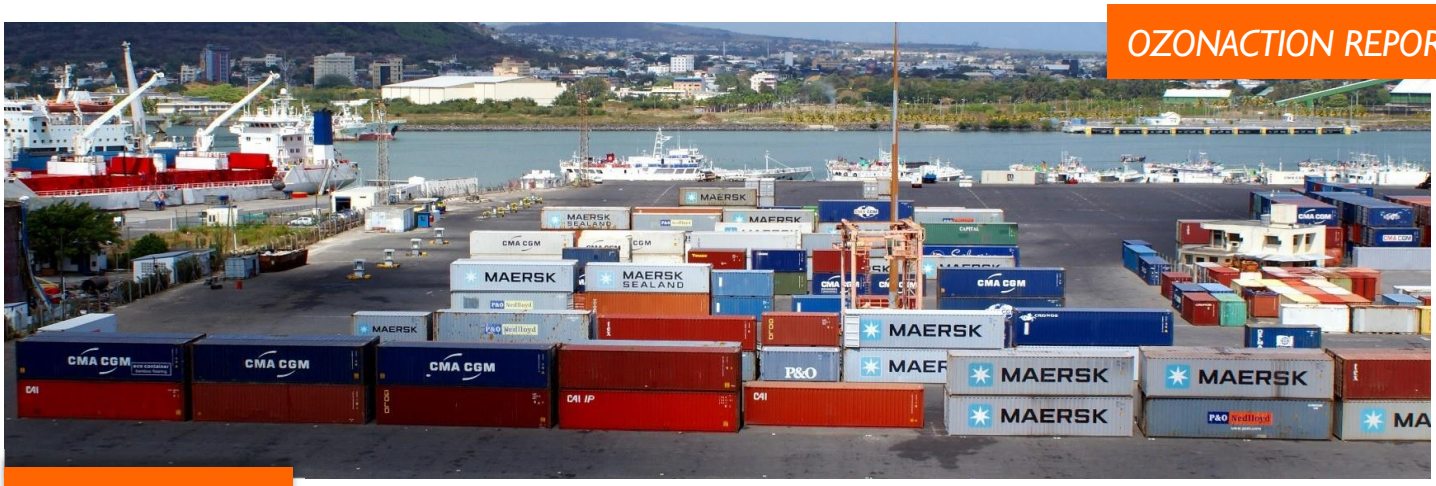
THE INFORMAL PRIOR-INFORMED CONSENT (IPIC) MECHANISM
2024 ANNUAL REPORT

OZONACTION REPORT



Introduction

In order to effectively monitor and control trade in controlled substances and to prevent illegal trade, which first became a significant problem in the mid-1990s, the Parties to the Montreal Protocol agreed to establish in 1997 a system for licensing the import and export of new, used, recycled and reclaimed ozone-depleting substances (ODSs) and ODS-containing mixtures. While a licensing system on its own is not sufficient to eliminate ODS smuggling, it gives the national authorities a way of taking stock of legitimate traders of controlled substances, to allocate import and export permits among the authorized traders and to prevent unauthorized trade. Such a licensing system is more effective when coupled with a quota system that sets levels of permitted imports and exports.

As part of its work in providing assistance to developing countries to fulfil their commitments under the Montreal Protocol on Substances that Deplete the Ozone Layer, the UNEP OzonAction Compliance Assistance Programme (CAP) launched the online 'Informal Prior-Informed Consent' (iPIC) mechanism in 2006. This mechanism aims to assist developing countries to better manage trade in substances controlled under the Protocol; to facilitate and monitor trade and avoid illegal or unwanted shipments. iPIC is a secure access-restricted platform currently has 112 registered countries and the European Union.

THE BENEFITS OF iPIC

- Information exchange to clarify the status of intended shipments of substances controlled under the Montreal Protocol, expedite legal trade and prevent illegal or unwanted trade in these substances.
- Enables Parties to better monitor controlled substances entering, transiting through and/or leaving their territories, ensuring the country's compliance with the Montreal Protocol
- iPIC is a useful tool which can be used to reduce discrepancies between import and export data, to identify and reduce illegal trade and cases of non-compliance with domestic legislation
- iPIC contributes to forging valuable links and fosters trust between iPIC focal points of import, export and transit countries
- Since its establishment iPIC has helped to clarify the status of numerous suspicious shipments and contributed towards the prevention of a large number of illegal, unauthorized and 'unwanted' shipments.

"iPIC has been used to verify over 450,000 metric tonnes of controlled substances"

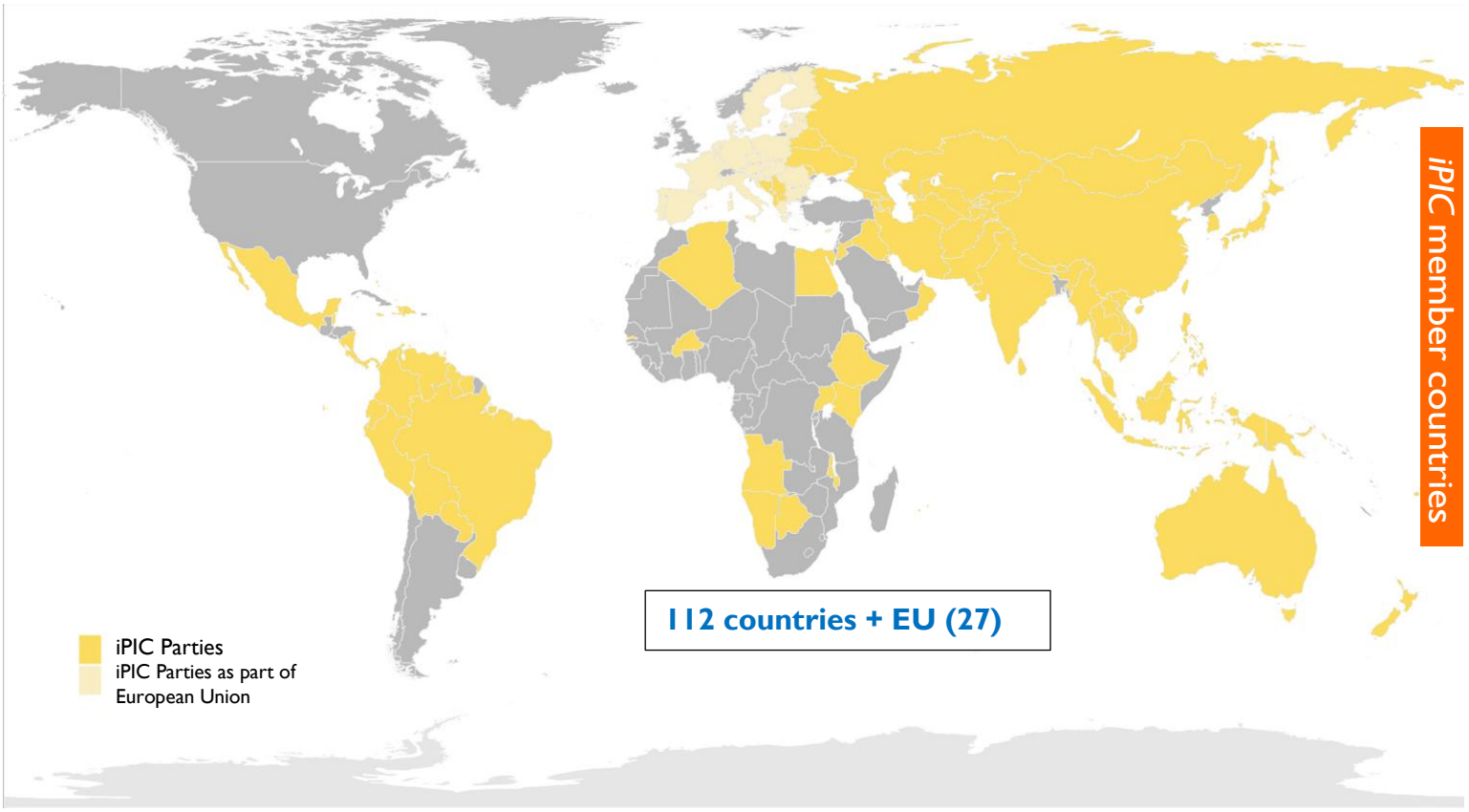
What is iPIC?

iPIC is a voluntary and informal mechanism of information exchange on intended trade between countries in substances controlled under the Montreal Protocol (ODSs, hydrochlorofluorcarbons (HCFCs), hydrofluorocarbons (HFCs), including blends, products and equipment containing them). It enables Parties that use iPIC to share details of eligible importers and exporters with each other through a secure online platform. Designated iPIC focal points can also carry out simple consultations with their counterparts in other countries prior to intended shipments of these substances. UNEP's regional iPIC focal points can provide valuable assistance and support to follow-up on specific iPIC consultations.

iPIC was launched in 2006 as an online platform, from its previously paper-based format, to help countries facilitate and monitor trade in controlled substances and avoid illegal or unwanted shipments. iPIC has become a global voluntary initiative currently used by 112 countries and the EU to strengthen the implementation of their national licensing system for ODSs and HFCs.

The Parties of the Montreal Protocol have recognized iPIC as a tool to help combat illegal trade in controlled substances. The 24th Meeting of the Parties, in its decision XXIV/12, invited all Parties to consider participation in iPIC as a means to improve the information about their potential imports of controlled substances and to reduce the discrepancy between reports of imports and exports and to help identify illegal trade or cases of non-compliance with domestic legislation.

UNEP OzonAction encourages all countries that have not yet used iPIC to register and use the tool for effective monitoring of ODSs, HFCs and other controlled substances. Countries that are registered, but do not regularly use iPIC are encouraged to review and update their country page as necessary.



Current iPIC member countries:

Afghanistan, Albania, Angola, *Antigua and Barbuda*, Armenia, Australia, Azerbaijan, *Bahamas*, Bahrain, Bangladesh, *Barbados*, Belarus, *Belize*, Benin, Bhutan, Bolivia, Plurinational State of, Bosnia and Herzegovina, Botswana, Brazil, Brunei Darussalam, Burkina Faso, Cambodia, China, Colombia, *Cook Islands*, Costa Rica, *Dominica*, Dominican Republic, Ecuador, Egypt, Ethiopia, European Union, Faeroe Islands, *Fiji*, Gambia, Georgia, Ghana, *Grenada*, Guatemala, Guyana, Haiti, Honduras, India, Indonesia, Iran, Islamic Republic of, Iraq, Jamaica, Japan, Jordan, Kazakhstan, Kenya, *Kiribati*, Korea, Republic of, Kuwait, Kyrgyzstan, Lao PDR, Malawi, Malaysia, *Maldives*, Marshall Islands, *Mauritius*, Mexico, *Micronesia, Fed. States of*, Moldova, Republic of, Mongolia, Montenegro, Myanmar, Namibia, *Nauru*, Nepal, New Zealand, Nicaragua, Nigeria, *Niue*, North Macedonia, Oman, Pakistan, *Palau*, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Russian Federation, *Saint Kitts and Nevis*, *Saint Lucia*, *Saint Vincent and the Grenadines*, *Samoa*, Senegal, Serbia, *Seychelles*, Sierra Leone, Singapore, *Solomon Islands*, Somalia, South Africa, Sri Lanka, Suriname, Tajikistan, Thailand, Timor Leste, Togo, *Tonga*, Trinidad and Tobago, Turkey, Turkmenistan, *Tuvalu*, Uganda, Ukraine, Uzbekistan, *Vanuatu*, Venezuela, Bolivarian Republic of, Vietnam

Information correct as of 29 October 2025; countries in italic text are not shown due to the map's scale.
*This is not an official UN map, for illustration purposes only; borders not authenticated. Map: public domain (Wikimedia)

iPIC in 2023-2024

In 2023 and 2024, a total of **5,834** (3,069 and 2,774) queries was initiated through iPIC. In terms of quantity of ODSs and other substances this was **250,465** metric tonnes (136,764 and 113,700) verified through iPIC. This is equivalent to **13,483** (7,374 and 6,109) ODP tonnes or roughly **424 million** (230 and 194 million) CO2–eq tonnes of HCFCs, HFCs, methyl bromide, chlorofluorocarbons (CFCs) and other substances.

The proportion of trade prevented through the iPIC mechanism in 2023 and 2024, that could be an indicator of illegal or unwanted trade, was quite low compared to previous years. Of the over 250,000 metric tonnes checked via iPIC, only 1,895 metric tonnes (or <1%, see Figure 1) were recorded as rejected.

The quantities recorded as "Blank" (i.e. "No response") amounted to 105,673 metric tonnes (42%). These are the cases where UNEP did not receive an update from the trading countries on the final outcome of the iPIC queries. It is therefore likely that some of these queries were also approved or rejected.

As in previous years, the great majority of queries still relate to HCFCs, both in terms of number of queries (see Figure 2) and quantity of substance in metric tonnes (see Figure 3).

When considering ozone depletion potential (ODP) tonnages, a somewhat different perspective emerges, as is illustrated in Figure 4. While HCFC is still the highest quantity in terms of ODS tonnages checked though iPIC, queries for very small quantities of substances for exempted use such as CFCs and methyl bromide (MeBr) were still raised. A gradual increase in queries concerning HFCs and HFC blends has been noted; however, from 2021 onward, a marked rise in the trade of these substances has also been observed.

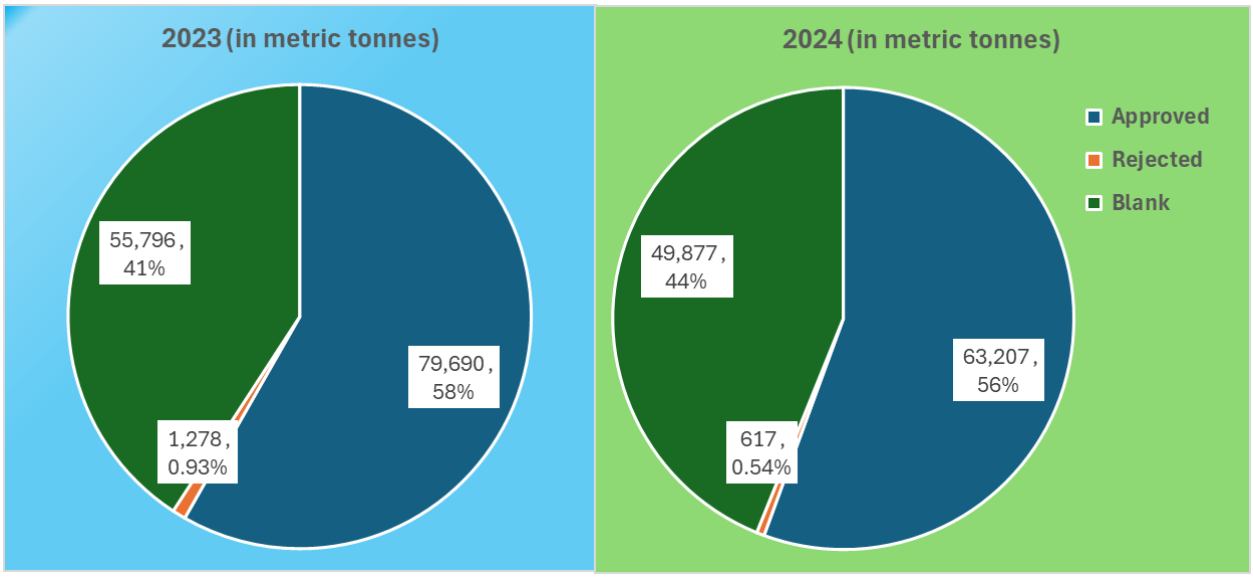
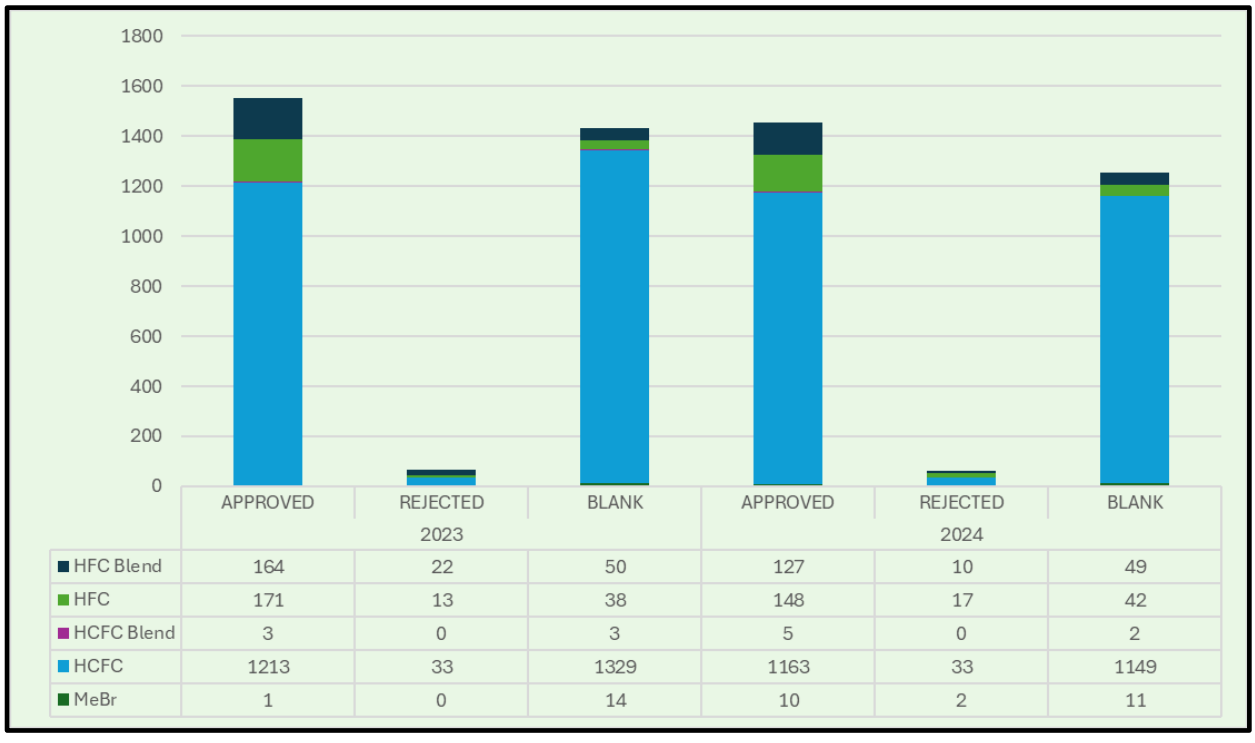


Figure 1 – Proportion of queries raised through iPIC in 2023 and 2024



	APPROVED	REJECTED	BLANK	APPROVED	REJECTED	BLANK
	2023			2024		
HFC Blend	164	22	50	127	10	49
HFC	171	13	38	148	17	42
HCFC Blend	3	0	3	5	0	2
HCFC	1213	33	1329	1163	33	1149
MeBr	1	0	14	10	2	11

Figure 2 - Number of queries for selected substances raised through iPIC in 2023 & 2024 and final status of query

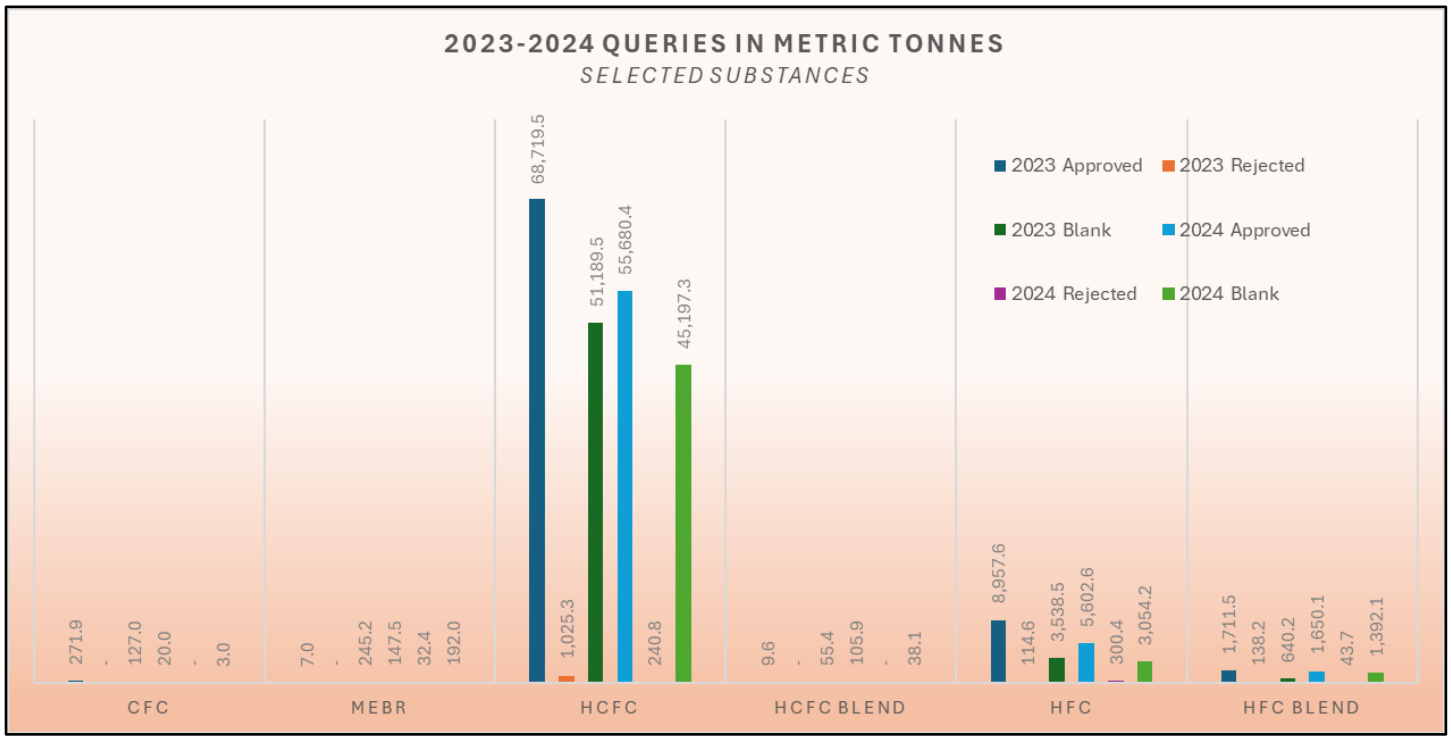


Figure 3 - Quantities of substances raised through iPIC in 2023-2024 in metric tonnes

Figure 4 - Quantities of substances raised through iPIC in 2023-2024 in ODP tonnes

Relatively small quantities of CFCs were still verified and most were approved for importation into the EU from Asia for feedstock use. Shipments of methyl bromide were also permitted into a number of Asian countries for quarantine and pre-shipment purposes, as well as for exempted use.

Rejected requests to import were mostly related to HCFCs and stayed relatively in the same range as in previous years. For 2023 and 2024, the amount rejected reached almost 106 ODP tonnes (1,900 metric tonnes). Reasons for stopping the shipments vary from exceeding the allocated quota, names of importing / exporting companies not matching, the company not holding a license or due to the presentation of false licences and permits.

Regular and close communication between the respective iPIC focal points allowed these unlawful activities and potential illegal trade in HCFCs to be prevented.

Trade in small amounts of HFCs and HFC blends have also been checked through iPIC from 2014 (prior to the adoption of the Kigali Amendment) and has steadily increased in the last years. A combined total of 847 queries was tallied (454 in 2023 and 393 in 2024) amounting to 27,143 metric tonnes (15,100 in 2023 and 12,043 in 2024). Although HFCs have zero ODP value, the amount checked through iPIC still represents an equivalent of 29.6 million GWP tonnes (15.6 million in 2023 and 14.03 million in 2024).

From 2020 more queries have been raised for HFC shipments, the option to include HFCs had already been fully integrated in the iPIC online platform. In 2024, over 12,000 metric tonnes of HFCs and HFCs contained in mixtures was verified through iPIC - equivalent to 194 million CO_2–equivalent tonnes.

Furthermore, it is interesting to note that countries use iPIC not only for large-volume shipments of controlled substances but also for very small quantities. Several iPIC queries were initiated for amounts as low as 2 grams (blend of CFCs, eventually rejected). The highest single shipment amounted to 1.3 million kg of HCFC-22.

Regular and close communication between iPIC focal points can help prevent unlawful activities and potential illegal trade

Assistance provided by UNEP regional focal points has proved useful in following up with concerned trade partners in resolving specific cases. For example, UNEP frequently followed up with importing and exporting countries to clarify whether the intended shipments would be acceptable / authorized, thus helping avoid unnecessary delays in the trade or in finalizing the consultation.

iPIC through the years

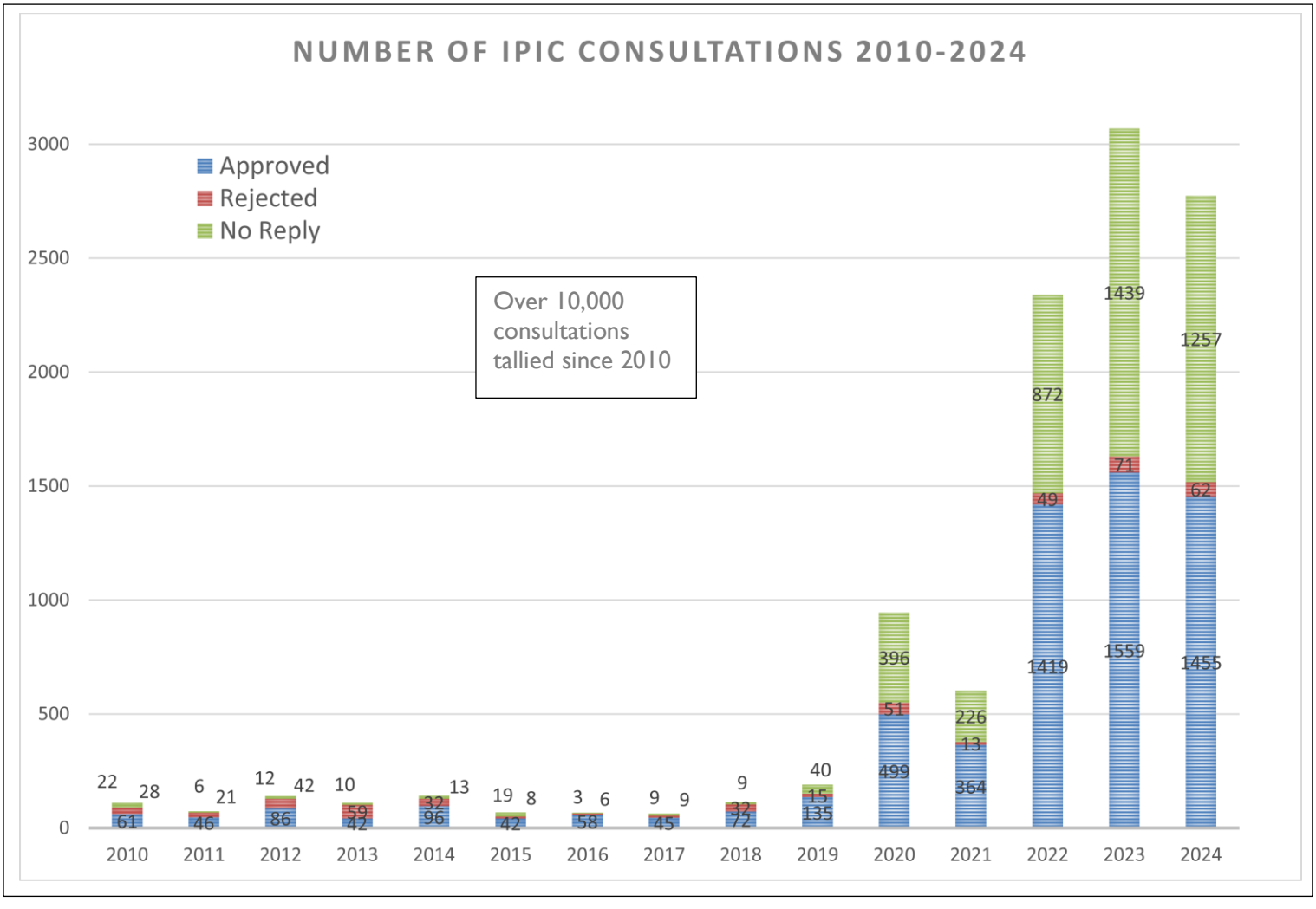


Figure 5 – Summary of number of iPIC consultations per year from 2010 - 2024

The chart above (Figure 5), illustrates the number of queries from 2010 to 2024. Prior to 2020 the number of queries averaged around 100 per year and to date, 2023 was the year with the most queries numbering over 3,000.

Figure 6 illustrates quantities cleared though iPIC in metric tonnages. Over the last ten years iPIC has been used to process thousands of queries to check over 450,000 metric tonnes of controlled substances (approximately 773 million CO_2–eq tonnes). During this period, the iPIC mechanism has prevented thousands of tonnes of unwanted or illegal shipments of ODSs and HFCs. The iPIC statistics collected (and this does not include the many cases where UNEP was not informed of the final outcome of the queries) show that more than 7,000 metric tonnes (around 11.5 million CO_2–eq tonnes) of controlled substances were prevented from being illegitimately traded by the using of the iPIC mechanism.

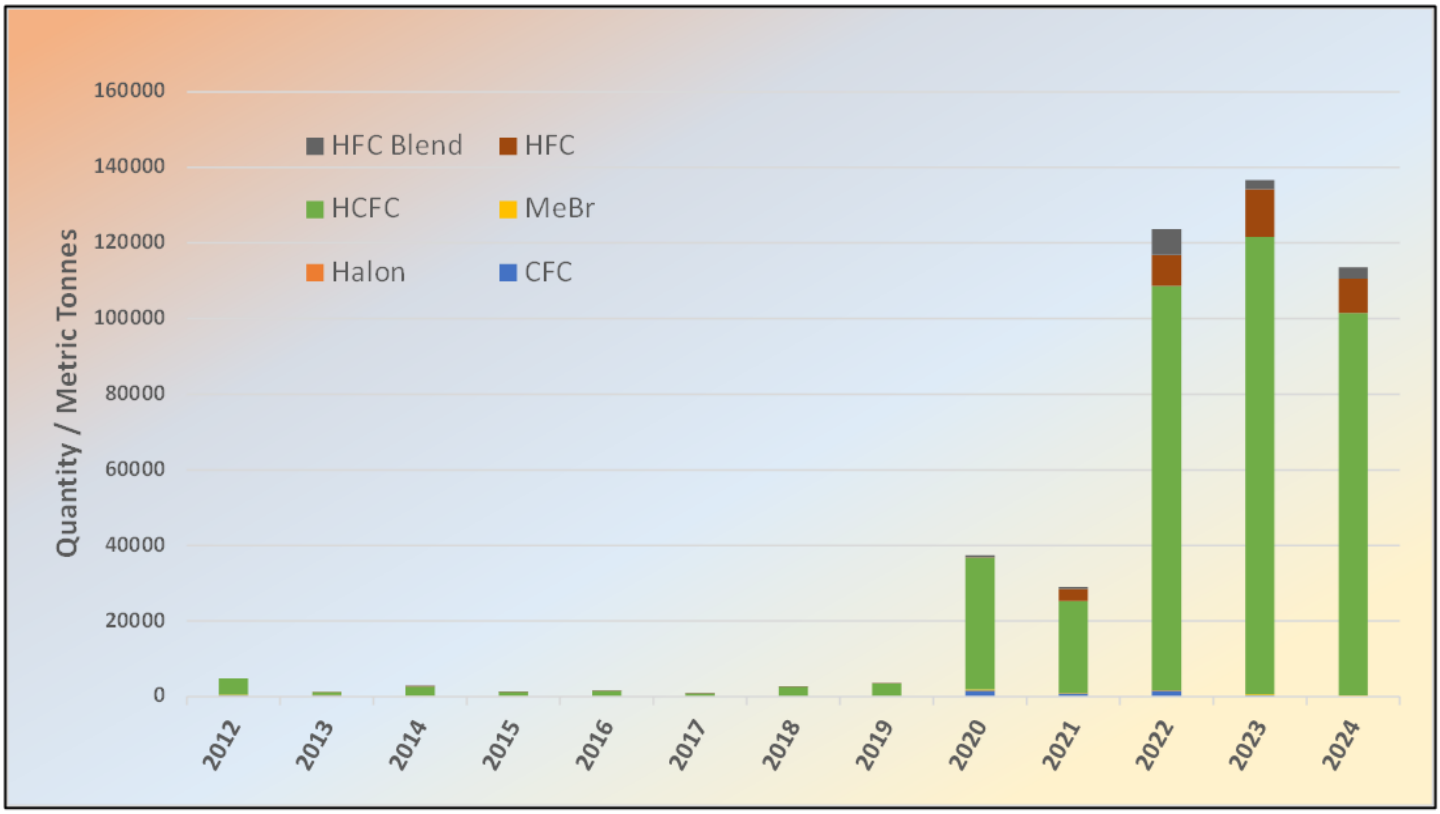


Figure 6. Summary of quantity of selected substances, in metric tonnes, cleared through iPIC consultations per year from

The Kigali Amendment to the Montreal Protocol was agreed in 2016, which added to the Protocol the phase-down of the production and consumption of HFCs and had been added to the iPIC mechanism and the online platform. Figure 7 illustrates quantities cleared though iPIC in terms of their global warming potential (CO_2–eq tonnes).

While queries raised through iPIC over the past 10 years are dominated by HCFCs, it is notable that during the same period HFC and HFC blends were increasingly and regularly being checked through the informal mechanism.

Between 2020 and 2024, over 46,000 metric tonnes of HFCs and HFCs contained in blends (mixtures) were verified through iPIC.

Although other controlled substances—such as CFCs, methyl bromide, and similar compounds—continue to appear sporadically in small quantities, over 1,000 metric tonnes were still checked through iPIC in 2023 and 2024, with 664 tonnes in 2023 and 395 tonnes in 2024 respectively.

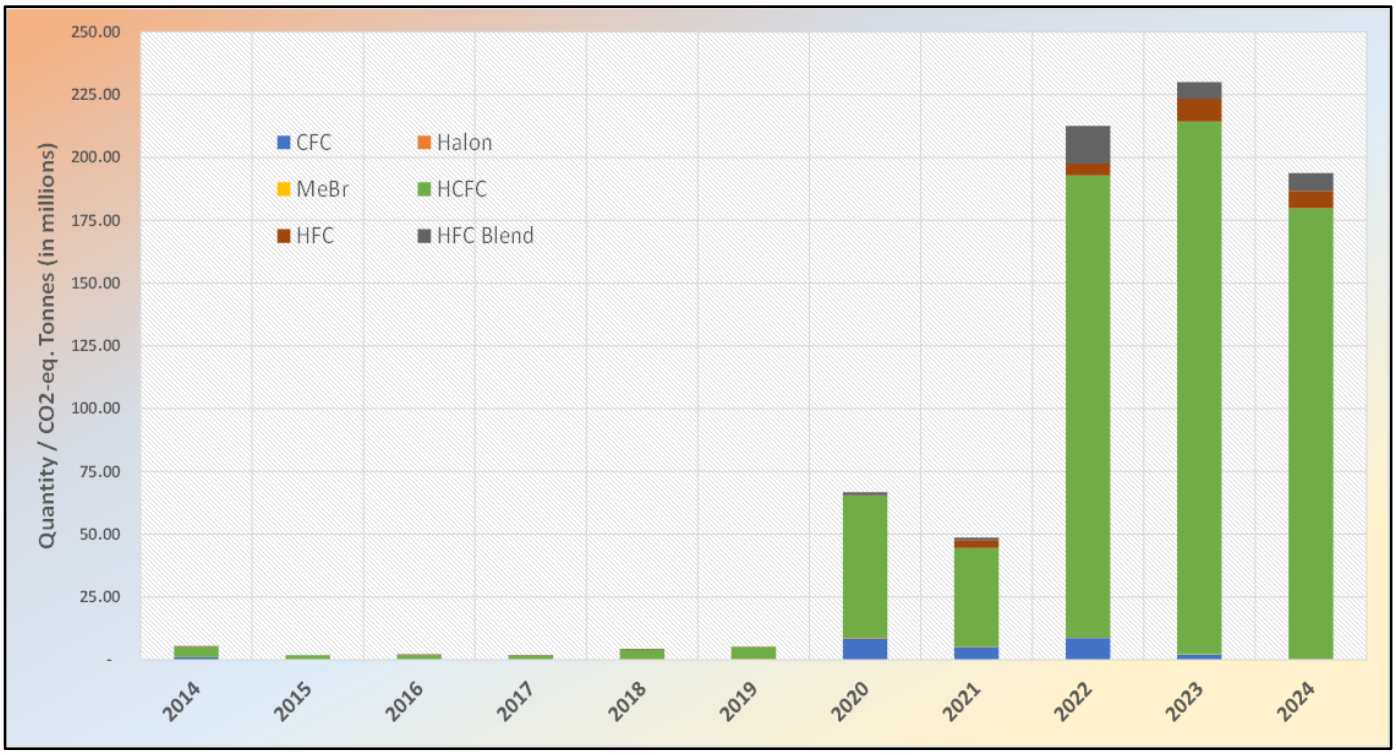


Figure 7. Summary of quantity of selected substances, in CO_2–equivalent tonnes, cleared through iPIC consultations per year from 2014 to 2024.

In conclusion, the IPIC mechanism continues to be a cornerstone in the global effort to prevent illegal and unwanted trade in ODSs and HFCs. With over 5,800 inquires processed in 2023–2024 alone, verifying more than 250,000 metric tonnes of controlled substances, iPIC has helped avert the unauthorized movement of over 7,000 metric tonnes — equivalent to 11.5 million tonnes of CO_2-equivalent emissions. These results underscore the importance of proactive, cooperative enforcement. iPIC stands out as a practical, scalable model for intergovernmental collaboration. Strengthening its use and expanding participation will be critical to safeguarding compliance, protecting the ozone layer, and contributing to climate and environmental security.

Visit the iPIC Online platform at:
www.ozonaction.org/ipic/login

UNEP's regional iPIC focal points can provide valuable assistance and support to follow-up with specific enquiries and can respond to any questions. Contact your UNEP OzonAction Regional Coordinators:
https://www.unep.org/ozonaction/networks

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