

OzoNews

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

Volume XXV | 15 January 2025

OzoNews Turns 25!

In January 2000 UNEP OzonAction launched its e-news service: 'OzoNews'. Twenty-four years later, almost to the day. We are proud to provide the most recent edition of this bi-monthly information service to celebrate its continuous dissemination.



OzoNews brings you current information and updates related to the Montreal Protocol and ozone and climate protection, Science and technological advances, News stories, Montreal Protocol and Multilateral Fund updates, UNEP and other Implementing Agencies meetings and activities, Upcoming events, and much more ...

OzonAction is delighted to bring you the OzoNews 25th anniversary edition. Thank you for your continued interest, feedback, and invaluable support throughout the years. We wish all our readers a successful and productive year 2025. OzoNews Turns 25!

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GLOBAL

1. A Tribute to Janusz Kozakiewicz: A Friend and Dedicated Expert of the Montreal Protocol

It is with profound sadness and regret that we share the sad news of the passing away of our dear friend, esteemed policy expert, and supporter, Janusz Kozakiewicz on 9 January 2025. Janusz was a strong voice for the environment and the Montreal Protocol and a longstanding collaborator of UNEP OzonAction.



Over the decades, Janusz supported the regional networks, produced policy guidelines and publications, and supported countries establishing their Montreal Protocol related legislation. His unexpected and untimely passing is a big loss for the Ozone Community.

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It was both a privilege and a pleasure to know such an extraordinary individual and to work alongside him. His personality exemplified kindness, helpfulness, modesty, wit, and professionalism. In particular, he supported the Montreal Protocol Network for Europe and Central Asia (ECA) since its inception over two decades ago. He consistently kept the countries informed about relevant legislation and initiatives within the European Union and Poland.

In the ECA WhatsApp Group, many Montreal Protocol Officers have shared heartfelt condolences and expressed their grief over this loss. On behalf of UNEP OzonAction and the ECA network, we extend our sincere condolences, deepest sympathies, and compassion to Janusz's wife, family, and friends during this difficult time.

Janusz will be deeply missed and will forever hold a special place in our memories.

See also: [Janusz Kozakiewicz, UNEP Ozone Secretariat](#)

Source: [UNEP OzonAction](#), 14 January 2025

Image: UNEP OzonAction, ECA

2. Illegal HFC trade: over 344 tonnes of seized ODS and HFCs



Led by the World Customs Organization (WCO) in collaboration with 17 national customs administrations, operation DEMETER X resulted in 99 Montreal Protocol related seizures in the second semester of 2024, representing over 344 tons of seized ODS and HFCs.

Led by the World Customs Organization (WCO) since 2009, the DEMETER Operations are aimed at intercepting illegal shipments of hazardous waste, especially plastic waste, as well as ozone depleting substances (ODS) and hydrofluorocarbons (HFCs) that contribute to global warming and environmental degradation.

In the second semester of 2024, the tenth iteration of WCO Operation DEMETER saw the participation of a record 110 Customs administrations and led to 450 seizures [1]. In 2023, DEMETER IX had involved 106 Customs administrations and led to the detection of 338 infringement cases [2].

The 2024 operation included 324 seizures of waste, 99 seizures of ODS, HFCs and equipment containing or relying on controlled substances under the Montreal Protocol, and 27 seizures of other commodities, including restricted or prohibited commodities such as hazardous chemicals.

HFCs were the most prominently trafficked commodities, both in terms of the number of seizures and the quantity seized. In terms of quantities, over 344 tonnes of ODS & HFCs, and 24 tonnes and 11,620 pieces of equipment containing or relying on controlled substances were seized.

Cooperation is required at the international level, but also nationally, with agencies in charge

of implementing regulations on the movement of the targeted products. 17 national customs administrations reported seizures related to substances controlled under the Montreal Protocol and the Kigali Amendment. Administrations from Gambia, Bulgaria and Italy stood out in the number of seizures they reported. In terms of the quantity seized, Sri Lanka took first place, followed by Italy and North Macedonia.

Sources

[1] [World Customs Organization. Operation DEMETER X.](#)

[2] [World Customs Organization. Operation DEMETER](#)

Image credits: World Customs Organization

Source of article: [IIR](#), 9 January 2025

3. 2025 International Special Issue – Empowering RACHP workforce for the future Transition

We are pleased to share with you the 2025 International Special Issue, the joint international publication from UNEP, IIR, AREA, CSG under the auspices of Italian Ministry for Environment and Energy Safety.

This is our 10th edition focusing on the need to strengthen the RACHP workforce for the future challenges of the sector. The Journal presents 24 sector-specific articles with contributions from global associations, institutions and organizations (such as AREA, AHRI, ASHRAE, ISHRAE, EPEE, FAIAR, U-3ARC..).



The Publication has been introduced at Chillventa 2024, and has been officially launched at MOP36 – the 36th Meeting of the Parties to the Montreal Protocol in Bangkok, where it has been handed out to all Heads of State, UN Representatives and the main International Experts. It has been also presented during several Side Events and available at UNEP's booth.

[Read it online](#)

Source: [INDUSTRIA & formazione](#)

Image: INDUSTRIA & formazione

AFRICA

4. Future of technician training and certification

The Southern African Development Community Refrigeration and Air Conditioning (SADC RAC) association held a workshop in Johannesburg in November. This is Part 5 of a seven-part article.

David Botha, the executive director of both the South African Qualification and Certification Committee (SAQCC) and the South African Refrigeration Air Conditioning Contractors' Association (SARACCA), noted that in the coming years he anticipates more training initiatives aimed at bridging the gap between informal experience and formal qualifications. He noted that the industry is already working with training providers to develop curricula for new refrigerant systems, such as CO2 and ammonia, and ensure that all technicians receive up-to-date training on emerging technologies. As more specialised systems become common, the need for technicians who can handle these systems safely and efficiently will increase, and proper certification will become even more important.

For now, Botha pointed out that the C-level certifications are reserved for qualified engineers and designers who are responsible for the more advanced technical aspects of system design and installation. These professionals must hold the relevant engineering qualifications to work in the industry at this level, ensuring that they have the technical expertise to design

complex systems and oversee their implementation.

One of the major issues, Botha pointed out, is the shortage of training centres. This problem is not unique to South Africa, as many countries around the world face similar difficulties in providing sufficient training opportunities for technicians. In South Africa, while the database currently holds around 7 000 registered practitioners, this number is a small fraction of the actual workforce. According to Botha's estimates, the true number of professionals working in the industry could be as high as 40 000 to 50 000, but many of these individuals are not properly registered or certified.

He also noted that some workers, particularly those working informally or on smaller jobs, are handling refrigerants illegally. For example, technicians working on car air conditioning systems by the roadside may not be certified but continue to do so. Botha stressed that this issue is not just a South African problem but is seen globally, and it highlights the importance of better regulation, training, and enforcement to ensure all workers are qualified.

As part of the industry's efforts to improve compliance, Botha discussed how SARACCA and SAQCC Gas are working together to implement initiatives like that announced by director Molefe for the 402 trainees. This programme aims to train more individuals who can write out Certificates of Conformity (CoCs), which are necessary for those working on HVAC&R systems. Currently, newcomers must complete five-day courses to become certified, and renewals for practitioners are typically two-day courses. These short courses help technicians stay up to date with regulations and safe practices.

Botha acknowledged that the existing training providers (14 in South Africa) cannot keep up with the demand for skilled workers. He emphasised the importance of training more people and developing better ways to reach larger numbers of technicians across the country. One of the solutions being developed is e-learning. SARACCA is working on an e-learning platform to provide online training for basic concepts, which would allow trainees to learn from home. The goal is to offer flexibility so that technicians can learn while continuing to work, thus minimising their time away from their jobs and incomes.

[Continued in Part 6...](#)

[Continued in Part 7...](#)

Source: by Kristin Long, [RACA Journal](#), 8 January 2025

ASIA AND THE PACIFIC

5. Economic Coordination Committee bans ozone-harming materials



Federal Minister for Finance and Revenue, Senator Muhammad Aurangzeb, chaired a meeting of the Economic Coordination Committee (ECC) of the Cabinet in Islamabad on January 6, 2025 — PID

ISLAMABAD: The Economic Coordination Committee (ECC) of the cabinet decided on Monday to immediately ban ozone-depleting insulation and foaming materials — polyol blended with hydrochlorofluorocarbons (HCFCs) — due to climate concerns.

The committee also approved supplementary grants totalling Rs10 billion. The meeting of the ECC, presided over by Finance Minister Muhammad Aurangzeb, also repeated its Aug 15 15, 2024, decision that approved the grant of industry status to the warehousing and logistics sector.

The meeting did not allow continuation of the PM's subsidy scheme for Utility Stores Corporation.

Committee decides to discontinue PM's subsidy scheme at Utility Stores

The finance minister expressed displeasure when the summary on warehousing and logistics sector was brought up and showed concern over the non-implementation of the ECC's previous decision even after a passage of almost five months. "The ECC reiterated its previous decision made on Aug 15, 2024, whereby the summary containing proposal of declaring warehousing as industry was approved," an official statement said.

As head of the ECC, the finance minister lectured the participants over the importance of "timely policy measures to address critical economic, energy and industrial needs with a focus on transparency and efficiency in implementation".

The commerce ministry requested the ECC to ban the import of polyol blended with HCFC-141b and HCFC-142b because of its adverse impact on environment. These materials are in vast use in the refrigeration, insulations and foaming sectors and many countries had banned their use two to three decades ago.

The meeting was told that alternative materials were available in many countries and since a number of domestic industries had also graduated to those materials, there would be no problem for the market to make adjustments.

Therefore, the ECC approved the ban with effect from the end of this month, but directed that all legal and procedural requirements be completed within two weeks. The committee also instructed the ministry of climate change to consult the ministry of industries and production to ensure that there was sufficient time for the industry concerned to be properly informed.

The meeting decided that "no new letters of credit (LCs) for the banned chemicals shall be opened" any longer.

Money for PSDP projects

The ECC approved eight supplementary grants worth Rs10bn. The list included an unspecified grant of Rs1.945bn allowed to the defence ministry.

The meeting also approved a grant of Rs5.276 million to the National Commission on the Status of Women (NCSW), which involved the reallocation of funds from the Ministry of Human Rights (MoHR). The funds would be purportedly used for women empowerment and gender equality.

The ECC approved a request by the information ministry for a Rs2.462bn grant to facilitate the execution of 15 projects under the Public Sector Development Programme (PSDP) for 2024-25.

The ministry came up with a proposal to clear outstanding liabilities for the "Korean Culture Week" event and the 23rd Shanghai Cooperation Organisation's (SCO) Council of Heads of Government (CHG) meeting held in Islamabad last year.

Due to insufficient budgetary allocations under operational heads, liabilities amounting to Rs25 million for the culture week and Rs95.822m for the SCO CHG meeting remain unpaid.

The ECC approved the Rs120.822m grant.

The committee gave its approval to a request by the ministry of interior for a Rs650.357m grant to cover security arrangements and maintain law and order during the Shanghai Cooperation Organisation Summit, repair safe city cameras damaged during violent protests, and address other law enforcement needs.

The meeting approved a Rs1.5bn grant to the Ministry of Federal Education and Professional Training to increase the salaries of faculty members under the Tenure Track System, which had not been revised since 2021.

The committee okayed a payment of \$6.170m (about Rs1.72bn) to Huawei Technologies Co of China through a supplementary grant by the interior ministry to clear the remaining five per cent of the contract cost for the Safe City Project Islamabad, as directed by the Islamabad High Court.

The ECC rejected a request by the Ministry of Industries to continue the Prime Minister's Relief Package through the Utility Stores Corporation (USC) in 2024-25. "The ECC approved a payment of Rs1.679bn to cover expenses incurred by USC between June 30 and Aug 18, 2024, on condition that the subsidy is budgeted for this year, and no further expenditures would be carried beyond this period," a statement said.

6. Experts warn of dire skills shortage threatening air conditioning and refrigeration industry this summer



Australia has less qualified refrigeration and air conditioning tradespeople — or "fridgies" — than needed to meet demand. (Supplied: Regal Air-Conditioning)

A dire skills shortage is threatening our air conditioning industry, a frightening prospect as [heatwaves descend](#) across large parts of Australia.

Almost \$19 billion a year is [spent on keeping us cool](#), but [government data shows](#) around 26,000 of the national workforce is employed as air conditioning and refrigeration mechanics, despite millions of cooling units being sold.

Ron Conry joined the industry in the 1960s, earning an Order of Australia Medal for inventing a component that's now used by every aircon manufacturer in the world.

His business partner Sam Ringwaldt boasts two decades of experience and the duo know air conditioning is transitioning "from being a luxury item to a necessity".

Mr Conry said consumers had increasingly adopted a "throwaway mentality", meaning most technicians or "fridgies" were kept busy installing new equipment.

[High demand for aircon parts](#) last summer — ordered through suppliers that had only just recovered from pandemic-era shortages — culminated in a "near impossible" situation for many Queensland businesses.

Supply has returned to normal, but now the industry is battling a lack of qualified tradies. [Read more...](#)

Source: [ABC News by Gemma Ferguson](#), 5 January 2025

Image: ABC News

EUROPE AND CENTRAL ASIA

7. EC rejects call to review F-gas regulation

EUROPE: The European Commission has refused a call to re-evaluate the F-gas regulation 2024/573 in the light of a slump in heat pump sales.

Italian MEP Isabella Tovaglieri questioned the ban on HFCs and HFOs when heat pump manufacturers were making cuts in production as a result of the downturn in sales.



The MEP argued that the entry into force of the bans was conditional on a re-evaluation of the technologies available on the market and their effectiveness on the basis of a report to be published by the Commission 2030. She asked whether, with a six-year wait for the report, the Commission should provide the industry with greater regulatory certainty to enable it to

plan. Also, Tovaglieri questioned whether the phasing out of HFOs should be reconsidered in the light of the objectives of the Energy Performance of Buildings Directive with regard to the decarbonisation of buildings.

In a written response, Wopke Hoekstra, the Dutch commissioner responsible for climate, net zero and clean growth, recognised the drop in heat pump sales but insisted that it was not linked to the new F-gas regulation.

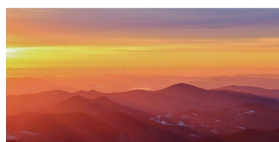
“All the included prohibitions are expected to be feasible from the date they apply and are providing legal certainty to manufacturers of such equipment,” Hoekstra said. “It is noted that the sales declined for various reasons, eg falling gas prices. However, the drop in sales is not linked to the new F-gas Regulation that only entered into force in March 2024. Consequently, the Commission does not see any reason to deviate from the legal requirement to review the F-gas Regulation by 2030.”

Source: [Cooling Post](#), 8 January 2025

Image: Cooling Post

8. Digital path to sustainable cooling: efficiency meets environment

Belgrade, Serbia, 13 December 2024 - The members of UNEP’s Regional Network for Europe and Central Asia (ECA) were able to see the benefits of advanced refrigeration, air conditioning, and heat pump (RACHP) technology firsthand during the 55th International HVAC&R Congress and Exhibition in Belgrade, which was organized by the Serbian Refrigeration Association KGH.



Thanks to presentations and hands-on demonstrations from technology providers, the Montreal Protocol Officers from the region were able to see how modern digital solutions can help them achieve ozone protection, climate mitigation, and energy efficiency benefits.

The officers were in Belgrade to participate in the ECA Kigali HFC Implementation Plan / Ozone2Climate meeting, which UNEP OzonAction organized from 11-13 December in parallel with the congress. The meeting was financially supported by the Montreal Protocol’s Multilateral Fund. RACHP technology was front and center in the discussions.

In an era where energy efficiency is critical to reaching sustainability goals, the integration of digitalisation, Internet of Things (IoT) systems, Machine Learning (ML), Artificial Intelligence (AI), and innovative methodologies present unprecedented opportunities to enhance efficiency and combat climate change. These advancements, which were unimaginable just a few years ago, now empower industries to optimize resource utilization, minimize negative impacts on the environment, and pave the way toward a greener future. The RACHP industry is no exception, and the paradigm shift is approaching.

With RACHP systems accounting for over 20% of global electricity consumption, optimizing and monitoring their performance is critical to achieving energy efficiency and sustainable development goals. While outdated equipment often requires replacement due to age, loss of efficiency, and physical degradation, the reality is that a significant share of both older and newly installed systems operate far below their rated performance. Addressing the gap through advanced monitoring technologies and improved maintenance practices can unlock substantial energy savings and contribute to a greener future. [Read more...](#)

Source: [OzonAction Branch](#), 20 December 2024

Image: by NASA on Unsplash

9. AREA: Women in cooling video competition – 3rd edition!

AREA and **World Refrigeration Day** (WRD) have launched the third edition of the video competition on best practices for EU women in cooling. The challenge is to provide a video on one of the following themes:

- Category A - RACHP Best Practice Mastery: Handling of a refrigeration, air conditioning or heat pump system
- Category B - RACHP Design Excellence: Design and application of RACHP systems.

The video must be posted privately on [AREA’s Facebook page](#): “AREA” or sent to info@area-

eur.be by Sunday, 4 May 2025 at midnight.

All European languages are welcome.

Good luck to our EU women in cooling!

More information [HERE](#).

Source: [AREA](#)

Image: AREA



NORTH AMERICA

10. Earth's air war: Explaining the delayed rise of plants, animals on land



A new Yale study finds that a destabilized ozone layer may have delayed the rise of land animals and plants on Earth.

If you like the smell of spring roses, the sounds of summer birdsong, and the colors of fall foliage, you have the stabilization of the ozone layer to thank for it. Located in the stratosphere, where it shields the Earth from harmful ultraviolet radiation, the ozone layer plays a key role in preserving the planet's biodiversity.

And now we may have a better idea of why that took so long — more than 2 billion years — to happen.

According to a new, Yale-led study, Earth's early atmosphere hosted a battle royale between iodine and oxygen — effectively delaying the creation of a stable ozone layer that would shield complex life from much of the sun's ultraviolet radiation (UVR).

The new theory, described in a study in the journal *Proceedings of the National Academies of Science*, may solve a mystery that has puzzled scientists for hundreds of years.

"The origin and diversification of complex life on Earth remains one of the most profound and enduring questions in natural science," said Jingjun Liu, a doctoral student in Earth and planetary sciences at Yale and first and corresponding author of the new study.

Indeed, scientists have long wondered why land plants did not emerge on Earth until 450 million years ago, even though their progenitors, cyanobacteria, had been in existence for 2.7 billion years. Likewise, there are no fossils for complex land animals or plants before the Cambrian era (541 to 485 million years ago) despite the evidence of much older microfossils.

"The only existing explanation states that this delay is an intrinsic characteristic of evolution

— that an enormous amount of time is required,” said Noah Planavsky, a professor of Earth and planetary sciences, faculty member of the Yale Center for Natural Carbon Capture, and senior author of the new study. “Yet that notion fails to explain how and why complex life originated and diversified.”

The new study suggests that something beyond the need for time was responsible: the delayed stabilization of Earth’s ozone layer, caused by elevated marine iodine concentrations that prevented a protective UVR shield from forming in the atmosphere.

Ozone production depends on atmospheric oxygen and background UVR. It has been widely accepted by scientists that once Earth established a substantial concentration of atmospheric oxygen, the planet formed an ozone layer that allowed for biological evolution to proceed unimpeded.

“We challenge this paradigm by considering how Earth’s evolving iodine cycle may have influenced ozone abundance and stability,” Liu said.

For the study, a Yale-led research team analyzed multiple lines of independent geological evidence and developed an ocean-atmosphere model to reconstruct the iodine-ozone dynamics for the early Earth. The researchers found that elevated marine iodide content (formed when iodine combines with another element to form a salt) prevailed through most of Earth’s history, which would have led to significant inorganic iodine emissions into the atmosphere after the rise of oxygen — with the potential for disrupting ozone.

The mechanism of ozone destruction by iodine is similar to the process by which chlorofluorocarbons (CFCs) created the “ozone hole” over Antarctica. When CFCs undergo photolysis, they release reactive chlorine, which catalytically destroys ozone in the stratosphere, leading to as much as a 50% depletion over continental Antarctica at the peak of the problem.

“Iodine-driven catalytic cycles for ozone destruction follow a similar process and are kinetically much faster than those involving reactive chlorine,” Planavsky said. “Our photochemical calculations indicate that even a moderate increase in marine inorganic iodine emission could result in a whole atmosphere ozone depletion by tens or even hundreds of times relative to modern levels.”

Liu noted that at a global scale, unstable and low ozone levels likely persisted from 2.4 billion years ago until roughly half a billion years ago. “During this interval, even under high levels of oxygen production, atmospheric ozone could have been very low and was likely unstable, leading to periodic or persistent high fluxes of solar UVR at Earth’s surface,” Liu said.

Dalton Hardisty of Michigan State University, James Kasting of Pennsylvania State University, and Mojtaba Fakhraee of Yale are co-authors of the study.

Related: [Evolution of the iodine cycle and the late stabilization of the Earth’s ozone layer](#), PNAS, 6 January 2025

Source: [YaleNews](#), by [Jim Shelton](#), 6 January 2025

Image: YaleNews

11. DOD invests \$90M in hydrofluorocarbons to support military operations

RICHMOND, Va. — The Department of Defense has made a significant investment in hydrofluorocarbons, a crucial component in various military applications, including air conditioning systems, refrigeration and fire suppression.

The \$90 million investment will enable the Defense Logistics Agency to stockpile HFCs, which are essential for supporting military operations worldwide.

According to Brian M. Howard, the Department of Defense Ozone Depleting Substances Program Manager, the investment is a response to the American Innovation & Manufacturing Act, which regulates the production and consumption levels of HFCs. The AIM Act aims to reduce the environmental impact of HFCs, which have a high global warming potential.

The DLA’s ODS Program Office, currently managed with four government full-time employees and a dedicated contractor at DLA Aviation, will manage the HFC inventory. The office will add two new government employees to its team to assist with managing the additional products.

Howard praised his team, consisting of retired military personnel and a former law enforcement officer, for their dedication and commitment to supporting the warfighter.

"I could not ask for a stronger, more dedicated group of people to work with," he said. "We all understand what it is like being on the front lines, and that drives all of us to do whatever is required to see that the Warfighter's needs are met."

The HFC storage facility will be established in phases, with the initial phase utilizing a vacant DLA Distribution facility in Richmond. The DLA will continue to supply HFCs to its military customers through the Industrial Gas Program, but the new repository will provide a secure and reliable source of HFCs for future needs.

HFCs are used in various military applications, including air conditioning systems, refrigeration, and fire suppression. The military services and government agencies rely on these systems to maintain operational readiness and ensure the safety of personnel and equipment.

The DLA's ODS Program Office also manages the Ozone Depleting Substances Reserve, which includes finite inventory of ODS that are no longer produced or imported. The ODS are used in similar applications as HFCs, including air conditioning systems, refrigeration, fire suppression, and precision cleaning. The ODS Program Office ensures that excess or used ODS are returned and reclaimed to specifications, making them available for issue again.

The storage facilities for both HFCs and ODS are secure and protected by the DLA Police force. The ODS Program's dedicated support contractor conducts regular visual and electronic leak detection to ensure the safe handling and storage of these gases.

The investment in HFCs marks a significant step towards ensuring the continued support of military operations while reducing the environmental impact of these substances. As the military services and government agencies transition to alternative technologies, the DLA's ODS Program Office will play a critical role in managing the phase-out of ODS and the introduction of new, more environmentally friendly substances.

Source: [Defence Logistics Agency](#), 7 January 2025

12. Ringing in 2025 with Big Changes and a Few Challenges

Regulations mean adapting to an evolving landscape of new refrigerants and technologies

Here we are, starting a new year, and once again it's bringing significant changes to the HVACR industry. Thanks to the AIM Act, 2024 saw a major cut in the production of high-GWP HFC refrigerants like R-410A, but 2025 is the year that the clock has officially run out on the manufacture of new R-410A systems. Meanwhile, states have added their own layers of complexity, with new laws that also govern the phasedown of HFC refrigerants. For HVACR professionals, these changes mean adapting to a new landscape of refrigerants, technologies, and regulations.

Probably the biggest change this year is that as of December 31, 2024, manufacturers must transition their new comfort cooling systems to utilize lower-GWP refrigerants like R-32 or R-454B, which ASHRAE classifies as being mildly flammable (A2L). These systems differ from R-410A units in that most include a refrigerant detection system (RDS), a safety feature whose function is to activate mitigation measures if a leaked A2L refrigerant reaches a certain threshold. Contractors must also make sure that some of their tools, such as gauges and manifolds, recovery machines, vacuum pumps, and leak detectors, are compatible with A2L refrigerants.

Contractors will still be able to install new split-system R-410A equipment until [December 31, 2025](#), if they can find it (packaged systems using R-410A may be sold until January 1, 2028). Most manufacturers have indicated that they expect to have some [R-410A inventory](#) through the first quarter of 2025 but that it will likely not be available much longer after that. Some contractors are already noticing that certain types of R-410A equipment are becoming scarce.

Even though manufacturers can no longer produce R-410A systems, they can still manufacture individual components for the service and repair of existing systems. This is due to a provision in the EPA's [Technology Transitions rule](#) under the AIM Act, which permits the indefinite manufacturing, importation, sale, distribution, and export of components used to repair legacy refrigeration, air conditioning, and heat pump (RACHP) systems.

Some in the HVACR industry are not happy with this provision, fearing it would create a service loophole that would allow customers to replace their components forever. As a result, several industry groups sent a [letter](#) to the EPA, urging the agency to reconsider exempting condensing units charged with R-410A from the final rule, citing adverse consequences for climate protection. The EPA stated it "intends to develop a proposed action on this matter" but did not provide a timeline for its release. [Read more...](#)

Source: [The News, Joanna's Point of View](#), 6 January 2025

13. UNEP OzonAction conducts training of trainers and technicians in

Oman

Muscat, Oman, 30 December 2024 – UNEP OzonAction Compliance Assistance Programme (CAP) for West Asia, in collaboration with the National Ozone Unit (NOU) of the Environment Authority of the Sultanate of Oman, organized a Training of Trainers and Technicians on good practices for servicing refrigeration and air conditioning (RAC) systems in Oman. The training focused on the safe handling of alternative refrigerants and introduced the assessment method for technician certification, in preparation for the implementation of Oman's assessment and certification system.

The NOU partnered with Genetco, a leading RAC company in Oman, to host the training sessions at their facilities in Darsait, Muscat.

The first Training of Trainers session, held on 22-23 December 2024, was attended by fifteen (15) participants, including supervisors and head technicians from various RAC companies, as well as a trainer from the Vocational Training Center in Salalah. The technicians' training, conducted on 24-25 December 2024, was attended by ten (10) technicians from Bhawan Engineering Company and Genetco.

A key highlight of the training was the hands-on application of the newly developed assessment method. Selected trainers were tasked with conducting assessments during the technicians' training using a draft assessment instrument. This practical component served as a foundation for refining the certification process.



“This training is essential for technicians and companies in Oman to ensure that RAC practitioners operate in compliance with international standards, particularly as the assessment and certification system is fully implemented by the concerned authority,” said Mr. Manjunath U.M., Manager of Genetco's Spare Parts department, during the certification distribution ceremony.

Mr. Khaled Klaly, Montreal Protocol Regional Coordinator for West Asia expressed his gratitude to Genetco for their unwavering support in hosting the training sessions. “Genetco's commitment has been instrumental in advancing capacity-building initiatives in Oman,” he remarked during his visit to the training venue.

The successful collaboration between UNEP, the NOU, and Genetco marks an important step towards enhancing the technical skills and professional standards of Oman's RAC sector.

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