

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 | 30 September 2025

In this issue:

1. **Kigali Amendment latest ratifications.....2**
2. **WMO Bulletin shows recovery of ozone layer, driven by science2**
3. **Inside the effort to track the health of the ozone layer3**
4. **World Cold Chain Symposium – Save the date | November 1 | Nairobi, Kenya5**
5. **37th Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer (MOP37) – 3-7 November 2025, Nairobi, Kenya5**
6. **Females for Future: Women in the Cooling Sector6**
7. **Strengthening cold-chain capacity in Africa: CCN successfully hosts pivotal foundation course7**
8. **Asia-Pacific leaders spotlight Montreal Protocol's climate legacy; renewed call for universal ratification of Kigali Amendment by 20268**
9. **REFCOLD India 2025 Makes Powerful Delhi Debut; Day 1 Draws Impressive Turnout as Industry Converges to Drive India's \$74.5 Billion Cold Chain Vision.... 11**
10. **Man sentenced for smuggling R22 13**

GLOBAL

1. Kigali Amendment latest ratifications



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

[Brunei Darussalam, 18 September 2025](#)

[Saudi Arabia, 10 September 2025](#)

[St. Kitts and Nevis, 29 August 2025](#)

[Nepal, 6 August 2025](#)

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.

Source/image: [UN Treaty Collection](#)

2. WMO Bulletin shows recovery of ozone layer, driven by science



The Earth's protective ozone layer is healing and the ozone hole in 2024 was smaller than in recent years, according to a new World Meteorological Organization (WMO) report which contains welcome scientific news for people's and planetary health.

Key messages

- Ozone layer remains on track to recovery in coming decades
- WMO Ozone Bulletin says ozone hole in 2024

smaller than previous years

- Vienna Convention and Montreal Protocol show benefits of science for global action
- Stratospheric ozone protects people's and planetary health

Continued atmospheric monitoring is vital

The [WMO Ozone Bulletin](#) reported that the low level of ozone depletion observed in 2024 was partly due to naturally occurring atmospheric factors which drive year-to-year fluctuations. However, the long-term positive trend reflects the success of concerted international action.

The WMO Ozone Bulletin was issued for [World Ozone Day](#) on 16 September and the 40th anniversary of the Vienna Convention, which recognized stratospheric ozone depletion as a global

problem and provided the framework for mobilizing international cooperation in ozone research, systematic observations and scientific assessments.

“Forty years ago, nations came together to take the first step in protecting the ozone layer – guided by science, united in action,” said United Nations Secretary-General António Guterres.

“The Vienna Convention and its Montreal Protocol became a landmark of multilateral success. Today, the ozone layer is healing. This achievement reminds us that when nations heed the warnings of science, progress is possible,” he said.

To date, the Montreal Protocol has led to the phase-out of over 99% of the production and consumption of controlled ozone-depleting substances, which were used in refrigeration, air conditioning, firefighting foam and even hairspray. As a result, the ozone layer is now on track to recover to 1980s levels by the middle of this century, significantly reducing risks of skin cancer, cataracts, and ecosystem damage due to excessive UV exposure.

“The theme for World Ozone Day is From Science to Global Action. It mirrors WMO’s 75th anniversary slogan Science for Action. This is no coincidence,” said WMO Secretary-General Celeste Saulo.

“WMO’s scientific research into the ozone layer dates back decades. It is underpinned by trust, international collaboration and commitment to free data exchange – all cornerstones of the world’s most successful environmental agreement,” she said.

Sustainable development goals

The WMO Ozone Bulletin is one of a suite of products issued by WMO’s Global Atmosphere Watch Programme to inform policy-making.

Scientists first sounded the alarm back in 1975, when WMO issued a statement “Modification of the ozone layer due to human activities and some possible geophysical consequences.”

“Despite the great success of the Montreal Protocol in the intervening decades, this work is not yet finished, and there remains an essential need for the world to continue careful systematic monitoring of both stratospheric ozone and of ozone-depleting substances and their replacements,” said Matt Tully, Chair of WMO’s Scientific Advisory Group on Ozone and Solar UV Radiation.

Protecting the ozone layer and thereby human, environmental and agricultural health has enabled significant progress towards achieving many of the United Nations Sustainable Development Goals, including SDG 3 (Good Health and Well-Being), SDG 13 (Climate Action), SDG 2 (Zero Hunger) and SDG 15 (Life on Land), he said. [Continue reading...](#)

Source/image: [World Meteorological Organization](#), 16 September 2025

3. Inside the effort to track the health of the ozone layer

Nearly every day a stainless-steel flask, about the size of a large soda bottle, arrives at a National Oceanic and Atmospheric Administration (NOAA) laboratory in the American city of Boulder.

The containers, which hail from places as far away as Australia and Antarctica, hold something that isn't typically shipped halfway around the world: air. But this invisible cargo has a higher scientific calling.

Analytical chemist Stephen Montzka and his team at NOAA's Global Monitoring Lab will feed the air into an instrument known as a gas chromatograph and mass spectrometer. The device can detect minute amounts of chemicals capable of chewing away at the ozone layer. It was this monitoring that detected several years ago unexpected releases of trichlorofluoromethane (CFC-11) – a banned ozone-devouring substance.

"Little parts of the (atmosphere) come to us each and every day so we can characterize what's in them," says Montzka, a senior scientist at the Global Monitoring Lab.

Montzka is on the frontlines of a global effort to track the health of the ozone layer, the invisible shield that protects Earth from the sun's ultraviolet radiation.

The work is largely unsung. After reaching a feverish pitch in the 1980s, worries about the "hole" in the ozone layer have receded. But experts like Montzka warn the stratospheric barrier remains in a fragile state. And despite global bans, ozone-depleting substances continue to make their way into the atmosphere.

"We've noticed the ozone layer hasn't continued to get worse, but things clearly still are not great," says Montzka, a contributing author to a seminal 2022 [United Nations-backed report](#) on the state of the ozone layer.

That's why, he says, checks like those done by his lab are critical. "If you don't monitor, you won't be able to understand how things have changed. I have a colleague who asks: 'If you're on a diet, do you use the scale or not?'"

[The ozone layer](#) hovers 15 to 35 kilometres above the Earth's surface in a region known as the stratosphere. The ozone molecules that give the layer its name sop up ultraviolet radiation from the sun, including UV-B. In high doses, this invisible light can damage the DNA of living things, leading to conditions like cataracts and skin cancer. Left completely unchecked, UV-B rays would likely sterilize the surface of the Earth.

So, alarm bells went off [in the 1970s](#) when scientists [Sherwood Rowland and Mario Molina](#) released [a paper](#) suggesting certain chemicals used in refrigerants, foams and aerosols were damaging the ozone layer. These chlorofluorocarbons (CFCs), it posited, were breaking down when they reached the stratosphere, releasing chlorine gas, which was [capable of shattering](#) ozone molecules.

The research in part spurred countries to adopt the Vienna Convention for the Protection of the Ozone Layer in 1985.

Around the same time, scientists discovered that the ozone layer over Antarctica had thinned dramatically, likely because of CFCs. This came to be known as a "hole" even though, strictly speaking, there was never a spot completely devoid of ozone. [Continue reading...](#)

Source/image: [UNEP](#), 15 September 2025

4. World Cold Chain Symposium – Save the date | November 1 | Nairobi, Kenya

Advancing a sustainable cold chain requires coordinated efforts from a broad range of stakeholders. Governments and non-profit organizations play a critical role in identifying and highlighting pilot projects, and industry engagement is essential to help build business models and drive long-term market growth. With this in mind, the theme for this year's World Cold Chain Symposium is Energizing the Private Sector.



Join the [Global Food Cold Chain Council](#), the [United Nations Environment Program's OzonAction](#), the [Cool Coalition](#), [Carrier](#) and experts from around the world as we come together for an in-person and virtual event focused on the benefits of investing in efficient, sustainable cold chain development programs and highlighting the progress to date.

5. 37th Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer (MOP37) – 3-7 November 2025, Nairobi, Kenya



2025 marks the 40th anniversary of the Vienna Convention for the Protection of the Ozone Layer. While commemorating this important milestone, parties are also preparing to leverage the success of the Convention to make further progress in protecting both the ozone layer and the climate.

In 1985 and 1987, respectively, the Vienna Convention and its Montreal Protocol were adopted to protect the stratospheric ozone layer by phasing out the production and consumption of ozone-depleting substances, including chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), halons, methyl chloroform, and methyl bromide, among others. With the adoption of the Kigali Amendment in 2016, parties also agreed to phase down hydrofluorocarbons (HFCs), potent greenhouse gases that had replaced certain ozone-depleting substances in refrigeration and air conditioning systems.

Without the successful implementation of these multilateral environmental agreements, stratospheric ozone concentrations would have become so depleted that the Earth's ozone layer would no longer protect humans and the environment from the sun's ultraviolet (UV) radiation, with consequences including widespread skin cancer, eye cataracts, and immune deficiencies as well as harm to terrestrial and aquatic life.

Instead, the World Meteorological Organization's September 2025 [Ozone Bulletin](#) reported that the Earth's protective ozone layer is healing and the ozone hole in 2024 was smaller than in recent years. If current policies remain in place, the ozone layer is expected to recover to 1980 values (before the appearance of the ozone hole) by around 2066 over the Antarctic, by 2045 over the Arctic, and by 2040 for the rest of the world, [according to the most recent quadrennial Scientific Assessment of Ozone Depletion in 2022](#). The next assessment will be in 2026.

Despite these successes in the last 40 years, there is more work to be done to keep the implementation of the Convention and its Protocol fit for purpose. Further improvements are needed in monitoring, containing, and replacing controlled substances. Also, some additional substances merit an assessment of their impacts on the ozone layer and the climate.

Furthermore, organizational matters need attention such as how to best set up the expert assessment panels supporting the processes under the Protocol and prepare for the upcoming 2027–2029 replenishment of the Multilateral Fund for the Implementation of the Montreal Protocol (MLF).

Parties will build on the groundwork laid at the [47th Meeting of the Open-ended Working Group](#) of the Parties to the Montreal Protocol, which was held from 7 to 11 July 2025 in Bangkok, Thailand. Draft decisions for the 37th Meeting of the Parties to the Montreal Protocol (MOP37) to consider address:

- terms of reference for the study on the 2027–2029 replenishment of the MLF;
- emissions of HFC-23;
- enhancing regional atmospheric monitoring of controlled substances;
- life-cycle refrigerant management;
- feedstock uses of controlled substances;
- management of halon 1301 and other controlled fire suppressants;
- national and regional initiatives to support the implementation of the Kigali Amendment;
- options for the organization of the Technology and Economic Assessment Panel and its technical options committees;
- further strengthening Montreal Protocol institutions; and
- classification of the State of Palestine as a party operating under paragraph 1 of Article 5 and access to support from the MLF.

MOP37 will convene from 3 to 7 November 2025 at the headquarters of the United Nations Environment Programme (UNEP) in Nairobi, Kenya, preceded by an informal meeting on facilitating the implementation of the Montreal Protocol on 2 November 2025.

Source/image: [IISD Earth Negotiations Bulletin](#), September 2025

6. Females for Future: Women in the Cooling Sector

Read about inspiring women in the cooling sector from Bangladesh, Colombia, and Kenya. Learn how their experiences and challenges have global relevance and what we can do to help other women overcome similar barriers!

Worldwide, over 12 million people are employed in the refrigeration and air conditioning industry, and the sector keeps growing. In many regions, there is a significant shortage of skilled labour. Despite this fact, women remain strongly underrepresented. According to data gathered by the International Institute of Refrigeration (IIR), the percentage of women who are members of national refrigeration and air conditioning organizations is only 6%. And those few women still face discrimination and other barriers.



We wanted to have a deeper look into that topic and find answers to the questions: How can we attract more women to careers in the cooling industry? And how can we improve conditions for those already working in the sector?

- Download: Short Handbook - [Recommendations for Action](#)

- Download: Full Report - [Challenges and Recommendations for Action](#)

Source/image: [Green Cooling Initiative](#), June 2025

AT A GLANCE: WORLD OZONE DAY (16 SEPT) ACTIVITIES AND CELEBRATIONS



[Click here to access](#) – Source UNEP OzonAction

7. Strengthening cold-chain capacity in Africa: CCN successfully hosts pivotal foundation course



A key highlight was the field visit to the Kinale Aggregation Centre, where course attendees observed cold-chain technologies in action.

From August 25th to 29th, 2025, the Clean Cooling Network ([CCN](#)), in partnership with the African Centre for Technology Studies ([ACTS](#)), and the Africa Centre of Excellence for Sustainable Cooling and Cold-Chain ([ACES](#)) hosted the 4th Cohort Foundation Course Training at the Desmond Tutu Conference Centre in Nairobi, Kenya. The five-day training brought together 14 participants, including engineers, agribusiness practitioners, aquaculture trainers, quality control officers, and early-career professionals, for an intensive learning experience on cold-chain systems and their applications in the

food and pharmaceutical sectors.

Commenting on the value of the experience, [Keziah Khalinditsa](#), one of the course attendees, said, "It has been a very insightful and interactive week. The training was truly hands-on, and it felt great to gain insights directly from farmers and suppliers engaged in the cold-chain. I would definitely recommend this training to people beyond the agribusiness sector."

The course covered a wide range of essential topics, including cold-chain fundamentals, refrigeration technologies, refrigerant choices, environmental impacts, postharvest management, regulatory compliance, and vaccine cold-chain requirements. Participants also explored business models, logistics, and telematics while engaging in highly interactive discussions, practical experiments, and peer-to-peer learning.

A key highlight was the field visit to the Kinale Aggregation Centre and Tigoni Grown packhouse at Tilisi Logistics Park, where course attendees observed cold-chain technologies in action, from farm-level operations and aggregation to modern temperature-controlled storage, processing, and logistics. These visits provided valuable exposure to cooperative models, solar-powered systems, pre-cooling processes, and technology-driven traceability.

The training wrapped up with business model presentations, where participants pitched innovative solutions such as value-added dairy processing and integrated livestock farming. Post-training evaluations reflected overwhelming satisfaction, with participants praising the strong balance of theory and practice, the expertise of facilitators, and the exposure to real-world cold-chain systems.

The Foundation Course continues to strengthen local capacity for sustainable cold-chain solutions across Kenya and the region, empowering participants to apply their knowledge in reducing postharvest losses, enhancing food safety, improving livelihoods, and advancing climate resilience. It is an essential component to the future success of Africa's vital cold-chain infrastructure.

Source/image: [Clean Cooling Network](#), 10 September 2025

ASIA AND THE PACIFIC

8. Asia-Pacific leaders spotlight Montreal Protocol's climate legacy; renewed call for universal ratification of Kigali Amendment by 2026

Nadi, Fiji, 28 August 2025 - At a packed evening side event on the margins of the Sixth Forum of Ministers and Environment Authorities of Asia-Pacific on 28 August, in Nadi, Fiji, senior UN leaders and ministers from across the region underscored the Montreal Protocol's dual legacy—protecting the ozone layer and delivering powerful climate benefits—while urging remaining countries to ratify its Kigali Amendment by 2026.

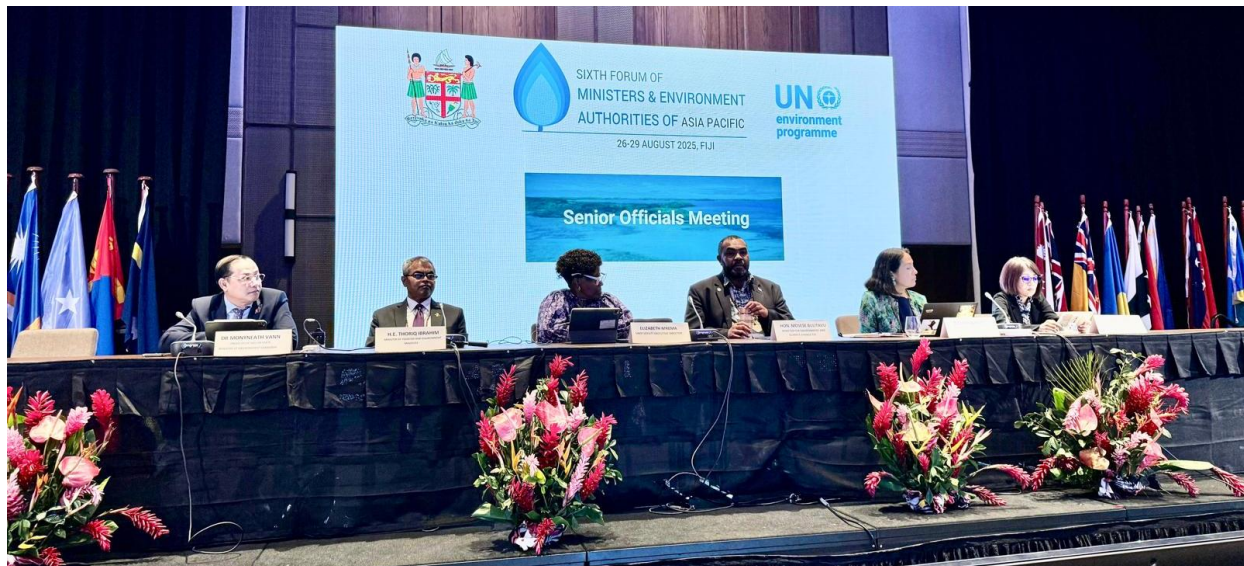


Photo 1 - From Left to Right: Dr. Monyneath Vann, Under Secretary of State, Ministry of Environment, Cambodia; H.E. Mr. Thoriq Ibrahim, Minister of Tourism and Environment, Maldives; Ms. Elizabeth Maruma Mrema, UN Assistant Secretary General & Deputy Executive Director, UNEP; Hon. Mr. Mosese Bulitavu, Minister of Environment and Climate Change, Fiji; Ms. Fleur Downard, Director, International Environment and United Nations Section, Department of Climate Change, Energy, the Environment and Water, Australia; Ms. Masako Ogawa, Deputy Director-General, Global Environment Bureau, Japan.

Moderated by UNEP's OzonAction (Law Division) and hosted at the Crowne Plaza Fiji Nadi Bay Resort, the session "The Montreal Protocol and Kigali Amendment – A Legacy of Ozone and Climate Action" brought together UNEP Deputy Executive Director Elizabeth Maruma Mrema,

Ozone Secretariat Executive Secretary Megumi Seki, Multilateral Fund Chief Officer Tina Birmipili, and ministers from Fiji, Cambodia, and the Maldives, with perspectives from Australia and Japan.

A treaty that cools the planet—and saves lives

In opening remarks, UNEP's Elizabeth Maruma Mrema recalled Kofi Annan's description of the Montreal Protocol as "perhaps the single most successful international agreement to date," noting that unchecked growth in ozone-depleting substances would have added 0.5–1.0°C of warming by mid-century. She highlighted additional climate gains through protected vegetation and affirmed that the Protocol prevents an estimated 2 million skin-cancer cases annually, while the Kigali Amendment, if fully implemented, could avert up to 1°C of warming by 2100. In a video message, Ozone Secretariat Executive Secretary Ms. Megumi Seki urged countries that have yet to ratify the Kigali Amendment to do so, stressing that progress must be matched by urgency and unity. Ms. Tina Birmipili, Chief Officer of the Multilateral Fund Secretariat (MLFS), highlighted how the MLFS continues to financially support countries to comply with its obligations under the Montreal Protocol that has also resulted in transformed lives by coupling environmental protection with jobs, skills, and social benefits.

Pacific leadership: Fiji's enforcement muscle and South–South support

Fiji's Hon. Mosese Bulitavu, Minister for Environment and Climate Change, spotlighted the country's long record of compliance—CFCs phased out by 2010, methyl bromide by 2015, and HCFCs on track for a 2030 phase-out—supported by a strengthened legal framework that now also covers HFCs. He detailed active border controls, a Memorandum of Understanding (MoU) with Customs, penalties and a successful court prosecution against illegal trade, plus capacity building for more than 300 enforcement officers and 3,000 refrigeration and air-conditioning (RAC) technicians, alongside sustained South–South cooperation with Pacific neighbors.

Cambodia's digital governance and skills agenda

Cambodia's Under Secretary H.E. Dr. Vann Momyneath outlined a comprehensive policy suite—the Environment and Natural Resources Code (2023) and Sub-Decree on ODS Management (2021)—that introduced licensing and quota systems, mandatory labeling, and integration of ISO standards in RAC training. Cambodia has upgraded HCFC/HFC licensing to an e-platform linked to the Customs National Single Window, is implementing Kigali Stage I (a 10% HFC reduction from baseline), and will launch a mobile application of certified RAC technicians in late 2025 to connect consumers with skillful technicians.

Maldives: Early phase-out and ambitious efficiency push

Maldives H.E. Thoriq Ibrahim, Minister of Tourism and Environment, stated that Maldives became the first developing country to fully phase out HCFCs in 2020, ten years ahead of schedule, eliminating 4.6 ODP tonnes of HCFC-22 and avoiding over 151,000 metric tonnes of CO₂ emissions. Building on that, the country has already implemented the HFC freeze and is targeting a 1.52 million tCO₂-e reduction by 2035, anchored by appliance energy-efficiency labeling and a forthcoming RAC technician licensing/certification program.

Partnerships that scale impact: Australia and Japan

Ms. Fleur Downard, Director International Environment and UN in Australia emphasized that the Protocol's success is built from "every country's actions," highlighting two decades of hands-on partnerships, supporting the Pacific ozone officers' network, collaborating with SPREP on CFC phase-out, and current projects with UNEP and UNDP across the Pacific and South East Asia region to update standards, codes of practice, and training. "Every action counts," the intervention reiterated.

Japan's Ms. Masako Ogawa, Deputy Director General, Global Environment Bureau, Ministry of Environment, also highlighted Japan's contribution, presented in the non-Article 5 segment, focused on the importance of refrigerant lifecycle management and robust monitoring, reporting, and verification systems—practical enablers for sustained Kigali outcomes across Asia-Pacific.



Photo 2: Photo 1 – Ms. Elizabeth Maruma Mrema, UN Assistant Secretary General & Deputy Executive Director, UNEP and Hon. Mr. Mosese Bulitavu, Minister of Environment and Climate Change, Fiji at the Montreal Protocol exhibition.

A proven model: science, institutions, and implementation

Speakers underlined the central role of the Multilateral Fund in enabling developing countries to transition to climate-friendly cooling while improving energy efficiency and public safety—benefits that align directly with UNEP's

Medium-Term Strategy and the SDGs. The OzonAction Compliance Assistance Programme's support for 38 developing countries across Asia and the Pacific was also highlighted.



Photo 3: H.E. Mr. Rasio Ridho Sani, Deputy Minister for Environmental Pollution and Degradation Control, Ministry of Environment/Environmental Protection Agency, Indonesia and Mr. Sena Pradipta, Deputy Director for Environmental Performance Rating, Ministry of Environment/Environmental Protection Agency, Indonesia at the Montreal Protocol exhibition

The side event was organized by UN Environment Programme (UNEP) OzonAction Compliance Assistance Programme (CAP) in collaboration with UNEP Asia and the Pacific Office and the Government of Fiji as part of its approved 2025 Work Programme under the Multilateral Fund.

In the margins of the meeting, an exhibition was also held. This exhibition was conducted throughout the event from 26-29 August 2025 as a dynamic and visually engaging platform to highlight the achievements of the Montreal Protocol and its Kigali Amendment at the national, regional (in particular showcasing the success of the Pacific Island Countries), and global levels with particular emphasis on the success stories of Pacific Island Countries. The exhibition featured educational and interactive displays, including posters, 3D models, infographics, short videos, and other awareness materials. High-level delegations from the AP6 participants visited the exhibition, where they explored the innovations and collaborative efforts that have shaped the global response to ozone depletion and climate change. The exhibition not only informed but also inspired continued commitment to protect the planet for future generations.

Source/images: [UNEP OzonAction](#), 28 August 2025

9. REFCOLD India 2025 Makes Powerful Delhi Debut; Day 1 Draws Impressive Turnout as Industry Converges to Drive India's \$74.5 Billion Cold Chain Vision



New Delhi, 18th September, 2025: The 8th edition of REFCOLD India 2025, South Asia's premier refrigeration and cold chain exhibition, made a high-impact debut in the capital today at Bharat Mandapam, Pragati Maidan, New Delhi. Co-organized by ISHRAE (Indian Society of Heating, Refrigerating and Air Conditioning Engineers) and Informa Markets in India, the 3-day event opened with an impressive response from industry professionals, global participants, and policymakers.

High-Profile Inauguration Marks Industry Milestone

The inauguration ceremony was marked by the presence of senior dignitaries from the Ministry of Agriculture & Farmers' Welfare, including Sh. Pramod Kumar, Additional Secretary (Horticulture); and Sh. Priya Ranjan, Joint Secretary (Horticulture). Also present were Mr Asheesh Fotedar, Chief Operating Officer, National Centre for Cold-chain Development (NCCD); Mr R. Sarvanan, National President Elect, ISHRAE; Ms Lieny Jamg, Director, Marketing Business Partner, Copeland Asia Middle East and Africa; Mr Madhur Sehgal, Head Climate Solutions Sales, Danfoss Industries Pvt Ltd; Mr Rajnish Aggarwal, Chair, REFCOLD 2025; Mr Ashish Gupta, Convener, REFCOLD 2025, Mr Richie Mittal, President Member, ISHRAE; Mr Waleuddin Siddiqui, President, Delhi Chapter, ISHRAE; Ms Sukhda Tandon, President Elect, DCI; Mr Mukesh Aggarwal, President, FCAOI, Mr Yogesh Mudras, Managing Director, Informa Markets in India, and Mr Ritesh Modi, Finance Director, Informa Markets in India.

The inauguration of the expo, which underlines the cold chain sector's key role in strengthening food security, driving sustainability, and accelerating economic growth, was also marked by the launch of the National Centre for Cold-chain Development (NCCD) website and the unveiling of the Energy Transition Report by the Secretary, MoA & FW.

Referred to as a 'sunrise sector', the cold chain industry has become integral to India's evolving economy. Day 1 witnessed massive participation from across industries, with over 10,000 visitors anticipated across the three days, exploring innovations from over 200 exhibitors. The strong turnout underlined the cold chain industry's rising importance as India's market prepares to scale from USD 10.5 billion in 2024 to USD 74.5 billion by 2033.

Global Participation Drives Cross-Border Collaboration

This year's event hosted globally renowned brands such as Copeland, Daikin, Danfoss, Carrier Transicold, Rinac, and Luvac to attract professionals from diverse sectors, including pharmaceuticals, seafood, dairy, meat, agriculture, hospitality, logistics, food processing, healthcare, retail, and bakeries. The event also featured international participation in terms of visitor and buyer delegations from Nepal, Sri Lanka, the Middle East, South Africa and Kenya, creating avenues for cross-border collaboration.

Supported by prestigious associations, including the International Institute of Refrigeration (IIR), the National Centre for Cold-chain Development (NCCD), the Ministry of Food Processing Industries (MOFPI), Agriculture and Processed Food Products Export Development Authority (APEDA), Norsk Kjøleteknisk Forening (NKF), Refrigeration and Trade Association (RATA), Refrigeration and Air Conditioning Servicing Sector Society RASSS, (All India Air Conditioning and Refrigeration Association (AIACRA), and Indian Polyurethane Association (IPUA), the event serves as a hub for knowledge exchange and international collaboration. It also received support from the end-user communities such as Federation of Cold Store Owners Association (FCSOA) and JKPICCA (Jammu & Kashmir).

Industry Leaders Highlight Transformative Potential

Speaking at the inauguration, Sh. Priya Ranjan, Joint Secretary, Horticulture, MoA & FW, said*, "India today stands as the world's second-largest producer of horticulture, with output touching nearly 365 million metric tonnes. However, post-harvest losses of up to 15% translates to nearly 15 million metric tonnes of wasted produce – a loss not just to farmers and consumers, but also to our nutritional security and economy. At the Ministry and through the NCCD, we are working to change this narrative. Our efforts include revising engineering guidelines with over 100 stakeholder consultations, digitising cold chain infrastructure for nationwide access, initiating the All-India Cold Chain Survey, and promoting energy transition to modernise and make facilities more sustainable. The goal is to reduce losses to below 5% by 2047, directly contributing to higher farmer incomes and a stronger food system."

He added, "Platforms like REFCOLD are critical in this journey, bringing together policymakers, academia, innovators, and industry leaders to collaborate, showcase solutions, and create customised, affordable technologies, especially for farm-gate infrastructure. With collective action, we can transform the cold chain into a robust, technology-driven backbone that not only secures our agriculture but also supports pharma, fisheries, and allied sectors critical to India's growth."

Dr. Sudhanshu, Secretary, APEDA, said, "India is an agrarian economy, and the strength of our cold chain will determine how effectively we reduce post-harvest losses. These losses are not only a drain on farmer incomes but also a national wastage that undermines our food security. A robust cold chain enhances the shelf life and quality of produce, benefiting both the domestic market and exports. At APEDA, we see cold chain infrastructure as a cornerstone for agri-exports, ensuring that Indian produce reaches global markets with consistent quality standards. Beyond perishables like fruits and vegetables, sectors such as dairy, meat, and fisheries also rely heavily on reliable cold chain solutions. Learning from the success stories of other countries, including developing economies, India too must adopt stronger cold chain strategies to strengthen its entire food ecosystem. APEDA has been facilitating this journey by assisting in the creation of packhouses, cold storages, and facilities at critical exit points – airports and seaports – bridging the gap from farm to foreign markets."

He added, "Platforms like REFCOLD provide the right environment for stakeholders to identify interventions, collaborate with central and state agencies, and chart actionable roadmaps. Strengthening India's cold chain is not a choice; it is a necessity for securing farmer incomes and expanding our global footprint."

Sh. Vivek Kumar Singh, Director, MoFPI, said, "At MoFPI, our primary mandate is to build a strong and resilient food processing ecosystem that caters to both domestic consumption and global exports. From farm to fork, it is our responsibility to ensure safe, high-quality, and sustainable food. For this, we are driving three flagship schemes. The first is the Production Linked Incentive (PLI) Scheme, through which we aim

to create global champions by incentivizing companies on the basis of sales growth. The second is the PM Formalisation of Micro Food Processing Enterprises (PMFME) Scheme, which provides credit-linked support to micro-processors along with training, branding, and handholding support. The third is the Pradhan Mantri Kisan Sampada Yojana (PMKSY), under which we extend assistance to MSMEs for establishing and expanding preservation and processing capacities across the country. Through these interventions, we are not only minimizing wastage and improving efficiency but also empowering farmers, boosting incomes, and enhancing food security.

He added, Platforms like REFCOLD India provide an excellent opportunity for dialogue and collaboration among ministries, industry leaders, and innovators. Together, we can accelerate the growth of a modern, resilient food processing and cold chain ecosystem.”

Speaking at the inauguration, Mr Ashish Gupta, Director Standard Refrigeration Pvt Ltd and Convenor REFCOLD INDIA 2025, said, “India’s cold chain sector stands at an inflection point. While the country has built 32–35 million tonnes of cold storage capacity, gaps in pack-houses, ripening chambers, and reefer vehicles still challenge efficiency. With the global refrigerated transport market set to reach USD 216 billion by 2030, India’s opportunity is immense, especially in food, pharma, and export-oriented supply chains. Policy support through schemes like PMKSY and energy-efficiency labelling is creating a fertile environment for integrated, sustainable networks. [Continue reading...](#)

Source/image: [TradeFairTimes](#), 18 September 2025

NORTH AMERICA

10. Man sentenced for smuggling R22



USA: A man who confessed to smuggling five cylinders of illegal R22 refrigerant into the USA has been sentenced to three-years’ probation, including 15 days’ time served.

Juan Ignacio Martinez is said to have entered the United States at the Laredo, Texas, port of entry in May. Customs officers discovered five 30lb (13.6kg) cylinders of R22 refrigerant concealed in a toolbox attached to the bed of his truck. The refrigerant was valued at between \$4,896 to \$5,916.

Custom and Border Protection records revealed that Martinez attempted to cross into the United States on at least five other occasions, between July 2022 and December 2023. Agents denied him entry, informing him that it was illegal to possess refrigerants that were unlawful to bring into the United States. Each time, Martinez was allowed to return to Mexico with the refrigerant.

The investigation was conducted by the US Environmental Protection Agency Criminal Investigation Division.

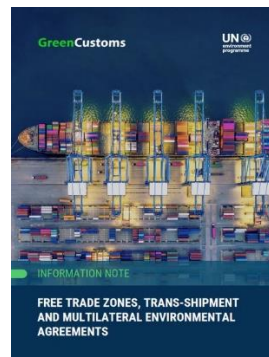
Source/image: [Cooling Post](#), 11 September 2025

RESOURCES

[FACTSHEET: Update on New Refrigerants Designations and Safety Classifications - June 2025.](#)
[Also available in French and Spanish](#)



[INFORMATION NOTE: Green Customs – Free Trade Zone, trans-shipment and Multilateral Environmental Agreements](#)



FEATURED



Ozone Secretariat's latest activities [here >>>](#)



Multilateral Fund's latest activities [here >>>](#)



OzonAction's latest activities [here >>>](#)



Past OzoNews Issues [here >>>](#)
[Request PDF of 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 to 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 online 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 the source directly indicated at the bottom of each article.

Prepared by: UNEP OzonAction | **Reviewed by:** James S. Curlin

If you wish to submit articles or invite new subscribers, please contact: Jo Chona, jo.chona@un.org

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