

STOCKHOLM
CONVENTION ON

PERSISTENT ORGANIC POLLUTANTS



BACKGROUND

The Stockholm Convention on **Persistent Organic Pollutants (POPs)** is a global treaty to protect human health and the environment from chemicals that remain intact in the environment for long periods, become widely distributed geographically, accumulate in the fatty tissue of humans and wildlife, and have harmful impacts on human health and on the environment.

In response, the Convention, which was adopted on 22 May 2001 and entered into force on 17 May 2004, requires its Parties to take measures to eliminate/reduce the release of POPs into the environment.

THE CONVENTION INCLUDES ANNEXES A - C THAT LIST CHEMICALS:

ANNEX A:

REQUIRES the Parties* to eliminate the production and use of listed these chemicals

ANNEX B:

RESTRICTS the production and use of certain chemicals

ANNEX C:

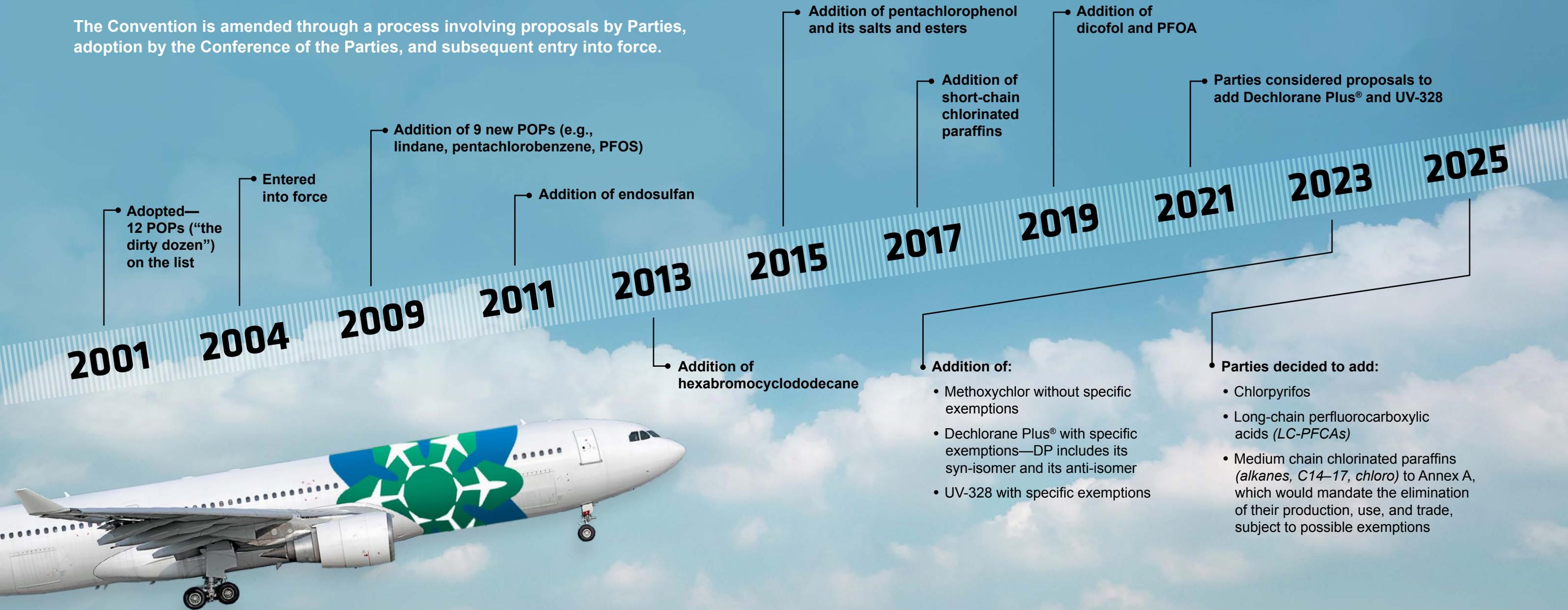
ADDRESSES POPs that are produced unintentionally and reduces the releases of these chemicals

180+ COUNTRIES ARE PARTY TO THE STOCKHOLM CONVENTION

*Parties: A State or regional economic integration organization that has consented to be bound by the Convention and for which the Convention is in force.

RELEVANT DATES

The Convention is amended through a process involving proposals by Parties, adoption by the Conference of the Parties, and subsequent entry into force.



LIST OF POPs



ANNEX A: ELIMINATION

Aldrin (CAS No. 309-00-2)	Alhpa- and Beta- hexachlorocyclohexane (CAS No. 319-85-6 and 319-84-7)	Toxaphene (CAS No. 8001-35-2)
Chlordane (CAS No. 57-74-9)	Lindane (CAS No. 58-89-9)	Decabromodiphenyl ether (c-DecaBDE; CAS No. 1163-19-5)
Chlordecone (CAS No. 143-50-0)	Mirex (CAS No. 2385-85-5)	Dicofol (CAS No. 115-32-2 & 10606-46-9)
Dieldrin (CAS No. 60-57-1)	Pentachlorobenzene (CAS No. 608-93-5)	Perfluorohexane sulfonic acid (PFHxS; CAS No. 355-46-4), its salts & related compounds
Endrin (CAS No. 72-20-8)	Pentachlorophenol (CAS No. 87-86-5) and salts/esters	Dechlorane Plus® (CAS No. 13560-89-9) – with specific exemptions
Heptachlor (CAS No. 76-44-8)	Polychlorinated biphenyls (PCBs; CAS No. 1336-36-3)	Methoxychlor (CAS No. 72-43-5 and isomers)
Hexabromobiphenyl (CAS No. 36355-01-8)	Polychlorinated naphthalenes (Many CAS Nos.)	UV-328 (CAS No. 25973-55-1) – with specific exemptions
Hexabromocyclododecane (HBCD; CAS Nos. 25637-99-4; 3194-55-6; 134237-50-6; 134237-51-7; 134237-52-8)	Perfluorooctanoic acid (PFOA; CAS No. 335-67-1), its salts & related compounds	Chlorpyrifos (CAS No. 2921-88-2)
Hexabromodiphenyl ether and Heptabromodiphenyl ether (CAS No. 68631-49-2; 207122-15-4; 446255-22-7; 189084-67-1; 207122-16-5; and others)	Short-chain chlorinated paraffins (SCCPs) – (Many CAS Nos.)	Medium-chain chlorinated paraffins (MCCPs) – (Many CAS Nos.)
Hexachlorobenzene (HCB; CAS No. 118-74-1)	Technical endosulfan (CAS No. 115-29-7) & its isomers (CAS No. 959-98-8 and 33213-65-9)	Long-chain perfluorocarboxylic acids (LC-PFCAs), their salts & compounds – (Many CAS Nos.)
Hexachlorobutadiene (HCBd; CAS No. 87-68-3)	Tetrabromodiphenyl ether (CAS No. 5436-43-1 and others) & Pentabromodiphenyl ether (CAS No. 60348-60-9 and others)	

ANNEX B: RESTRICTION

DDT (CAS No. 50-29-3) – restricted to disease vector control

Perfluorooctane sulfonic acid (PFOS; CAS No. 1763-23-1), its salts & Perfluorooctane sulfonyl fluoride (CAS No. 307-35-7) – restricted with specific acceptable purposes and exemptions

ANNEX C: UNINTENTIONAL PRODUCTION

Hexachlorobenzene (HCB; CAS No. 118-74-1)

Hexachlorobutadiene (HCBd; CAS No. 87-68-3)

Pentachlorobenzene (CAS No. 608-93-5)

Polychlorinated biphenyls (PCB; CAS No. 1336-36-3)

Polychlorinated dibenzo-p-dioxins (PCDD; Many CAS Nos.)

Polychlorinated dibenzofurans (PCDF; Many CAS Nos.)

Polychlorinated naphthalenes (Many CAS Nos.)

**FULL
CHEMICAL
LIST**



EXAMPLES OF AEROSPACE & DEFENSE EXEMPTIONS



PFOS

ANNEX B

- Some photographic uses
- Some industrial metal plating applications
- Semiconductor manufacture
- Uses of PFOS are being phased out as alternatives become more available



DecaBDE

ANNEX A

- Aerospace parts
- Textiles in transportation
- Electric/electronic equipment



Dechlorane Plus®

ANNEX A

- Aerospace/defense
- Electronic components
- Certain cables, wires, and adhesives



UV-328

ANNEX A

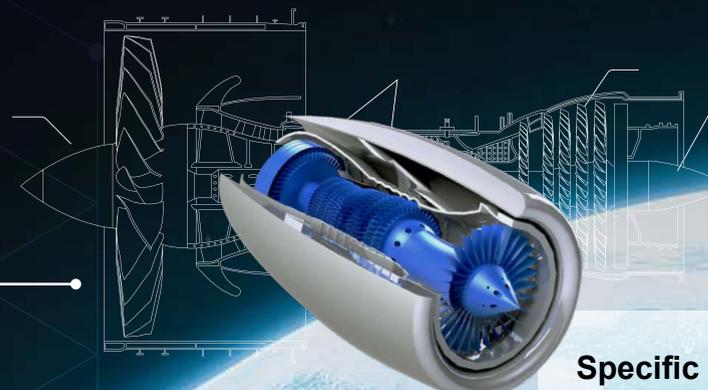
- Water sealants, adhesives, and coatings
- Electrical and mechanical components
- Exemption granted due to aviation safety concerns



Hexabromodiphenyl ether & Heptabromodiphenyl ether

ANNEX A

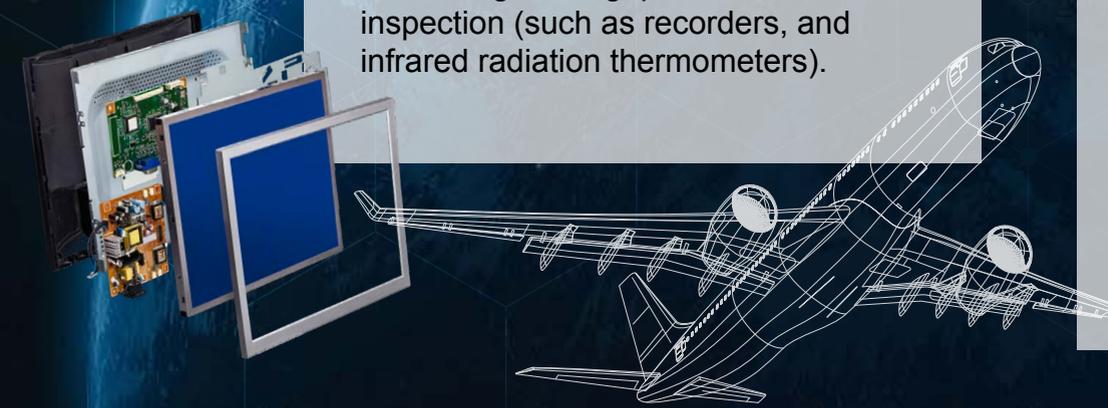
- Use in recycled plastics from vehicles and electronics
- Exemption is time-limited and exception was extended to allow recycling industries to adapt



UV-328

Specific exemptions for the production and use of UV-328 for replacement parts for articles shall apply where UV-328 was originally used in the manufacture of those articles and may be available, limited to the following applications, until the end of the service life of the articles or 2044, whichever comes earlier:

- Stationary industrial machines for use in construction.
- Liquid crystal displays in instruments for analysis, measurements, control, monitoring, testing, production and inspection (such as recorders, and infrared radiation thermometers).



DP

Specific exemptions for the use of DP for replacement parts for, and repair of, articles shall apply where DP was originally used in the manufacture of those articles and may be available, limited to the following applications, until the end of the service life of the articles or 2044, whichever comes earlier:

- Aerospace (such as aircraft engine fan case rub strip products and void-filling and edge-sealing products, aircraft engine manufacturing repairs, electrical items, structural panels and aircraft cabin interiors).
- Space (such as satellites, probes and other exploration equipment, manned cabins and laboratories, heat-insulating materials for rocket motors and ground support equipment).
- Defense (such as naval vessels, missiles, launch platforms, ordnance, communication equipment, radar/lidar systems and support equipment).
- Instruments for analysis, measurements, control, monitoring, testing, production and inspection.

SELECT ARTICLES OF THE STOCKHOLM CONVENTION

GENERAL

The Convention is a legally binding international treaty. Once a country ratifies the Convention, it is then legally obligated to implement its provisions through national laws, regulations, and enforcement tools:

ARTICLES 3&4:

Parties are legally committed to eliminate or restrict the production and use, including import and export, of listed POPs in Annexes A and B, with certain exemptions.



ARTICLE 5:

Parties must reduce or eliminate the unintentional release of POPs listed in Annex C. This includes implementation of Best Available Techniques (BAT) and Best Environmental Practices (BEP) to minimize emissions.



ARTICLE 6:

Parties must develop appropriate strategies to identify stockpiles, products, and wastes containing POPs and ensure that wastes containing POPs are handled, collected, transported, and disposed of in an environmentally sound manner. Disposal must prevent the recovery, recycling, reclamation, direct use, or alternative uses of POPs.



ARTICLE 7:

Parties must develop and submit a National Implementation Plan within two years of joining the Convention. NIPs must be updated periodically to reflect new POPs.



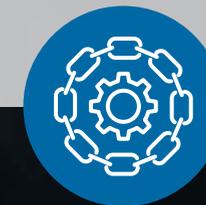
ARTICLE 10:

Parties must promote and facilitate awareness programs and public access to information on POPs. Parties must provide necessary training and education of workers, scientists, educators, and the public.

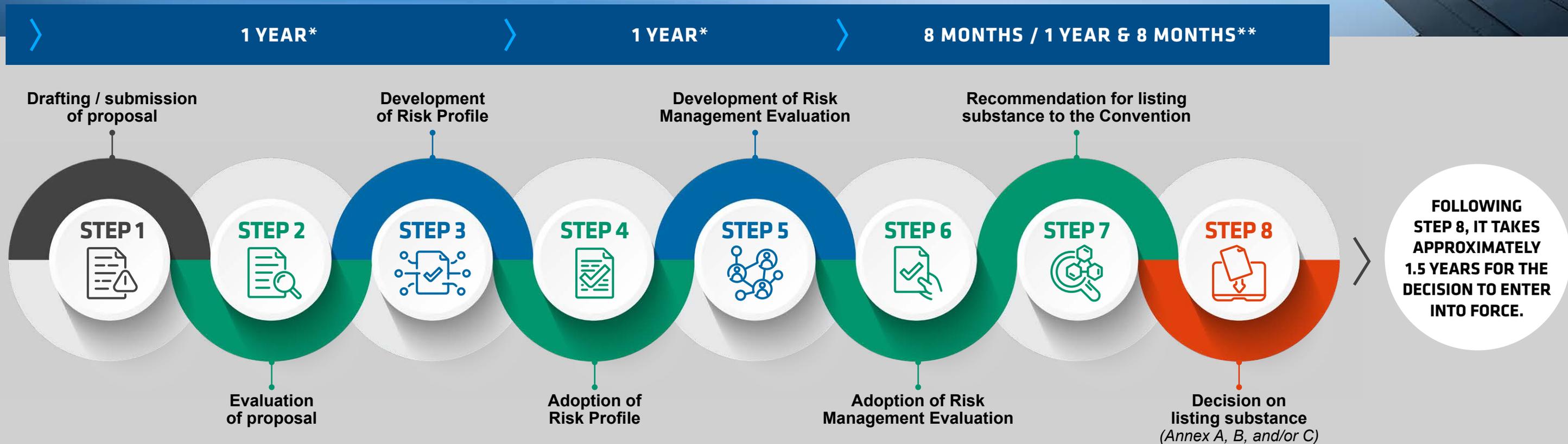


ARTICLE 15:

Parties must submit periodic reports on i) measures taken to implement the Convention, ii) effectiveness of the measures, iii) data on the production, import, and export of POPs, and iv) information on stockpiles, disposal methods, and releases.



PROCESS TO ADD A POP TO THE CONVENTION



Party to the POPs Convention, including the EU (i.e. State or regional economic integration organisation that has consented to be bound by this Convention, and for which the Convention is in force).



The Persistent Organic Pollutants Review Committee POPRC (composed of specialists and tasked with reviewing proposals to add new substances to the Convention).



Working Group of the POPs Review Committee for the substance.



The Conference of the Parties COP is composed of all Parties to the Convention and, where appropriate, observers. It sets the rules for the implementation procedures and is responsible for the main decisions.

*The risk profile and risk management evaluation are prepared during the intersessional period between POPRC meetings, which take place once a year (September/October).

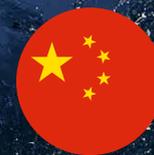
**The meetings of the Conference of the Parties (COP) take place once every two years in April/May.

Note: Amendments to the Annexes to the Convention enter into force one year after the date of communication of their adoption by the depositary. The depositary notifications (CNs) are usually issued about 6 months after the amendments have been adopted by the COP.

REGULATORY OBLIGATIONS

Parties are to implement the Convention through various regulatory, legal, monitoring, educational, and financial tools—including laws regulating chemical production, use, disposal, and institutional mechanisms for monitoring and enforcement.

SELECT COUNTRIES...



CLICK A LOCATION FOR MORE INFORMATION



REGULATORY OBLIGATIONS

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UNITED KINGDOM

The UK ratified the Convention in May 2004. The [POPs Regulation in the UK](#) is a piece of EU legislation that was retained in domestic law at the end of the Brexit transition period. Originating as Regulation (EU) 2019/1021, this Regulation has been amended by UK authorities to ensure its continued application and alignment with UK international obligations - the Stockholm Convention. The Regulation forms the principal legal framework for the control and management of POPs across England, Scotland, and Wales. Between 2007 and 2013, it the UK enacted initial bans on “Legacy POPs” including aldrin, dieldrin, DDT, and PCBs. In 2017, the UK published its NIP and in January 2021, it retained the EU POPs Regulation (2019/1021) post-Brexit.

On 20 May 2025, the UK government published an amendment ([SI 2025 No. 605](#)) to the UK POPs regulation to revoke the inclusion of DP and UV-328 from Part A of Annex 1 although methoxychlor remains restricted. This decision is effective from 21 May 2025. The restrictions will be re-implemented once continuing needs to use in medical devices have been evaluated. In June 2025, the UK published its latest policy update on obligations for POPs stockpile management, waste disposal, and trade restriction.



UNITED STATES

Whereas the USA signed the Convention in 2001, it currently lacks the domestic legal authority to fully implement all provisions of the Convention, particularly those requiring automatic bans or restrictions on chemicals once listed by the treaty. The Toxic Substances Control Act (TSCA), as it existed when the treaty was signed in 2001, did not give the EPA enough authority to regulate or ban chemicals quickly or automatically in line with international decisions. For the US to comply with the treaty, Congress would have had to amend TSCA to allow automatic or streamlined action on POPs; this legislative change was politically difficult.

The US law requires Congressional action to regulate chemicals, and the Stockholm Convention’s mechanisms could bypass that process, raising concerns about sovereignty and legislative control. Further, ratification of any treaty requires a two-thirds majority in the Senate, which is often difficult to achieve, especially for environmental treaties. Special interest groups and political divisions have historically opposed international agreements that might impose stricter regulations on U.S. industries.

However, even though the US has not ratified the Convention, it actively participates in meetings and technical committees as an observer. The EPA has taken actions consistent with the Convention, such as banning or restricting many of the original POPs. The US shares scientific data and policy views with other Parties to the Convention.



CANADA

The [Prohibition of Certain Toxic Substances Regulations, 2012](#), made under [CEPA](#), prohibits the manufacture, use, sale, offer for sale or import of certain toxic substances, including POPs. After the Stockholm Convention substances are placed on Schedule 1 – List of Toxic Substances of CEPA, Canada typically uses the Prohibition of Certain Toxic Substances Regulations to implement Stockholm Convention requirements. Canada ratified the Convention on 23 May 2001 and in May 2006 it submitted its first NIP.

In 2009 Canada began aligning domestic controls with the Convention amendment that added nine new POPs. In 2024, Canada released an updated NIP to include measures to manage dicofol, endosulfan, HCBN, PCNs, and SCCPs. On 26 February 2025, [DP was added to Part 2 of Schedule 1 to the Canadian Environmental Protection Act \(CEPA\)](#). This does not impose an immediate ban but empowers the government to develop enforceable risk-management measures with future regulations. Canada has not yet implemented any specific regulation or prohibition governing UV-328.



REGULATORY OBLIGATIONS

SELECT COUNTRIES...

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JAPAN

Japan ratified the Convention in May 2002 and initiated bans on the 12 legacy POPs between 2004 and 2010 under its Chemical Substances Control Law (CSCL). The [CSCL](#) provides the legal framework to classify, restrict, and phase out POPs in line with international obligations. Substances listed under the Convention are controlled as [Class I Specified Chemical Substances](#), enabling nationwide restrictions on manufacture, import, and use while allowing limited exemptions where necessary.

In 2011, Japan introduced PFOS restrictions under the CSCL. Between 2013 and 2019, it updated its POPs to include SCCPs, HBCD, and PBDEs. Dechlorane Plus and UV-328 has been [classified as Class I Specified Chemical Substances under the Chemical Substances Control Law \(CSCL\)](#), effective 18 February 2025, following a Cabinet decision on 13 December 2024. Manufacture and import are restricted, with a ban on products containing these substances from 18 June 2025. A defense-related exemption for DP in insulation materials applies until 26 February 2030.

EUROPEAN UNION

The EU implements the Stockholm Convention primarily through the [Regulation \(EU\) 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants \(recast\)](#), which directly bans or restricts substances listed under the Convention and applies across all Member States to ensure harmonised controls on manufacture, use, and waste. In April 2024, the EU adopted [Regulation \(EC\) No 850/2004](#) on POPs, the first EU-wide framework for controlling POPs in products and waste. The EU ratified the Convention in May 2004. In 2014, the EU published its first NIP and in June 2019 it updated controls on newer POPs such as SCCPs, PFOS, and brominated flame retardants. In May 2025, the European Commission adopted two Delegated Regulations introducing new restrictions for [DP](#) and [UV-328](#) under the POPs Regulation. Both regulations will enter into force following their publication in the Official Journal of the European Union. These restrictions are aligned with the Stockholm Convention, including the permitted exemptions.

THAILAND

Thailand ratified the Stockholm Convention in 2003. The [Hazardous Substance Control Act B.E. 2535](#) regulates the manufacture, import, export, and possession of all hazardous chemicals used in Thailand, which includes the POPs listed under the Convention. The Act also ensures that hazardous substances are handled only by authorised operators, and are appropriately handled, transported and disposed of. In recent years, DP has been classified as a Type 3 hazardous substance under Thailand's Hazardous Substance Act, requiring registration and licensing for manufacture, import, export, or use. Regulatory controls on UV-328 are under development but have not yet been formally implemented. Thailand's prohibitions and exemptions for DP are aligned with the Convention, including adherence to control measures consistent with the amendment listings. Thailand submitted its National Implementation Plan updating control measures for new POPs including DP and continues to enhance enforcement mechanisms. More information can be found [here](#).

AUSTRALIA

Australia ratified the Convention in May 2004. Between 2004 and 2010 it placed controls on the initial 12 POPs. In 2024 Australia released its draft NIP. Australia added DP & UV-328 to Schedule 6 of the [Industrial Chemicals Environment Management \(IChEMS\) Register](#). The prohibition is effective from 1 July 2026. From that date, manufacturing, import, export, and use of these chemicals (whether as the substance itself, in mixtures, or in articles) will be prohibited. This prohibition is aligned with the Stockholm Convention, including the specified exemptions. The IChEMS is part of Australia's ratification process for the Stockholm Convention, and determines whether a substance is permitted, restricted or prohibited. It establishes nationally consistent controls by scheduling chemicals according to their environmental risk and identifying any essential uses. The [Industrial Chemicals Environmental Management \(Register\) Act 2021](#) is the legislative framework for the IChEMS.



REGULATORY OBLIGATIONS

SELECT COUNTRIES...

Parties are to implement the Convention through various regulatory, legal, monitoring, educational, and financial tools—including laws regulating chemical production, use, disposal, and institutional mechanisms for monitoring and enforcement.



MALAYSIA

Malaysia has signed but not yet ratified the Stockholm Convention. The country includes POPs substances on its Environmentally Hazardous Substances (EHS) list, which imposes notification obligations on the import, export, or manufacture of listed substances. The Environmentally Hazardous Substances Notification and Registration Scheme (EHSNR) applies to all EHS, such as the POPs under the Convention, which are manufactured or imported into Malaysia in volumes ≥ 1 tonne per year. This is currently voluntary, and requires Malaysian importers, exporters and/or the manufacturers of EHS need to register, apply, and notify in the MyEHS System. However, the regulatory framework does not apply to chemicals with exemptions under the Stockholm Convention.

Recently, Malaysia's Department of Environment published a notice clarifying its regulatory position on DP and UV-328 on the Malaysia Environmentally Hazardous Substances System portal. Although both substances are subject to strict control measures under the Convention, Malaysia has no plans to register exemptions for DP or UV-328, as it is not eligible to do so before ratification. Stakeholders are advised to refer to the Stockholm Convention Secretariat for exemption details and to consult Malaysia's Chemical Management Division of the Department of Occupational Safety and Health for local regulatory guidance. Prohibitions on DP and UV-328 are not yet implemented domestically and are not aligned with the Convention due to Malaysia's non-ratification status. More information can be found [here](#).

SINGAPORE

In the mid 1980s, Singapore had banned 10 POPs including aldrin, DDT, and PCBs. In 2000, it enacted the Air Impurities Regulations that targeted the emissions of dioxins and furans from incinerators. Singapore ratified the Convention in August 2005 and all obligations to eliminate or restrict POPs became binding. In August 2007, it submitted its NIP. Falling under the [Environmental Protection and Management Act \(EPMA\)](#), the Environmental Protection and Management (Hazardous Substances) Regulations facilitate the control of environmentally hazardous chemicals by the Singapore National Environment Agency, such as the prohibition/restriction of POPs under the Convention. On 21 March 2025, Singapore issued the [Environmental Protection and Management Act 1999 \(Amendment of Second Schedule\) \(No. 3\) Order 2025](#), ratifying the prohibition on DP and UV-328 with exemptions (aligned with the Convention). The Order became effective on 24 March 2025.

INDIA

[Notification G.S.R 207 \(E\) - Regulation of Persistent Organic Pollutants Rules 2018](#) prohibits the manufacture, trade, use and import of 7 chemicals listed under Annex A of the Stockholm Convention: chlordecone, hexabromobiphenyl, hexabromodiphenyl ether and heptabromodiphenyl ether, pentachlorobenzene, yetrabromodiphenyl ether and pentabromodiphenyl ether, HBCD, and HCBD. The Rules also regulate the disposal of wastes containing such chemicals. India ratified the Stockholm Convention in 2006 but submitted a declaration under Article 25(4) of the Convention, stating that it is not bound to implement amendments to Annexes (including those adding new POPs such as DP and UV-328) until formally adopting them domestically. Currently, India has not added DP or UV-328 to its domestic POPs regulations, and no public information indicates plans to do so. As a result, prohibition or regulation of DP and UV-328 is not currently in place, and no alignment with the Convention amendments for these substances exists at this time. India's Ministry of Environment, Forest and Climate Change continues to monitor POPs developments internationally but has not announced specific control measures for these chemicals.



CHINA

China ratified the Convention in November 2004. Between 2004 and 2010, it initiated bans on the 12 original POPs. Between 2016 and 2020, China updated its NIP to include new POPs such as SCCPs, HBCD, and PBDEs. Between 2021 and 2023, China began phasing out PFOS and PFOA in line with the Convention amendments. The proposed bans on DP and [UV-328](#) are expected to align with the Stockholm Convention, but full alignment (including exemptions) is pending final regulatory confirmation. The [Catalogue of Severely Restricted Toxic Chemicals](#) lists chemicals where the import and export are restricted under the Stockholm Convention. The Catalogue also includes permitted uses for listed substances according to the Convention.





WORTH THE RISK?

Failure to comply with the provisions of the Convention poses risks for reputational damage, closure of facility and/or high fines, and varies by Party depending on the individual country law:



WHAT'S AT RISK...



GLOBAL SUPPLY CHAIN EXPOSURE:

A&D companies sourcing materials or components from, or selling to, these countries that are Parties to the Convention must comply with the laws of that country that reflect the requirements of the Convention.



INTERNATIONAL CONTRACTS:

Failing to comply with environmental standards, such as POPs bans, can breach contract clauses with the Parties to the Convention or multinational defense partners.



OBSOLESCENCE OF MATERIALS OR TECHNOLOGIES:

Many legacy aerospace components (e.g., coatings, insulators, flame retardants) contain POPs like PFOS, PCBs, or brominated flame retardants; non-compliance may require sudden replacements or redesigns.



INCREASED COMPLIANCE COSTS:

Delaying transition to POP-free materials or systems can make future compliance more expensive and logistically complex.



SUSTAINABILITY SCRUTINY:

Investors, governments, and the public increasingly hold defense contractors to environmental and social governance (ESG) standards. Use of banned substances can damage reputation and stakeholder trust.



PENALTIES AND FINES:

Companies may face penalties or private lawsuits if not in compliance.



LOSS OF MARKET OPPORTUNITIES:

A&D companies must understand regulatory requirements to enable market access.



ADDITIONAL RESOURCES

- [Stockholm Convention Overview](#)
- [Text of the Convention](#)
- [POPs Status of Ratifications](#)
- [Listing of POPs in the Stockholm Convention](#)
- [New POPs under Convention](#)
- [Environmental Protection and Management Act 1999 \(Amendment of Second Schedule\) \(No. 3\) Order 2025 \(Singapore\)](#)
- [The Persistent Organic Pollutants \(Amendment\) \(No. 3\) Regulations 2025](#)
- [List of substances proposed as POPs \(EU\)](#)
- [Delegated Regulations for DP & UV-328 \(EU\)](#)
- [IChEMS \(Australia\)](#)
- [Order Adding Toxic Substances to Part 2 of Schedule 1 to the Canadian Environmental Protection Act, 1999: SOR/2025-27 \(Canada\)](#)
- [Cabinet Decision on "Cabinet Order Partially Amending the Enforcement Order of the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc." \(Japan\)](#)



DELIVER education, awareness and guidance for the industry

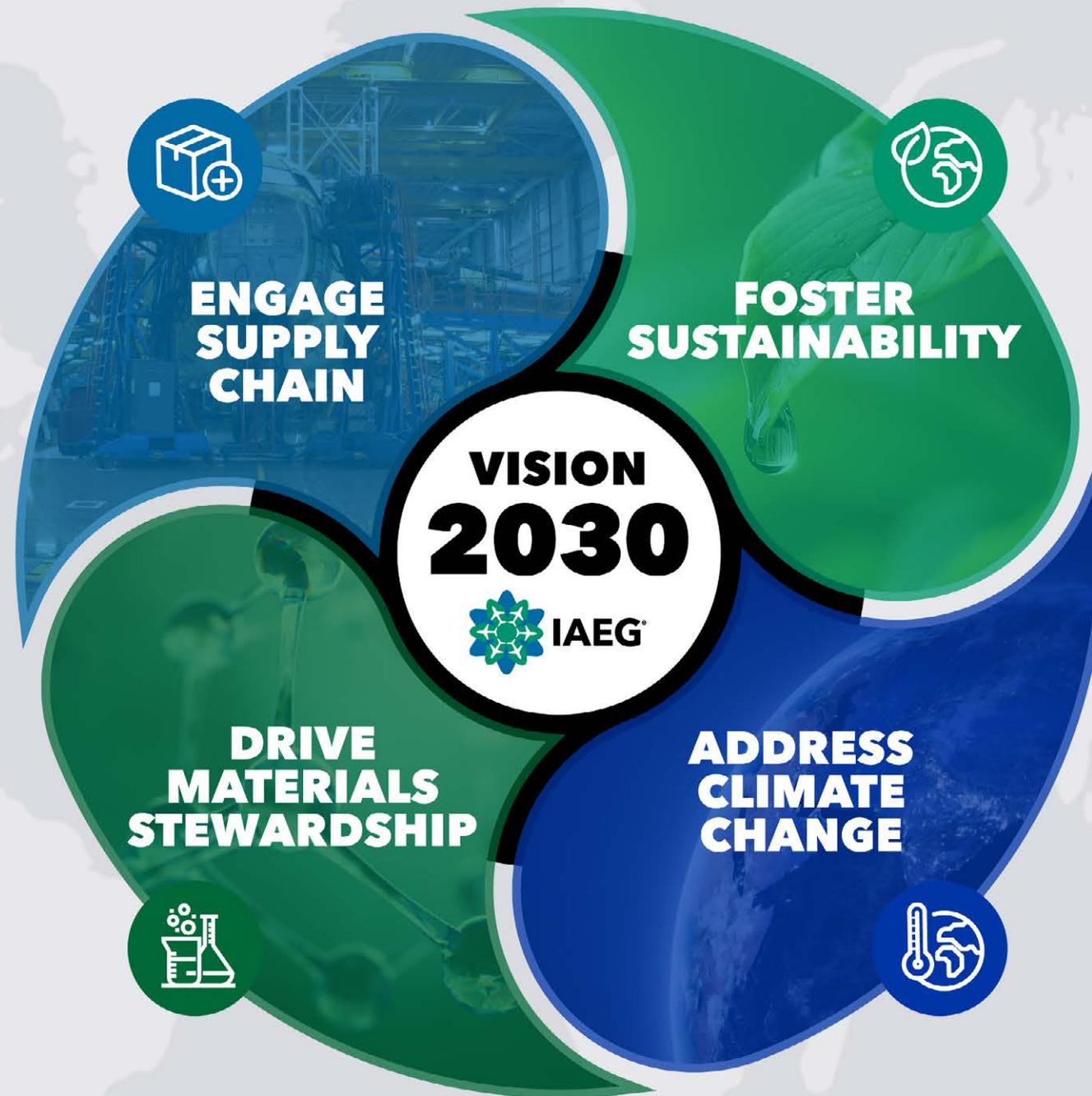
STRENGTHEN small and medium enterprise (SME) engagement

GENERATE transparency through data insight for the benefit of all

PRIORITIZE rapidly evolving global regulations and standards

ACT collaboratively to develop risk assessment tools

ADAPT through shared mitigation strategies



ANTICIPATE new reporting, social and environmental expectations

ADVANCE the maturity of the value chain on sustainability

FACILITATE industry actions to drive circular economy

PROMOTE activities to reduce greenhouse gas emissions

DEVELOP tools to report progress in a standardized manner

ENABLE strategies to improve value chain climate resilience

OUR VISION: A Sustainable Aerospace and Defense Industry

OUR VALUES: **CHAMPION**
STANDARDIZED PRACTICES

PARTNER
WITH STAKEHOLDERS

ELEVATE
THE IMPACT OF IAEG