

OzoNews

A fortnightly electronic news update on ozone and climate protection and the implementation of the Montreal Protocol brought to you by OzonAction

Volume XXIV | 15 July 2024

In this issue:

1. Kigali Amendment latest ratifications
2. Parties to the Montreal Protocol Meet in the Home of the Protocol to Discuss Ozone Layer and Climate Protection
3. Global effort produces first-ever decline in harmful HCFC levels
4. Inception workshop for the Philippines' hydrofluorocarbon (HFC) phasedown plan
5. Green Cooling Initiative Provides Training for Safe Handling of R290 in Vietnam
6. De primera mano, conocemos sobre la capa de ozono y antártida
7. Laredo Field Office reminds traveling public not to bring freon canisters, it is illegal and may result in fines and/or vehicle seizure
8. La douane s'implique dans la lutte contre le changement climatique
9. Hydrocarbons being sold as F-gas replacements

JOB OPENING

- > [Programme Management Officer - P4](#)
- > [Senior Programme Management Officer, P5 \(re-advertised\)](#)

GLOBAL

1. Kigali Amendment latest ratifications

Congratulations to the latest countries which have ratified the Kigali Amendment:

[Bahrain, 1 July 2024](#)

[United Arab Emirates, 19 April 2024](#)

[Thailand, 3 April 2024](#)

[Djibouti, 8 March 2024](#)

[Guatemala, 11 January 2024](#)



At the Twenty-Eighth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, held in Kigali from 10 to 15 October 2016, the Parties adopted, in accordance with the procedure laid down in paragraph 4 of article 9 of the 1985 Vienna Convention for the Protection of the Ozone Layer, a further amendment to the Montreal Protocol as set out in Annex I to the report of the Twenty-Eighth Meeting of the Parties (Decision XXVIII/1).

Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, Status of Ratification 15 October 2016 to [date](#).

United Nations Treaty Collection

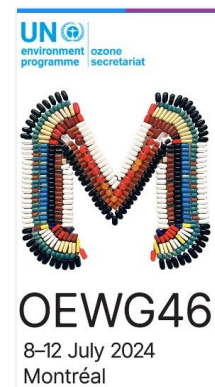
Image: UN Treaty Collection website

2. Parties to the Montreal Protocol Meet in the Home of the Protocol to Discuss Ozone Layer and Climate Protection

15 JULY 2024 - [The forty-sixth meeting of the Open-ended Working Group](#) (OEWG) of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer met in Montréal, Canada, from 8 to 12 July 2024 to consider issues related to ongoing efforts to protect the ozone layer and the implementation of the Kigali Amendment to the Protocol to mitigate climate change. An in-person meeting, it also provided live streaming to allow more persons to follow proceedings remotely.

The parties faced a heavy agenda of issues in preparation for the combined thirteenth meeting of the Conference of the Parties to the Vienna Convention for the Protection of the Ozone Layer (COP13) and the Thirty-Sixth Meeting of the Parties to the Montreal Protocol (MOP36) which is due to take place in Bangkok, Thailand, from 28 October to 1 November 2024. Prior to the meeting, a workshop on life-cycle refrigerant management will be held on 27 October 2024.

Many of the discussions emanated from decisions adopted at [MOP35](#). The parties were provided with presentations and updates from the Technology and Economic Assessment Panel (TEAP) and the Scientific Assessment Panel (SAP) on very **short-lived substances (VSLs)**, **feedstock** uses of controlled substances and emissions of **carbon tetrachloride**



(CTC). The Environmental Effects Assessment Panel (EEAP) also responded to queries by parties on UV impacts and on **forever chemicals (PFAS)** on ozone depletion and human health.

Based on the outcomes of the online workshop of experts on the costs of establishing and operating stations for monitoring controlled substances, endorsed by the twelfth meeting of the Ozone Research Managers held in April, and a report by the Secretariat on sustainable funding options, parties explored the cost and running and establishing new stations to **enhance the global and regional atmospheric monitoring of controlled substances**.

The parties also started more in-depth discussions on emerging challenges such as the feasibility and availability of climate friendly alternative propellants for **metered-dose-inhalers (MDIs)**. Inhalers used for the treatment of asthma and chronic obstructive pulmonary disease currently use hydrofluorocarbons (HFCs). While not ozone depleting, HFCs are climate warming, and the availability of alternatives are anticipated to be more readily available as of 2026.

An update from TEAP on the **future use of halons**, a fire suppressant widely used in the aviation industry, was also considered. The growing scarcity, lack of alternatives and the destruction of halons because it is global warming was discussed at length by the parties.

Building on the workshop during OEWG45 last year on **institutional processes to strengthen the effective implementation and enforcement of the Montreal Protocol**, parties discussed how to improve the effectiveness of the Protocol to deal with the illegal production and movement of controlled substances as well as options for strengthening HFC licensing systems and the non-compliance mechanism.

The TEAP also provided information on **life-cycle refrigerant management (LRM)** which the parties will review in more detail during a workshop on LRMs prior to the combined COP13/MOP36 later in the year.

Parties were also provided with an **update on energy efficiency technologies** which noted that accessibility to some new refrigerants and technologies remains a challenge; and 2025 nominations for a limited use of **methyl bromide**, an ozone depleting substance used as a pesticide in agriculture; possible **compliance deferrals** for Article 5, group 2 parties on their HFC phase-down obligations; suggested changes to **reporting form** for HFC-23 consumption, production and destruction; **additional funding support** for countries affected in their implementation of the Montreal Protocol due to COVID-19.

In the margins of the Open-ended Working Group meeting a total of **23 side events** also took place covering a wide range of topics of interest to delegates and ozone stakeholders.

Discussions were productive and fruitful, parties made good progress with several draft decisions for further work both prior to and during MOP36 later this year in Bangkok, Thailand.

- [ImpCom72: 7 July 2024](#)

- [OEWG46: 8 to 12 July 2024](#)

- [Meeting information and documents](#)

- [Side events and exhibitions](#)

- [IISD Summary Report, Daily reporting, highlights and images](#)

3. Global effort produces first-ever decline in harmful HCFC levels

As much of the world's nations struggle to make sufficient progress on reducing carbon emissions, new research has emerged showing that global collaboration can in fact reverse some of the harmful effects of human activity. A study published in the journal [Nature Climate Change](#) documented the first significant drop in atmospheric levels of hydrochlorofluorocarbons (HCFCs), harmful gases known to deplete the planet's ozone layer.



The study from researchers at the University of Bristol found a 1% drop in HCFC emissions between 2021 and 2023. While the drop-off might seem small, it marks the first time ever a decline in the compound's presence has been detected. Even better, the findings suggest that HCFC usage peaked in 2021, nearly five years ahead of schedule.

A brief history on HCFCs

HCFCs are human-made compounds containing hydrogen, chlorine, fluorine and carbon, and are commonly used in refrigerants, aerosol sprays, and packaging foam. They were used as a replacement for chlorofluorocarbons (CFCs), more commonly known as Freon.

CFCs were widely believed to be harmless—they are nontoxic, nonflammable and don't have any unstable reactions with other common chemicals. But, in the 1970s, scientists Mario Molina and F. Sherwood Rowland managed to link the depletion of the ozone layer to the use of these chemical compounds.

That discovery was foundational to the Montreal Protocol, an international treaty signed by 198 countries seeking to phase out the use of substances that harm the ozone layer, the planet's shield against ultraviolet radiation from the Sun. The agreement set forth a number of goals that would lead to the reduction and eventual elimination of ozone-depleting substances.

The first stage of the Montreal Protocol was the elimination of CFCs and proved to be wildly successful. A 2022 [report](#) from the United Nations found that nearly 99% of all CFCs had been phased out. The report estimates that ditching CFCs, which are also greenhouse gases that trap heat in the Earth's atmosphere, managed to avoid an increase of 0.5 to 1 degrees Fahrenheit to the planet's temperature by 2100.

Promising results in the fight against ozone depletion

The success of the treaty now appears to be extending to HCFCs. The Freon replacement took off as a sort of harm-reduction strategy because it provided similar functionality as CFCs while doing less damage to the ozone. But, like CFCs before them, HCFCs are a greenhouse gas and contribute to planetary warming. The Montreal Treaty mandated a ban

on this compound by 2020 for developed nations, and the latest study suggests the restrictions are working.

“The results are very encouraging. They underscore the great importance of establishing and sticking to international protocols,” Dr. Luke Western, Marie Curie Research Fellow at the University of Bristol School of Chemistry and lead author on the paper, said in a [statement](#). “Without the Montreal Protocol, this success would not have been possible, so it’s a resounding endorsement of multilateral commitments to combat stratospheric ozone depletion, with additional benefits in tackling human-induced climate change.”

The success of the Montreal Protocol isn’t just seen in the dwindling levels of harmful chemicals in the atmosphere, but can also be seen in the slow but steady decrease in the hole in the ozone layer. [According to the UN](#), the ozone layer is expected to recover to 1980 levels by 2040 for most of the world. That would mark a return to health for the protective part of the stratosphere that would match levels before holes in the shield were first discovered.

As nations continue debating the best way to reduce carbon emissions and combat climate change, the Montreal Protocol offers a proof of concept for global cooperation. A concerted effort toward a common goal can make a difference.

[IBM, 15 July 2024, By: AJ Dellinger](#)

Image: IBM website

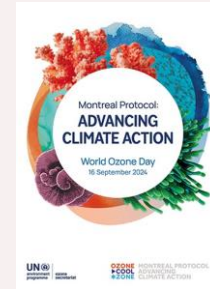
Upcoming 2024 World Cold Chain Symposium - Less food waste. Reduced greenhouse gas emissions. Greater food security. This is the path to addressing hunger and a better future. It takes a more sustainable cold chain to get us there. The World Cold Chain Symposium (WCCS) is a global conference organized by The Global Food Cold Chain Council (GFCCC) in partnership with the United Nations Environment Programme (UNEP) and sponsored by Carrier. [The 2024 World Cold Chain Symposium, Bangkok, Thailand, on Saturday, 26 October 2024. Register now](#) to join the Global Food Cold Chain Council and experts worldwide, as we come together for an in-person, complimentary event focused on the benefits of building efficient and sustainable business models for the development of the cold chain around the globe.



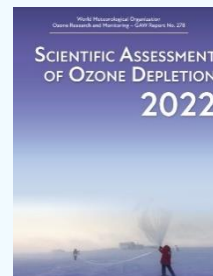
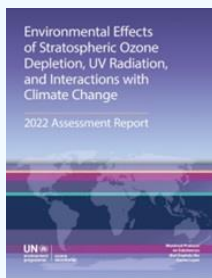
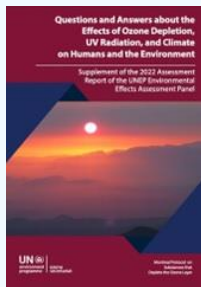
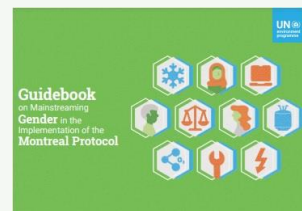
The image shows the logo for the World Cold Chain Symposium, which includes the text 'World Cold Chain Symposium' and 'GLOBAL FOOD COLD CHAIN COUNCIL'. Below this, there are logos for 'Carrier', 'Cool Coalition', and 'OzonAction COMPLIANCE ASSISTANCE PROGRAMME'. The text 'In cooperation with' is placed between the Carrier logo and the Cool Coalition/OzonAction logos.

World Ozone Day 2024 theme announced "Montreal Protocol: Advancing Climate Action" - The aim of this year's World Ozone Day is to raise awareness of how far the Montreal Protocol has progressed from ozone layer protection to also become a recognized powerful climate action tool. The Ozone Secretariat invites all parties to join the celebration of World Ozone Day and use the assets created around this year's theme to raise awareness among the public on the important work of the Montreal Protocol to safeguard us and the planet.

- > Theme in [Arabic](#) [Chinese](#) [English](#) [French](#) [Russian](#) [Spanish](#)
- > Graphic visualisation: Full range of A1 posters for printing: [Arabic](#) [Chinese](#) [English](#) [French](#) [Russian](#) [Spanish](#)



Guidebook on Mainstreaming Gender in the Implementation of the Montreal Protocol - OzonAction, in consultation with UN Women and a gender expert, has developed this [Guidebook on Mainstreaming Gender in the Implementation of the Montreal Protocol](#) to advance the agenda of gender equality and women's empowerment through the implementation of Montreal Protocol activities. The Guidebook is designed to assist National Ozone Officers with addressing gender issues through their daily work and operations. [Read/download English](#) | [Russian](#)



[Watch out for Illegal Trade of HCFCs and HFCs](#): Lessons learnt from the Global Montreal Protocol Award for Customs and Enforcement Officers. This publication provides an analysis of the cases submitted in the context of the [Global Montreal Protocol Award for Customs and Enforcement Officers](#). The Global Award was launched in 2018 by UNEP OzonAction. This Global Award is intended to raise awareness about the Montreal Protocol and to recognise customs and enforcement officials for their efforts in preventing and combating illicit traffic in Montreal Protocol and Kigali Amendment-regulated substances. Ozone-depleting substances (ODS) include hydrochlorofluorocarbons (HCFCs) and other compounds with a high Global Warming Potential (GWP), particularly hydrofluorocarbons (HFCs).



UNEP OzonAction, ASHRAE, April 2023 Fact sheet: [Update on New Refrigerants Designations and Safety Classifications](#). The purpose of this fact sheet is to provide an update on ASHRAE standards for refrigerants and to introduce the new refrigerants that have been awarded an «R» number over the last few years and introduced into the international market.



[Sustainable cold chains: Virtual Exhibition](#) - **The virtual exhibition for sustainable cold chains aims to highlight the critical role of cold chains in ensuring food safety and security, access to vaccines, reducing global warming and preventing ozone layer depletion.** The exhibition showcases commercially available cold chain technologies for food and vaccines, mainly targeting applications and equipment with refrigeration and cooling cycles that use ozone and climate-friendly refrigerants and have enhanced energy efficiency characteristics. It also aims to promote game-changing and systemic approaches, relevant initiatives, and not-in-kind solutions to cold chains

These technologies and approaches directly contribute to meeting national obligations under the Montreal Protocol on Substances that Deplete the Ozone Layer including its Kigali Amendment and the Paris Agreement on Climate Change. Sustainable cold chain contributes to the achievement of many [Sustainable Development Goals](#).

The exhibition is ongoing and continuously updated with submissions accepted on a rolling basis. The partners of the exhibition will continue promoting the exhibition at all relevant events and throughout 2022 and beyond.

Click [here](#) for more information / submit a nomination >>>





[Vanuatu's Case Study on Integrating ODS/HFC Module into the National Single Window System](#) - The National Single Window is a centralized system that links all relevant government approving authorities and acts as a 'one-stop-shop' where importers and exporters may submit applications electronically including information and all required paperwork to support the application and approval process. [Read/Download the Factsheet >>>](#)



[Recognition of Prior Learning Scheme for Refrigeration and Air-Conditioning Servicing Technicians in Mongolia](#) - The Recognition of Prior Learning (RPL) process can help those in the industry acquire a formal qualification that matches their knowledge and skills and thereby contributes to improving their employability, mobility, and lifelong learning. RPL can make a significant contribution to providing the relevant learning framework necessary for the present and ongoing



maintenance of a quality workforce, especially in the RAC servicing sector. In Mongolia, the RPL process has been rolled out in over 30 TVET trades in the construction, mining, and other sectors, including apparel and culinary etc. Mongolia initiated the RPL scheme for RAC servicing technicians as part of their implementation of the HPMP in cooperation with various national stakeholders. **Read/Download the [Factsheet](#) >>>**

ASIA AND THE PACIFIC

4. Inception workshop for the Philippines' hydrofluorocarbon (HFC) phasedown plan

The Department of Environment and Natural Resources - Environmental Management Bureau (DENR-EMB) in collaboration with the United Nations Development Programme (UNDP) spearheaded the National Hydrofluorocarbon (HFC) Inception Workshop for Kigali Implementation Plan (KIP) Project Preparation held at Park Inn by Radisson North EDSA, Quezon City on July 5, 2024.



The inception workshop is part of the Philippines' proactive measures to implement the Kigali Amendment, an international treaty ratified by the country to phase down HFCs, combat climate change, and support the country's net zero emissions ambition. The Philippines' Kigali Amendment to the Montreal Protocol was ratified and entered into force on February 2, 2023.

Director AI Orolfo of the DENR-Foreign Assisted and Special Projects Service (FASPS) said, "This initiative is an effort and fulfillment of our commitment to ensure a structured and effective approach to HFC reduction and will serve as the foundation for Stage I of our KIP." Orolfo acknowledged the participation of various government agencies, private industries, organizations, HFC importers, dealers, and service providers, stressing their essential role in developing a robust HFC Phase Down Management Project Plan.

During the workshop, GeriGeronimo R. Sañez, Chief of the EMB-Environmental Quality Management Division, outlined the Kigali Amendment Commitment and the HFC Phase Down Program's implementation in the Philippines. Engineer Edwin Romel N. Navaluna, Chief of the EMB Chemical Management Section, presented the KIP Project Preparation and Stakeholder Roles.

UNDP Programme Analyst Mark Anthony M. Ramirez discussed HFCs Data Gathering and Consultation Design.

Participants raised concerns and provided recommendations to enhance the KIP implementation. Results from the sectoral breakout sessions were presented, with TESDA representing the regulatory and government sector and Delsa Inc. representing the industry and private organizations group.

The input of each participant was highly regarded and will be utilized in the final crafting of the survey questions that will be disseminated to the concerned sectors. Through comprehensive data collection, analysis, and sectoral consultations, the implementing project agency and executing agencies hope to establish KIP in the Philippines efficiently and successfully.

EMB Assistant Director Sajul emphasized the inception workshop is one step toward achieving a climate-friendly Philippines. “We will continue to advance our causes through effective information dissemination, comprehensive consultations, and productive dialogues. We will build a stronger link between the government and private organizations and industries with constant communication and coordination,” she concluded.

Looking ahead, the UNDP and DENR-EMB will conduct the National Capital Region Data Gathering & Focus Group Discussion on July 30-31, 2024, before finalizing the HFC Phase-down Management Project Plan, which will be submitted to the Multilateral Fund Secretariat this year.

[The Philippines Department of Environment and Natural Resources - Environmental Management Bureau \(DENR-EMB\), 12 July 2024](#)

Image: DENR-EMB

5. Green Cooling Initiative Provides Training for Safe Handling of R290 in Vietnam

The program’s four courses provided 60 students with hands-on experience in propane-based refrigeration applications.



To support the phasedown of HFCs in Vietnam, the Green Cooling Initiative (GCI) III project recently hosted a [series of training courses](#), equipping 60 students with hands-on experience in the safe handling of natural refrigerants, with a focus on propane (R290)-based refrigeration applications.

With the global transition away from f-gases, there has been a notable increase in demand for technicians proficient in green cooling technologies. This demand is expected to grow as the world continues to move towards more sustainable practices.

“As the planet continues to warm, refrigeration equipment plays a crucial role across various sectors,” said Nguyen Dang Thu Cuc, National Ozone Office Coordinator at Vietnam’s Department of Climate Change, Ministry of Natural Resources and Environment (MONRE). “Consequently, safety has become more critical than ever.”

“Governmental agencies such as MONRE anticipate close and intensive collaboration with our international partners and vocational colleges to offer more training courses in the near future,” she added. “This will undoubtedly contribute to meeting the demands of the future market.”

Following Vietnam’s ratification of the Kigali Amendment to the Montreal Protocol in September 2019, the country’s HFC phasedown officially began in January 2024. In ratifying the amendment, Vietnam has agreed to freeze its production and consumption of HFCs from 2024 and eventually achieve a 80% reduction by 2045, compared to 2020–2022 levels.

The GCI III project, which is funded by the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV) under the International Climate Initiative (IKI), has worked on multiple interventions to support Vietnam’s transition to sustainable cooling. Efforts to date have included policy advice, technology transfer and capacity building. This latest training program was part of its capacity-building activities.

Developing practical skills

The program consisted of four courses, which took place from October 2023 to March 2024 at the Hanoi College of Electronics and Electro-refrigeratory Technics (HCEET) and the Hanoi Industrial Vocational College.

Course participants came from various backgrounds, including vocational trainers and local HVAC&R technicians.

Each course featured skill-based sessions covering tool proficiency, pipeline operation, substance recovery and weldless pipe connection techniques. A knowledge-sharing session on international and national management policies on phasing out ODS was also included. The practical training was designed to enhance trainees’ expertise in green cooling technologies with a focus on developing their technical and tactical skills, explained the GCI III project.

Participants provided positive feedback and recommended organizers expand their offerings around the country.

To enhance diversity within the sector, which has traditionally been male-dominated, organizers are looking to tailor their vocational training to encourage and accommodate the participation of women. This could include the use of female trainers, which was widely acknowledged and valued in the March 2024 Training of Trainers course.

“Moving forward, the GCI III project aims to actively promote gender mainstreaming across all its interventions and activities,” the organizers said.

Transcritical CO₂ training

The GCI III project also recently co-funded an advanced [transcritical CO₂ \(R744\) training program](#) for eight refrigeration technicians and policymakers from Bangladesh, Colombia, Kenya, the Philippines and Vietnam.

The week-long course was organized by Europe-based refrigeration manufacturer Carrier and German government agency GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit). It was hosted at Carrier’s CO2OLacademy in Wiesbaden, Germany,

where participants could work with a fully operational R744 refrigeration system simulating a supermarket environment.

In preparation for their hands-on experience in Germany, participants received 12 hours of online training. Once at the CO₂OLacademy, trainees took part in various practical sessions, including working with a CO₂ training rack. According to organizers, the rack is slated to be shipped to a training facility in Kenya.

In October 2023, [Carrier and GIZ announced](#) that they would be establishing the “first-ever” East African transcritical CO₂ supermarket training center.

Previously, the GCI has organized or funded several educational initiatives for stakeholders from around the world, including [Grenada, Kenya, Sri Lanka and Timor Leste](#). It also facilitated a [study tour to China](#) to promote the adoption of energy-efficient R290-based air-conditioning through international exchange and knowledge sharing.

In addition to technician training programs, the GCI also offers a free online Cool Training course that is open to everyone. Previously available in English, French and Spanish, it is [now offered](#) in Arabic and Portuguese.

[Natural Refrigerants News, 15 July 2024, By: Christina Hayes](#)

Image: Trainees at the program's closing ceremony at the Hanoi College of Electronics and Electro-refrigeratory Technics (Source: HCEET)

LATIN AMERICA AND CARIBBEAN

6. De primera mano, conocemos sobre la capa de ozono y Antártida

Entrevista del ingeniero Héctor Ochoa del Instituto Antártico Argentino

Transcripción

En Circo Urbano le dimos pista al Ingeniero Héctor Ochoa del Instituto Antártico Argentino, quien estuvo presentándose en Galería Torres Barthe para tocar la temática del agujero de ozono y su relación con la Antártida. Con 51 campañas al continente blanco en sus espaldas, Héctor nos contó algunas anécdotas y datos relevantes de su experiencia.

Las mediciones registradas por el satélite Copernicus Sentinel de la Agencia Espacial Europea muestran que el agujero de la capa de ozono localizado sobre la Antártida alcanzó



en 2020 uno de los niveles más altos de los últimos años en cuanto a extensión y profundidad.

Los cambios en el tamaño del agujero de la capa de ozono dependen, en gran medida, de los vientos que se forman en la Antártida y que se producen por las diferencias de temperatura entre latitudes, así como la propia rotación terrestre.

[Frecuencia zero Argentina, 12 Julio 2024](#)

Image: Frecuencia zero

NORTH AMERICA

7. Laredo Field Office reminds traveling public not to bring freon canisters, it is illegal and may result in fines and/or vehicle seizure

LAREDO, Texas – U.S. Customs and Border Protection officers at Laredo Field Office ports of entry are reminding the traveling public not to bring hydrofluorocarbon (HFC) (freon) canisters from Mexico as their importation is restricted and must adhere to strict federal commercial importation requirements. Bringing undeclared freon canisters from a foreign country in a passenger vehicle may result in fines and/or vehicle seizures.



“We want to strongly remind the traveling public not to bring in freon canisters from Mexico as that is contrary to existing federal law and may result in fines or vehicle seizure, even federal prosecution,” said Director, Field Operations Donald Kusser, Laredo Field Office. “CBP actively enforces laws from a variety of federal agencies, including the American Innovation and Manufacturing Act of 2020 and the Clean Air Act, which prohibit importation of HFCs such as those contained in freon canisters in a manner that is not compliant with Environmental Protection Agency restrictions.”

According to the EPA, HFCs are potent greenhouse gases that cause climate change and used in applications such as refrigeration, air conditioning, building insulation, fire extinguishing systems and aerosols. The global warming potential of an HFC can be hundreds to thousands of times more potent than carbon dioxide.

Beginning on January 1, 2022, EPA regulations prohibit any person from importing bulk regulated HFCs, except by expending, at the time of import, a consumption or application-specific allowance issued by the EPA. No person may sell or distribute, or offer for sale or distribution, any regulated HFC that was imported illegally.

Those who bring in canisters of such regulated HFCs without adhering to EPA regulations face a fine for failure to declare the item and the vehicle used in the furtherance of the violation may be subject to seizure.

[U.S. Customs and Border Protection, 9 July 2024](#)

Image: CBP- Boxes of freon canisters discovered by CBP officers within the cargo area of a vehicle.

Regulatory Updates: EPA's Latest Significant New Alternative Policy (SNAP) Program Rule – GreenChill Webinar - Thursday, July 25 from 1 – 2 PM Eastern

Presenters from EPA will provide an overview of the SNAP Program and the SNAP Program Final Rule. SNAP Rule 26:

- Lists 10 refrigerants as acceptable, subject to use conditions in the refrigeration and air conditioning sector;
- Incorporates by reference the latest versions of industry standards;
- Modifies use conditions for R-290 in two end-uses; and
- Exempts R-290 in the refrigerated food processing and dispensing end-use from the Clean Air Act Section 608 venting prohibition.

Join this webinar to learn how SNAP Rule 26 pertains to the retail food refrigeration end-uses. [Register Now!](#)



EUROPE & CENTRAL ASIA

8. La douane s'implique dans la lutte contre le changement climatique

Les engagements internationaux pris par l'Union européenne en matière de lutte contre le changement climatique dans le cadre du Protocole de Montréal et à l'amendement de Kigali au protocole trouvent une transposition directe sur l'action de la douane.



Face à l'urgence de l'action pour le climat et pour respecter ses obligations internationales, l'Union s'est même fixé un objectif contraignant de réduction des émissions nettes de gaz à effet de serre (émissions après déduction des absorptions) d'au moins 55% d'ici à 2030 par rapport au niveau de 1990, et l'objectif de neutralité climatique au sein de l'Union d'ici à 2050 au plus tard.

Pour atteindre ces objectifs, depuis le 11 mars 2024, deux nouveaux règlements européens remplacent les textes précédemment en vigueur, les règlements (UE) [2024/590](#) et [2024/573](#), respectivement relatifs à certaines substances appauvrissant la couche d'ozone et les gaz à effet de serre fluorés.

Quels changements pour les opérateurs ?

La liste des substances visées s'allonge, de même que celle des exemptions se restreint. Pour ce qui concerne les HFC, les quotas diminuent drastiquement. L'accent est désormais clairement placé sur l'utilisation de solutions de substitution à faible potentiel de réchauffement climatique et à faible potentiel d'appauvrissement de la couche d'ozone.

La liste des produits et équipements interdits s'allonge, sur la base de leur potentiel de réchauffement climatique ou de leur potentiel d'appauvrissement de la couche d'ozone. Les bouteilles non rechargeables, dont la définition est étendue, sont interdites.

De nouvelles informations deviennent obligatoires dans la déclaration en douane

Le contrôle des obligations documentaires applicables à la frontière va être entièrement automatisé d'ici à mars 2025 pour les gaz à effet de serre fluorés. Cette automatisation est déjà effective depuis la fin juin 2024 pour les substances appauvrissant la couche d'ozone. Cette facilité permettra aux services de concentrer leurs efforts sur la surveillance des flux illicites et les contournements.

Enfin, l'ensemble de ces dispositions sont maintenant applicables à l'importation (incluant les régimes particuliers), à l'exportation et au transit, de façon à prendre en compte le caractère planétaire de ces engagements.

Liens utiles >>> [Dossier d'information - Substances à impact climatique](#)

[République Française, Direction générale des douanes et droits indirects, 15 juillet 2024](#)

Image: Douanes.gouv.fr

9. Hydrocarbons being sold as F-gas replacements

SPAIN: The authorities in Spain have arrested six people for selling flammable hydrocarbon refrigerants online as replacements for F-gases.

The detainees, from a company in Granada, were said to be selling various types of hydrocarbon refrigerant on the internet, giving incorrect



instructions on their use and handling. They are charged with the crimes of risk of destruction, fraud, document falsification and belonging to a criminal organisation.

Around 30 tonnes of gas were involved in the operation was carried out in the provinces of Alicante, Granada, Lleida and Valencia as part of the Guardia Civil's Operation Ecogas.

The investigations began when the agents detected sales of refrigerant gases on various websites, where they were advertised as substitutes for fluorinated gases for refrigeration and air conditioning.

In a statement, the Guardia Civil said: "The substitution of fluorinated gases by gases originating from hydrocarbons is a highly dangerous practice, in addition to being prohibited for refrigeration and air conditioning equipment, due to the extreme inflammability of these gases.

"The false properties that the announcements attributed to these gases were not correct, since they offered them as substitutes for fluorinated gases and invited buyers to use them themselves, something totally prohibited by the Ministry of Industry, Commerce and Tourism."

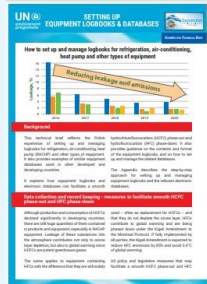
Spain has reported an increase in fires in cars and air conditioners in recent months, which the Guardia Civil attributes due to the prohibited use of this type of refrigerant.

Inspections carried out by the Guardia Civil's environmental police, Seprona, are also said to have exposed "serious errors" in the safety data sheets and incorrect safe storage instructions for these products.

[CoolingPost, 13 July 2024](#)

Image: CoolingPost

[How to set up and manage logbooks for refrigeration, air-conditioning, heat pump and other types of equipment](#) - **Background:** This technical brief reflects the Polish experience of setting up and managing logbooks for refrigeration, air-conditioning, heat pump (RACHP) and other types of equipment. It also provides examples of similar equipment databases used in other developed and developing countries. It explains how equipment logbooks and electronic databases can facilitate a smooth hydrochlorofluorocarbon (HCFC) phase-out and hydrofluorocarbon (HFC) phase-down. It also provides guidance on the contents and format of the equipment logbooks, and on how to set up and manage the related databases. The Appendix describes the step-by-step approach for setting up and managing equipment logbooks and the relevant electronic databases. **This factsheet is available in [English](#) and [Russian](#)**



The image shows the cover of a technical brief titled "How to set up and manage logbooks for refrigeration, air-conditioning, heat pump and other types of equipment". The cover features the UN Environment logo and the title in a blue box. Below the title, there is a bar chart showing "Reduction in logbooks and databases" with a downward arrow. The text on the cover describes the brief's content, including its focus on the Polish experience and its aim to provide guidance on setting up and managing equipment logbooks and databases. It also mentions that the factsheet is available in English and Russian.

FEATURED

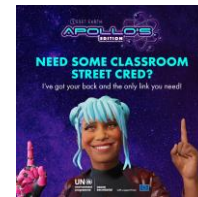


Overview for the meetings of the ozone treaties - Click [here](#) for upcoming and past Montreal Protocol Meetings dates and venues.

Avoided CO₂e - The CO₂e App available from the Ozone Secretariat aims to raise awareness and enhance understanding of the contributions of the Montreal Protocol and its Kigali Amendment to climate change mitigation.



New gaming technology to create environment simulation game for teenagers-The UN Environment Programme's (UNEP) Ozone Secretariat today launched a simulator game and avatar using the latest software technology. [Apollo's Edition](#) is the latest addition to the [Reset Earth education platform](#). Targeting 13-18-year-olds, the free online education material developed provides educators with resources to teach students the importance of environmental protection.



[Online introductory course 'International legal framework on ozone layer protection'](#) - Designed for government representatives and national stakeholders new to the Vienna Convention and Montreal Protocol, students of environmental law, and anyone interested in learning about the ozone treaties, the [online course](#) launched by the Ozone Secretariat aims to provide an introduction to the international legal framework on ozone layer protection.



[Free teaching kits on ozone layer and environmental protection](#)

- New free online teacher toolkits and lesson plans based on the success of UNEP's Ozone Secretariat's [Reset Earth](#) animation and video game
- Targeting Tweens by adopting animation and gamification to create innovative online lessons to raise awareness on ozone layer and environmental protection
- Available online in digital and print format for universal access



Read/download >>> [Ozone Secretariat's education platform](#)

[The UN Environment Assessment Panels](#)

The Assessment Panels have been vital components of ozone protection since the Montreal Protocol was first established. They support parties with scientific, technological and financial information in order to reach decisions about ozone layer protection and they play a critical role in ensuring the Protocol achieves its mandate. The Assessment Panels were first agreed in 1988 to assess various direct and indirect impacts on the ozone layer. The original three panels are:

- [The Technology and Economic Assessment Panel](#)
- [The Scientific Assessment Panel](#)
- [The Environmental Effects Assessment Panel](#)

In the past there were 4 main panels. The Panels for Technology and Economic Assessments were merged in 1990 into one Panel, now called the Technology and Economic Assessment Panel.

Why are the three current panels important to ozone layer protection? Each carries out assessment in its respective field. Every four years, the key findings of all panels are consolidated in a synthesis report. [Learn more >>>](#)

[United Nations Environment Programme \(UNEP\), Ozone Secretariat](#)



The Multilateral Fund for the Implementation of the Montreal Protocol

The Fund is dedicated to reversing the deterioration of the Earth's ozone layer. It was established by a decision of the Second Meeting of the Parties to the Montreal Protocol (London, June 1990) and began its operation in 1991. The main objective of the Fund is to assist developing country parties to the Montreal Protocol whose annual level of consumption of the ozone depleting substances (ODS) chlorofluorocarbons (CFCs) and halons is less than 0.3 kilograms per capita to comply with the control measures of the Protocol. Currently, 147 of the 197 Parties to the Montreal Protocol meet these criteria. They are referred to as Article 5 countries.

The Multilateral Fund is managed by an Executive Committee with equal membership from developed and developing countries. Since the inception of the Fund, the Executive Committee has held 93 meetings. The Fund Secretariat, located in Montreal, assists the Executive Committee in its tasks. Projects and activities supported by the Fund are implemented by four international implementing agencies and a few bilateral agencies.

On 27 October 2023, the Thirty-Fifth Meeting of the Parties to the Montreal Protocol (35thMOP) decided on the replenishment of the Multilateral Fund for the triennium 2024-2026. The Parties agreed on a budget of US \$965 million for the triennium, a record amount.

As at 8 November 2023, the contributions received by the Multilateral Fund from developed countries, or non-Article 5 countries, totalled over US\$ 4.7 billion. The Fund has also received additional voluntary contributions amounting to US \$25.5 million from a group of donor countries to finance fast-start activities for the implementation of the HFC phase-down.

To facilitate phase-out by Article 5 countries, the Executive Committee has approved 144 country programmes, 144 HCFC phase-out management plans (HPMPs), 24 Kigali HFC implementation plans (KIPs), pilot projects to maintain and/or enhance energy efficiency in the context of HFC phase-down and has funded the establishment and the operating costs of ozone offices in 145 Article 5 countries.

New and updated guides and submission forms for the preparation of project proposals:

- Guide for funding requests for preparation of national inventories of banks of used or unwanted controlled substances and a plan for the collection, transport and disposal of such substances [>>>](#)
 - Updated interim guide for the presentation of stage I of Kigali HFC implementation plans (July 2023) [>>>](#)
-

- Updated guide for the presentation of new stages of HCFC phase-out management plans (July 2023) >>>

All guides and submission forms are available [here](#)

- Click [here](#) for the Executive Committee upcoming and past Meetings and related documents.



[OzonAction Compliance Assistance Programme](#) produces and outreaches a wide variety of information and capacity building materials and tools that support the implementation of the Montreal Protocol programs and assist Article-5 countries in meeting the compliance targets. These include publications, technology briefs and factsheets, mobile applications, videos, e-Learning, modelling and database programs and special educational or certification programs.

The section below features several of our most recent products.

Visit [OzonAction website](#) for more information, discover the entire range of products.

[OzonAction: Celebrating International Women's Day, 8 March 2024](#) - on the occasion of **International Women's Day (IWD)**, UNEP OzonAction would like to express our best wishes and sincere thanks to all our female colleagues working in National Ozone Units for your leadership, outstanding dedication, great intellectual input, and tireless work on the Montreal Protocol! This treaty is often referred to as the most successful multilateral environmental agreement to date, and both women and men take equal credit in making this amazing achievement possible. OzonAction is extremely proud of all the female **Ozone Officers, Assistant Ozone Officers, technical experts, and support staff**, as well the women in national stakeholder groups and partner organizations, notably those in the **refrigeration, air conditioning, and customs**. Through your work, you are providing girls and young women who are interested in pursuing careers in environmental protection with a role model by showing them that there are successful women in Montreal Protocol fields – you are indirectly investing in their future. [...]



- [Miruza Mohamed: A Woman Behind the Maldives' Environmental Transformation](#)
- [Samira de Gobert: Leading Change in Environmental Communication and Women's Empowerment](#)
- [Colleen Keyworth - From Family Roots to Industry Beacon: Leading Advocate for Women in HVACR](#)
- [Laura López: Impulsando la implementación del Protocolo de Montreal y la equidad de género en Guatemala](#)
- [Marta Pizano: A trailblazer's path from research to global policy](#)
- [Liazzat Rabbiosi: A Woman Facilitating International Environmental Policy-making](#)
- [Cecilia Mercado: Breaking Barriers-A legacy of environmental leadership and empowerment](#)
- [Sarah Nakanyika: A Woman Leading Cooling Advancement in Zambia](#)
- [Yvette Gauthé: Une femme forte à la tête du Bureau national de l'ozone au Bénin](#)

[Considerations for establishing national HFC Quota System](#) - As HFC consumption in most countries is determined by their import, this document aims to highlight guiding principles and key aspects that countries need to consider when developing their import quota system. The underlying principles and approaches are equally applicable for production and export quota allocation. **Read/download the [full document](#)**



[Every Action Counts: Kigali Amendment - UNEP 2022](#) - This brochure targets the general public and explains in a simplified manner what the Montreal Protocol and its Kigali Amendment signify. It includes some actions that everybody can do to support the Kigali Amendment. It also covers the relationship between the Kigali Amendment and Sustainable Development Goals. It introduces some examples of successful communication campaigns on the Kigali Amendment. [English](#) / [Spanish](#)



[Gender Mainstreaming in the Montreal Protocol: Experiences in Latin America and the Caribbean](#) - Taking into account that women and girls constitute half of the world's population and, therefore, represent half of the potential and innovation necessary to face the "triple planetary crisis" – climate change, nature and biodiversity loss, pollution and waste –, positioning people and the planet as central pillars of the transformation necessary to overcome it, and considering the guiding principles and the scopes of action of the Operational Policy on Gender Mainstreaming of the Multilateral Fund, the United Nations Environment Programme (Latin America and the Caribbean Office). [English](#) / [Spanish](#)



Refrigeration, Air-Conditioning, and Heat Pumps (RACHP) Associations & Organizations: This Knowledge Map provides a global directory of RACHP associations, societies, and organisations around the world. These are key stakeholders for ensuring safe and efficient refrigerant transitions. **Local Technical & Vocational Education and Training (TVET):** This Knowledge Map provides a global directory of TVET entities and centres around the world. These are the strategic partners for conducting and promoting training and certification programmes related to the refrigeration servicing sector.



Click [HERE](#) to access the OzonAction Knowledge Maps tool
 Click [HERE](#) to download the OzonAction Knowledge Maps tool flyer

Gas Card Tool: Web-based Visual Printable Cards of Refrigerant Gases

Content of Gas Cards - Each Gas Card is printable (in PDF or image format) and includes the following information about each substance/gas: a) General Characteristics (Chemical name, formula and type, ASHRAE designation, Trade names, Harmonized System (HS) codes, Chemical Abstract Service (CAS), United Nations (UN) numbers, Blend/ mixture components, Montreal Protocol Annex and Control measures, main usage, etc.) b) Gas Performance—Radar Chart (in terms of: Ozone depleting potential-ODP, Global warming potential- GWP, Toxicity Class & Flammability Class) c) Environmental and Safety Impact, and Safety Impact (with visualization of Toxicity & Flammability Class, Hazardous Symbols).



More Information - The Gas Card web-based tool is part of UNEP OzonAction’s portfolio of activities and tools to assist various stakeholders in developing countries, including customs officers and technicians, to achieve and maintain compliance with the Montreal Protocol on Substances that Deplete the Ozone Layer. In the left navigation bar of the Gas Card tool web page, you will find a list of commonly used HFCs and HFC Blends in different sectors. *

Using the Gas Card web-based tool

- The Gas Card tool is available online on the [OzonAction website](#)
- Read the full [2021 annual iPIC report](#)
- See the [flyer](#) introducing the new iPIC platform

* Based on the Overall Analysis of the Results of the Survey of ODS Alternatives Report (conducted in 119 countries from 2012 to 2015)



[HCFC Quota and Licence Tracker](#) - a new desktop application to assist with HCFC licences and quotas

National Ozone Officers have the great responsibility of managing the allocation and monitoring of quotas for substances controlled under the Montreal Protocol. This process can be complex with many importers, especially if the country imports a range of different hydrochlorofluorocarbons (HCFCs) and

mixtures containing HCFCs. To address this challenge, OzonAction developed a new desktop application that helps Ozone Officers with the tasks of planning, calculating, monitoring and managing consumption quotas and licences. It can be used on a daily basis to track and manage the current year’s quota allocations for different importers, or for future planning by trying different scenarios that adjust the type of substances imported, their quantity, or the number of importers. The HCFC Quota and Licence Tracker allows Ozone Officers to see the effect of such scenarios on the

national HCFC consumption and helps ensure that the quotas stay within agreed HCFC Phase-out Management Plan (HPMP) targets. For countries that have ratified the Kigali Amendment, in the future OzonAction will extend the tracker to include hydrofluorocarbons (HFCs) once countries begin designing their quota systems for those controlled substances. **Access the:**

- [HCFC Quota tracker app](#)
- [Flyer for more information on the tracker](#)
- [Short video tutorial on the OzonAction YouTube Channel](#)

[GWP-ODP Calculator Application](#) - Updated- “Quickly, efficiently and accurately convert between values in metric tonnes, ODP tonnes and CO₂-equivalent tonnes” - Data are extremely important for the Montreal Protocol community, and the data reporting formats for both A7, and CP have changed recently, to a large degree triggered by the Kigali Amendment. HFCs, blends, CO₂-equivalent values, etc, now have to be addressed much more frequently by Ozone Officers during their daily work. Sometimes the terminology and values are complex and can be confusing, and it helps to have all the official facts and figures in one place. Conversion formulas need to be applied to calculate CO₂-eq values from both GWP and metric tonne values. This free app from OzonAction is a practical tool for Ozone Officers to help demystify some of this process and put frequently needed information at their fingertips.



What's new in the app:

- An updated more user-friendly interface
- Multilingual interface: English, French and Spanish
- A new **Kigali Amendment mode** - in this mode the GWP values used to calculate the refrigerant blends/mixtures only include GWP contributions from components that are controlled HFCs
- Latest updated ODP and GWP values from the recent reports from the Montreal Protocol technology and scientific expert panels as well as the Intergovernmental Panel on Climate Change (IPCC) reports
- References added for sources of all values
- New refrigerant mixtures (with ASHRAE -approved refrigerant designations)

If you already have the application installed on your device, be sure to update to benefit from the new features. The app can be viewed in English, French or Spanish.



Smartphone Application: Just search for “GWP-ODP Calculator” or UNEP in the Google Play store or use the QR code – free to download! If you already have the application installed on your device, be sure to update to benefit from the new features.



Desktop Application: GWP-ODP Calculator is also available online on the [OzonAction website](#)



Watch the new short introductory tutorial **video** on the GWP-ODP Calculator - available now on [YouTube](#)

>>> Read/download the flyer

Updated OzonAction "WhatGas?" Mobile App

The OzonAction 'WhatGas?' application is an information and identification tool for refrigerants gases: ozone depleting substances (ODS), HFCs and other alternatives. It is intended to provide some stakeholders, including Montreal Protocol National Ozone Officers, customs officers, and refrigeration and air-conditioning technicians with a modern, easy-to-use tool that can be accessed via mobile devices or the OzonAction website to facilitate work in the field, when dealing with or inspecting ODS and alternatives, and as a useful reference tool.



This latest release includes the 2022 Harmonized System (HS) Codes for HFCs and blends, which facilitates the process of inspection and identification of controlled and alternative substances.

Scan the QR code to download the app (*currently available for Android devices only*). If you've already downloaded the app, to update visit the [Google Play Store](#)

[RAC Technician Videos](#) - Full length films! Two 'full length' videos for refrigeration and air-conditioning (RAC) sector servicing technicians: on 1) Techniques, Safety and Best Practice and 2) Flammable Refrigerant Safety.

The OzonAction Refrigeration and Air-Conditioning Technician Video Series consists of instructional videos on techniques, security and best practice and flammable refrigerant safety. They are intended to serve as a complementary training tool for RAC sector servicing technicians to help them revise and retain the skills they have acquired during hands-on training. The videos are not intended to replace structured formal technician training, but to supplement and provide some revision of tips and skills and to build on training already undertaken.



These videos are based on the successful UNEP OzonAction smartphone application, the RAC Technician Video Series app. Following many requests to make the videos more versatile and better suited to classroom and training settings, OzonAction has responded to this demand and produced two 'full-length' instructional videos.

You may wish to share this message and the flyer with:

- Your national/regional RAC associations
- Training or vocational institutes
- Master RAC trainers in your country
- Any other interested national stakeholders



You can watch these videos on the OzonAction YouTube Channel:

- [Techniques, Safety and Best Practice](#)
- [Flammable Refrigerant Safety](#)



The videos are also available for download by request from UNEP OzonAction: unep-ozonaction@un.org



If you prefer to access the video clips via the OzonAction smartphone application, just search for “RAC Technician Video Series” or UNEP in the Google Play Store and iTunes/App Store or scan the QR code –**Free to download!** The flyer is available from the [OzonAction website](#).

[OzonAction’s iPIC platform - Updated](#) Collaboration between China and Thailand using OzonAction’s informal Prior Informed Consent (iPIC) system has resulted in the prevention of a huge consignment of ozone-depleting and climate damaging hydrochlorofluorocarbons (HCFCs). Those chemicals, which are primarily used as refrigerants for air conditioners and fridges, are controlled under the Montreal Protocol on Substances that Deplete the Ozone Layer and are being phased out by all countries according to a specific timeline.



[Women in the refrigeration and air-conditioning industry: Personal experiences and achievements](#) The United Nations Environment Programme’s (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. All of the professionals presented in the booklet are pioneers. They are role models whose stories should inspire a new generation of young women to enter the weld and follow in their footsteps. **Read/download the [publication](#)**



As part of IIR and UNEP OzonAction's partnership, a set of Cold Chain Technology Briefs was released over the past few years, which includes in-depth summaries about the cold chain in different key sectors. They include descriptions of technology, refrigerant options and trends and conclude with prospects and challenges. They cover the main cold chain sub-sectors, i.e., [Production & Processing](#), [Cold Storage](#), [Transport Refrigeration](#), [Commercial & Domestic](#), and [Fishing Vessels](#). **Download the Cold Chain Technology brief in [English](#) | [French](#) | [Russian](#) | [Spanish](#)**



PUBLICATIONS

[Results of a Worldwide Survey about Women in Cooling Released by IIR and UNEP OzonAction](#) - Refrigeration, Air-Conditioning, and Heat-pumps (RACHP) are crucial for our health, nutrition, comfort, and well-being. It is one of the sectors that crosscuts many of the UN sustainable development goals and can contribute significantly to safeguard the environment, advance welfare of humanity and support the growth of employment and economics worldwide. Women are highly under-represented in this sector as indicated by the fact that only 6% of the members of national refrigeration associations/organisations/institutions are women. In order to better understand the background, motivation, challenges, and opportunities faced by women working in RACHP a worldwide survey was undertaken by the International Institute of Refrigeration (IIR) and



OzonAction of UN Environment Programme (UNEP) in cooperation with several partners. **Read/Download the Full [Report](#)**

[Sustainable Food Cold Chains: Opportunities, Challenges and the Way Forward](#)-This [UNEP-FAO] report explores how food cold chain development can become more sustainable and makes a series of important recommendations. These include governments and other cold chain stakeholders collaborating to adopt a systems approach and develop National Cooling Action Plans, backing plans with financing and targets, implementing and enforcing ambitious minimum efficiency standards. At a time when the international community must act to meet the Sustainable Development Goals, sustainable food cold chains can make an important difference.



[Legislative and Policy Options to Control Hydrofluorocarbons](#) - In order to follow and facilitate the HFC phase-down schedules contained in the Kigali Amendment, the Parties, including both developed and developing countries, will have to implement certain measures. This booklet contains a recommended set of legislative and policy options which the developing (Article 5) countries may wish to consider for implementation. It is intended to be a guide/tool for countries. [Read/download](#)



[Green Cooling in public procurement](#) How to advance the procurement of climate-friendly and energy-efficient cooling equipment in the public sector? Air conditioning in public buildings is often responsible for around 50% of total electricity consumption. Switching to climate-friendly cooling technologies ("Green Cooling") can reduce costs and energy consumption and improve the carbon footprint of public buildings. This study takes a closer look at the benefits of Green Cooling in the public sector and discusses current barriers and possible solutions. The information presented provides a solid basis to revise current procurement criteria for sustainable cooling systems in public buildings. [Read/Download](#)



[Protecting the Ozone Layer - 35th Anniversary Edition](#) - a new book celebrating the 35th Anniversary of the Montreal Protocol. **The electronic version (Kindle Edition) of the book has become available for purchase \$3.03 on Amazon.** The book highlights successes and documents innovation during the first 35 years and inspires new ambition to strengthen protection of stratospheric ozone and climate before Earth passes tipping points. The book tells the story of the Montreal Protocol, revealing a model of cooperation, collaboration, universal ratification, record of compliance with over 99 per cent of controlled ozone-depleting substances (ODSs) phased out, the ozone layer on the path to recovery, the 2007 Montreal Adjustment, and the 2016 Kigali Amendment moving the Montreal Protocol further into environmental protection. Unfinished business includes: HCFC phase out, ODS bank management, HFC phase down, uncontrolled ozone-depleting greenhouse gas nitrous oxide (N₂O), feedstock exemptions for plastics production, and dumping of obsolete cooling appliances.



The International Institute of Refrigeration (IIR) **[IIR Activity Report 2023 | Rapport d'activité de l'IIR - 2023](#)** is available online. It is a must-read for everything you need to know about advances in the field of refrigeration! Read/Download the full report to discover the IIR's actions and achievements in 2023 in its quest for a cooler, greener and more sustainable future! [English](#) | [French](#)





Click [here](#) for recent OzoNews Issues

[Request a PDF](#) of the current issue



[Subscribe to OzoNews](#)

Disclaimer:

The United Nations Environment (UNEP), Law Division, OzonAction, provides OzoNews as a free news clipping service for the members of the Montreal Protocol community under UNEP's mandate as an Implementing Agency of the Montreal Protocol's Multilateral Fund. Since its inception in January 2000, the goal of OzoNews is to provide current news relating to ozone depletion and the implementation of the Montreal Protocol, to stimulate discussion and promote cooperation in support of compliance with this multilateral environmental agreement. With the exception of items written by UNEP and occasional contributions solicited from other organizations, the news is sourced from on-line newspapers, journals, and websites.

The views expressed in articles written by external authors are solely the viewpoints of those authors and do not represent the policy or viewpoint of UNEP. While UNEP strives to avoid inclusion of misleading or inaccurate information, it is ultimately the responsibility of the reader to evaluate the accuracy of any news article in OzoNews. The citing of commercial technologies, products or services does not constitute endorsement of those items by UNEP.

If you have questions or comments regarding any news item, please contact directly the source indicated at the bottom of each article.

Prepared by: Samira Korban-de Gobert
Reviewed by: James S. Curlin

If you wish to submit articles, invite new subscribers, please contact:
Samira Korban-de Gobert, samira.degobert@un.org



UNEP, OzonAction, 1, rue Miollis, Bldg. VII – 75015, Paris • France