration of World Ozone Month 2024, the Deutsche Gesellschaft für Internationale

Zusammenarbeit (GIZ) conducted Cool Contributions for Climate Action: Refrigerant Identification, Recovery, and End of Life Management on September 18, 2024, at Delsa, Inc. Muntinlupa, Metro Manila.

The objective of this learning session is to capacitate personnel of the DENR-EMB from Region 1 to Region 8, the Cordillera Administrative Region, and the National Capital Region with the proper collection, transport, and storage of refrigerants during end-of-life (EOL), including best practices in refrigerant identification and recovery.

Ms. Maraida Licerio, the Senior Technical Advisor of GIZ, Philippines, discussed the Proklima Programme established in 1995 in the context of implementing technical projects for ozone protection under the Montreal Protocol. In 2016, the Kigali Amendment broadened the focus from ozone to climate protection. Some initiatives of the GIZ Philippines include Cool Contributions Fighting

EMB Offices participate in GIZ Philippines' Cool Contributions for Climate Action workshop





Climate Change I and II, Accelerating Air Conditioning Transformation through Enhanced Standards and Labeling in the ASEAN Region, and the Climate and Ozone Protection Alliance.

Paolo Ladia, Sales Supervisor of Delsa Inc., provided the background of the company. Engineer Garry J. Quiambao, PME, and Mr. Elizalde G. Nardo, also from Delsa Inc., shared their best practices in the RAC servicing sector. They discussed refrigerants and safety issues, corrective maintenance: standard reprocessing of systems and repair works, and process flow for the storage of recovered refrigerants.

After the presentations in the morning session, Delsa Inc. spearheaded the actual demonstration of proper handling of refrigerants, identification, and recovery, then proceeded to their warehouse visit, showcasing the proper way of storing the refrigerants.

The Department of Environment and Natural Resources Climate Change Service provided a presentation about the contribution of F-gas





destruction in the Nationally Determined Contributions (NDC).

Ms. Licerio also introduced carbon market mechanisms and their application for F-gases. When refrigerant is properly managed in its EOL phase and is properly collected, transported, and stored, it becomes an

opportunity to support the NDC or potentially enter the carbon market mechanisms.

Then, the participants from the regional offices completed the survey on capacity development needs of regional offices in the regulation and enforcement of F-gas lifecycle management.

Another batch of learning sessions will be conducted in the Korphil Regional Training Center, TESDA Region XI, Tibungco, Davao City, on September 26, 2024, which will be attended by personnel from DENR-EMB Region 9 to 13 and Bangsamoro Autonomous Region in Muslim Mindanao.



EMB-NCR spearheads ODS and HFC Training for Dealers, Resellers, and Service Providers; POD facilitates discussions



The Environmental Management Bureau-National Capital Region conducted a training for the ODS & HFCs Dealers, Resellers, and Service Providers for the Implementation of the Montreal Protocol & Overview of the RA 6969 Implementation Rules and Regulations on September 19-20, 2024, at the EMB Central Office, DENR Compound.

The Philippine Ozone Desk presented different and important topics, such as Ozone Science, Implementation of the Montreal Protocol and

its Amendments, Project Implementation and Updates, and Refrigerant Identifier Demonstration and What Gas Application Presentation.

The highlight of the two-day event was the presentation of Ms. Kathrine Viñegas, national expert in Gender and Environment, about Gender and Environment Nexus, Global Commitments and National Policies on Gender, and Practical Tips for Mainstreaming Gender in Montreal Protocol Projects.

Relating to ozone-depleting substances, Ms. Viñegas

highlighted that women are more vulnerable to ODS when exposed, as they store more environmental pollutants than men in their tissues. This exposure may also cause reproductive health problems, and a significant part of the chemical burden experienced by mothers can be transferred to their babies through gestation and breastfeeding.

Ms. Viñegas presents the country's commitments that put importance to women's rights, including the UN Convention on All Forms of Discrimination Against Women (CEDAW)

that the Philippines ratified in 1981 and reports every four years, the Beijing Platform for Action (BPfA), which served as a blueprint for advancing women's rights, and the country reports to BPfA every five years, and Sustainable Development Goals (SDG), particularly the SDG five that hopes to achieve gender equality.

UN Framework Convention on Climate Change adopted in 2019 the Enhance Gender Action Plan (GAP) to advance knowledge and understanding of gender responsive climate action. GAP's priority areas include capacity building, knowledge management, and communication, gender balance, participation, and women's leadership, coherence,



gender responsive implementation and means of implementation, and monitoring and reporting.

On the United Nations Environment Programme's 84th Meeting of the Executive Committee of the Multilateral Funds (MF) for the Implementation of the Montreal Protocol, the parties drafted operational policy on gender mainstreaming for MF-supported projects, including a gender responsive approach, the collection and reporting of sex disaggregated data, affirming the importance of gender mainstreaming in MF-supported projects, and requesting bilateral and implementing agencies to apply gender mainstreaming and report gender-relevant information.

Locally, the Philippines mandates the equal rights of women; as stated in the 1987 Constitution, the state recognizes the role of women in nation-building and shall ensure the fundamental equality before the law of women and men. The Republic Act 9710 of 2019 or the Magna Carta of Women, Executive Order 273 of 1995 approving and adopting the Philippine Plan for Gender Responsive Development (PPGRD), and Philippine Commission on Women Memorandum Circular 2011-01 are some of the policies that protect the rights and welfare of women.

Ms. Viñegas also provided practical tips for mainstreaming gender in the Montreal Protocol, such as gender categorization, gender analysis, analysis of



findings, risk assessment, logical framework, and gender responsive budgeting in project formulation. In project implementation, Ms. Viñegas recommended having an implementation team and collaborating with stakeholders. Lastly, for monitoring and evaluation, monitoring

gender results, evaluating gender results, building case studies, and communicating gender results.

In the Philippines, leaders who champion the Montreal Protocol are women. OIC Assistant Secretary for Environment and concurrent EMB

Director Jacqueline A. Caancan, CESO III, is the Overall Project Director, while OIC Assistant Director Engr. Esperanza A. Sajul serves as the Overall Project Coordinator for ODS phaseout and HFC programs under the Montreal Protocol.



EMB-POD concludes World Ozone Month through In The oZone: An Interactive Learning Activity

The Environmental Management Bureau-Philippine Ozone Desk conducted In The oZone, an interactive learning activity, on September 27, 2024, at Lazer Quest, SM City North EDSA, Quezon City.

Participants in this activity are students, Youth for Environment in Schools Organization (YES-O) officers, and teachers from San Francisco High School.

During the event, Mr. Benjamin Sarondo, Information Officer of EMB-POD, discussed the Ozone Science including ozone layer depletion and climate change, the Montreal Protocol, and the Kigali Amendment, and more.

"It is vital for every individual on the planet to know and understand about the significant role of the ozone layer to life on Earth. Now that the ozone layer is continuously healing and recovering, we will push further our cause to mitigate the impacts of climate change through the Montreal Protocol for

the people, climate, and planet."

After the presentation, the students were immersed in the interactive learning activity. The twenty (20) students were divided into four groups with five players each; only two groups will play each game and compete.

As the students play the Lazer Quest, where they must tag their opponents while avoiding being tagged, they also must answer questions that are placed inside the arena. These questions were related to the previous discussion of the Ozone Science.

Also, there were puzzles that must be solved, arranged, and completed; for example, the players must arrange the theme of this year's celebration of World Ozone Month and identify the contributions of the Montreal Protocol to the Sustainable Development Goals (SDG); everything is related to the ozone layer and climate system.

The level of awareness and understanding about the topic was evaluated during the game. There were thirty (30) questions in the arena per game; each is equivalent to 1,000 points. The outcome of the activity proved that the students understood the presentation because most of the questions from the arena were correctly answered; in fact, one group garnered 15,000 points, equivalent to fifteen (15) correct answers over the 10,000 points of the competing team.

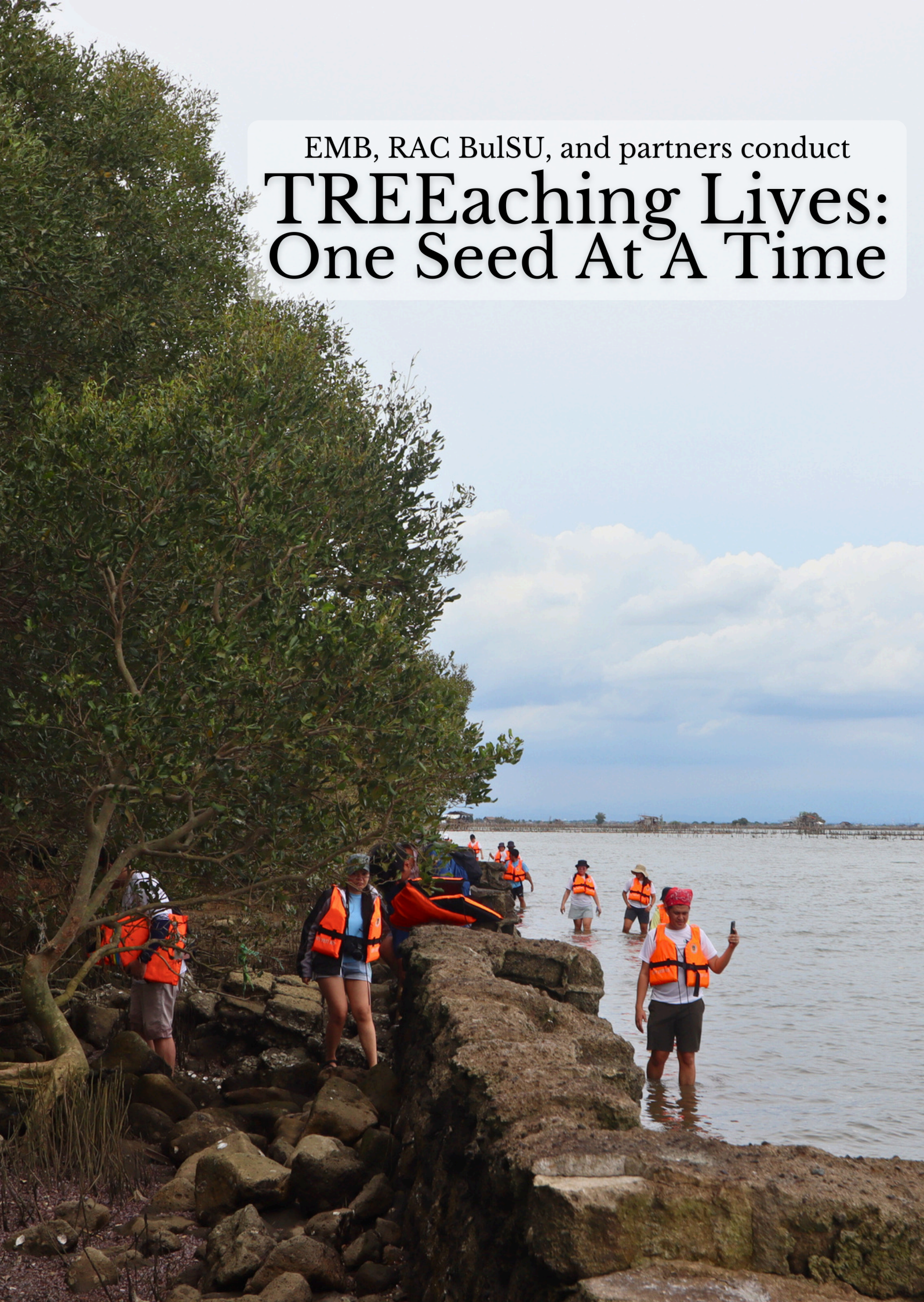
The interactive learning activity challenged the critical-thinking and decision-making skills of participants in solving problems related to the ozone layer and the climate system. Another essential thing about this activity is that it showcased teamwork, collective contribution, and effort.

In The oZone proved that learning about a scientific and technical topic, like the ozone layer and climate system, can involve fun and interaction.



EMB, RAC BulSU, and partners conduct

TREEaching Lives: One Seed At A Time



The Environmental Management Bureau-Philippine Ozone Desk conducted the TREEaching Lives: One Seed At A Time, a mangrove planting activity on September 28, 2024, in Barangay Pamarawan, City of Malolos, Bulacan.

This is a partnership with various organizations of Bulacan State University, including the Rotaract Club of Bulacan State University, that spearheaded the activity.

This activity is in line with the celebration of World Ozone Month, with the theme "Montreal Protocol: Advancing Climate Action." This year, the world will not only celebrate the success and achievements of the international environmental agreement in phasing out ozone-depleting substances (ODS), but will also recognize the need for immediate and appropriate climate actions.

One of many initiatives to mitigate the impacts of climate change is the planting of mangroves. Mangroves, as noted by The Nature Conservancy, offer vital flood protection by acting as natural barriers against waves and storm surges, reducing the impact on people and property.



At 10:00 in the morning on September 28, 2024, the volunteers for the mangrove planting activity, employees of the Environmental Management Bureau, gathered at the EMB Central Office before departing to Panasahan Fish Port located in the City of Malolos, Bulacan.

At Panasahan Fish Port, the EMB volunteers arrived at 12:30 in the afternoon, joining other volunteers from Bulacan, Engr. Lance Arojado from JCI Malolos led the briefing to the volunteers, the do's and don'ts, and the flow of the activity, then all proceeded

to travel to Barangay Pamarawan by boat.

Upon arrival at Barangay Pamarawan, the volunteers started the program led by the Rotaract Club of Bulacan State University. The organizations that participated in the activity shared testimonials regarding their contributions and initiatives for the environment. The EMB shared its commitment to the Montreal Protocol and its Kigali Amendment, looking to phase out ozone-depleting and global warming substances to mitigate the impacts of climate change.



After the program, the volunteers proceeded to conduct the mangrove planting activity, where they planted more than 200 mangrove saplings. Then, they proceeded to conduct a community consultation; through this, every organization will be enlightened about the struggles and the needs of the community.

After the mangrove planting activity, the volunteers returned to Panasahan Fish Port from Barangay Pamarawan at 5:00 in the afternoon by boat. Then, from the Panasahan Fish Port, EMB employees arrived at the EMB CO at 7:00 in the evening.

The organizations that participated in this initiative effectively played their part and efficiently executed their tasks. Most importantly, they contributed in mitigating the impacts of climate change, looking at long-term effect.

A climate action, small or big, can positively affect future generations, and the EMB commits to be proactive for the environment and for the people.

