Webinar Report

Activity Options for Action Plans on Cross-Cutting Issues of Specific Stockholm Convention Articles

24 February 2026

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Introduction

On 24 February 2026, the Green Growth Knowledge Partnership (GGKP) hosted the fourth and final session of the NIP action plan webinar series under the GEF-funded and UNEP-led Global NIP Update Project (GEF ID 10785). Effective National Implementation Plan (NIP) action plans are essential for managing and phasing out persistent organic pollutants (POPs) while avoiding regrettable alternatives and meeting core obligations under the Stockholm Convention, including Article 15 reporting.

This webinar introduced action plan activity options for cross-cutting action plans linked to specific Stockholm Convention Articles, including institutional and regulatory strengthening, measures to reduce or eliminate releases from intentional production, and use, identification and management of stockpiles and waste, exemptions listing, public awareness and education, and contaminated sites. The session also featured awareness-raising materials and activities from the International Pollutants Elimination Network (IPEN) and provided insights on strengthening chemicals and waste management through sectoral approaches exploring interlinkages between Stockholm Convention NIPs, other international conventions and the Global Framework on Chemicals (GFC).

TIME (CET)	Description	Speaker
14:00	Welcome and opening remarks	Moderator: Dr Fabienne Pierre (GGKP/UNEP)
14:05	Activity Options for Action Plans on Cross-Cutting Issues of Specific Stockholm Convention Articles – Part 1	Dr Roland Weber (POPs Environmental Consulting)
14:45	Awareness Raising on POPs and Other Pollutants with a Global Network Supporting NIP Action Plans and Beyond	Dr Therese Karlsson and Gohar Khojayan (IPEN)
15:10	Activity Options for Action Plans on Cross-Cutting Issues of Specific Stockholm Convention Articles – Part 2	Dr Roland Weber
15:25	Strengthening Chemicals and Waste Management through Sectoral Approaches: Interlinkages between Stockholm Convention NIPs, Other International Conventions and the Global Framework on Chemicals	Mihaela Paun (UNEP)
16:15	Q&A session	All
16:30	Closing remarks	

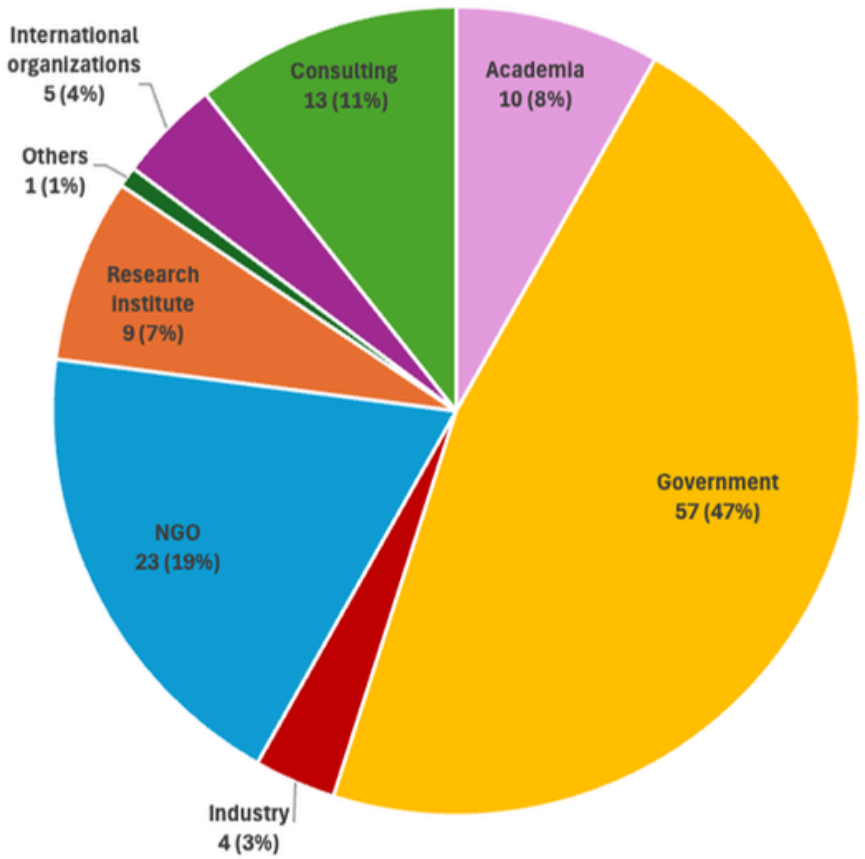
Registration and attendance

Number of registrants: 218 / total attendance: 122
(approx. 56.5% female, 42% male, 1.5% prefer not to answer)

Participants by country

Country	Attendees	Country	Attendees	Country	Attendees
Argentina	6	Democratic Republic of the Congo	2	United States of America	1
Uruguay	5	Tunisia	2	Gabon	1
Dominican Republic	5	Canada	2	Gambia	1
Nigeria	4	Côte d'Ivoire	2	Bolivia	1
Peru	4	Niger	2	Guinea	1
South Africa	4	Kazakhstan	2	Benin	1
Uganda	3	Sierra Leone	2	Maldives	1
Germany	3	Myanmar	2	Egypt	1
Bangladesh	3	India	2	Afghanistan	1
Costa Rica	3	France	1	Romania	1
United Republic of Tanzania	3	Indonesia	1	Tajikistan	1
Armenia	2	Thailand	1	Bulgaria	1
Botswana	2	Sweden	1	Greece	1
Ghana	2	Zimbabwe	1	Saudi Arabia	1
Japan	2	North Macedonia	1	Namibia	1
Senegal	2	Ethiopia	1	Belgium	1
Switzerland	2	Bahamas	1	Iraq	1
Zambia	2	Saint Kitts and Nevis	1	Malaysia	1
China	2	Mexico	1	Lao People's Democratic Republic	1
Cameroon	2	Chile	1	Mongolia	1
Colombia	2	Liberia	1	Burundi	1
Czech Republic	2	Kyrgyzstan	1	Republic of Congo	1
United Kingdom of Great Britain and Northern Ireland	2	Saint Vincent and the Grenadines	1	Sudan	1

Participants by sector



Key highlights

The global effort to eliminate POPs depends on a strong synergy between government action, scientific expertise and engagement from civil society and the private sector. Through robust regulatory frameworks, the timely phase-out of exemptions, life-cycle approaches, and continuous monitoring and awareness-raising, this collective mission can also serve as a strategic platform for advancing broader global environmental goals.

Activity Options for Action Plans on Cross-Cutting Issues of Specific Stockholm Convention Articles

Dr Roland Weber, Head of POPs Environmental Consulting, introduced action plans objectives and activity options in line with the Stockholm Convention NIP guidance and the harmonized NIP template in the Stockholm Convention Integrated Electronic Toolkit. He stressed the need to reduce releases from the intentional production and use of POPs that remain under specific exemptions, including per- and polyfluoroalkyl substances (PFAS), medium-chain chlorinated paraffins (MCCPs), UV-328 and dichlorodiphenyltrichloroethane (DDT).

Parties should compile inventories, assess emissions and identify control measures, while continually reviewing alternatives so exemptions can be phased out earlier. He linked this to sustainable consumption, arguing that reducing unnecessary chemicals and unnecessary plastics, guided by the essential-use concept, should be a priority. For hexachlorobutadiene (HCBD), he pointed to rising Arctic air concentrations and recommended stronger monitoring, inventories and substitution of the major HCBD source chlorinated solvents used in dry cleaning or degreasing. Where substitution is not feasible, best available techniques and best environmental practices (BAT/BEP) should be applied to minimize emissions and ensure safe waste management.

The NIP action plans are partly structured around specific Convention articles and cross-cutting issues as recommended by the NIP development/update guidance. Article 4 requires a register of POPs for identifying Parties with specific exemptions, and he recommended clear national processes for deciding on exemptions, including science-based assessment, periodic review and formal notification.

Under Article 6, Parties should establish regulatory frameworks and practical systems to identify, separate, collect, transport, treat and safely dispose of POP wastes, while also systematically identifying, securing, prioritizing and remediating contaminated sites. For Articles 9 and 10, he recommended a mechanism to screen information from the Basel, Rotterdam and Stockholm (BRS) Conventions and the GFC for national relevance, and to communicate national POPs information of regional or international importance to the regional centres and the BRS Secretariat. He also stressed the importance of public awareness and targeted education for policymakers, industry, workers and the general public.

Key highlights

Article 11 requires Parties to undertake appropriate research, development, monitoring and cooperation on POPs and, where relevant, their alternatives and candidate POPs. Countries should strengthen national scientific and technical research capacity and infrastructure to evaluate POPs and develop networks among research institutions at national and international levels. Under Article 16, Parties are encouraged to contribute to the Global Monitoring Plan (GMP) by generating comparable data on POPs in key matrices such as air, human milk and blood to evaluate how effectively the Stockholm Convention is being implemented. National reporting under Article 15 complements this by tracking implementation progress, challenges and results.

Awareness Raising on POPs and Other Pollutants with a Global Network Supporting NIP Action Plans and Beyond

Dr Therese Karlsson, Science and Technical Advisor at IPEN, stressed that the impacts of POPs can be hard to see while they spread through ecosystems and food chains, making awareness-raising essential for Stockholm Convention implementation and stronger chemicals management.

IPEN, a civil society network, bridges science and policy, and local and global perspectives by supporting POPs evaluations, conducting studies on POPs in products and waste, and producing guidance, policy briefs and reports useful for NIPs and action plans.

IPEN's monitoring of free-range chicken eggs for more than two decades has functioned as a local indicator of POPs in the food chain. Studies have shown that eggs collected near waste burning or industrial activities can contain high levels of POPs, including dioxins. The findings demonstrate the importance of preventing open burning, properly managing ash from waste incineration and strengthening the control of POPs- containing waste streams, including brominated flame retardants and polychlorinated biphenyls (PCBs). Certain waste practices can generate additional POPs, and investigating and securing contaminated sites are essential.

Growing evidence suggests that brominated dioxins can also contribute substantially to dioxin-like toxicity, implying a need for additional listings under the Stockholm Convention, better waste practices and avoiding recycling plastics with brominated compounds, alongside discouraging exports of electronic and plastic waste to places without safe management capacity.

On plastics and consumer products, she described findings on beached plastic pellets sampled across 23 countries and plastic toys from 10 countries, which all contained POPs. None of the toys were labelled to indicate the presence of toxic chemicals, underscoring gaps in transparency and traceability that obstruct Convention requirements to identify POPs in products and waste.

Key highlights

Recycling practices can further complicate the issue, as plastics containing POPs may be recycled and incorporated into new products, including toys, thereby reintroducing hazardous chemicals into the market. She stressed the importance of clear identification criteria in new listings under the Stockholm Convention, narrow and time-limited exemptions and greater transparency throughout the lifecycle of chemicals. For safe management of identified POPs, IPEN provides guidance on technologies for destroying POPs-containing waste, including non-combustion methods that avoid the formation of new POPs during the treatment process.

Gohar Khojayan, Co-Chair at IPEN and Communication Specialist at Armenian Women for Health and Healthy Environment (AWHHE), introduced how AWHHE has supported protecting the health of women and children while addressing environmental pollution and chemical risks as a civil society organization. The organization works closely with the Armenian government as an NGO focal point for the Stockholm Convention and a member of the National Steering Committee, contributing to national strategies and to a GEF Enabling Activity project supporting the review and update of the NIP in Albania, Armenia and Kazakhstan. AWHHE has contributed to making POPs information accessible, producing and distributing a booklet on Stockholm Convention implementation and leaflets on the list of POPs and properties and risks of specific POPs, highlighting their persistence and health effects.

She highlighted the “Next Exit” chemical safety game utilized to educate the younger generation and increase engagement with the presentation developed in Armenian by AWHHE. The activity has been conducted with secondary school students aged 10–16 in villages (including Nigavan and Arzakan) as well as with NGO representatives at the Yerevan Aarhus Center. Outreach activities have been tailored to specific audiences, as each of these groups encounters chemicals in different ways.

Agricultural students and farmers face potential risks from pesticide use and obsolete stockpiles, while medical students need to understand the health impacts of chemical exposure. Webinars and hybrid formats (webinars projected in classrooms/community spaces) allowed reaching remote areas. The effectiveness of media engagement through websites, social media and national media was also highlighted, connecting current events with broader issues related to chemical management and environmental protection.

Key highlights

Strengthening Chemicals and Waste Management through Sectoral Approaches: Interlinkages between Stockholm Convention NIPs, other International Conventions and the Global Framework on Chemicals

Mihaela Paun, Programme Management Officer in the Agrifood and Health Unit at UNEP, emphasized that addressing POPs requires integrated approaches with broader environmental frameworks. She underlined that NIPs under the Stockholm Convention already include key elements of chemicals management such as legal reviews, institutional assessments, POPs inventories and action plans, and therefore serve as strategic platforms for strengthening broader chemicals and waste management.

By aligning NIPs with the GFC, countries can build on existing mechanisms to support legal reforms, strengthen data systems, address issues of concern such as PFAS and highly hazardous pesticides (HHPs), and promote safer alternatives and lifecycle approaches. The sectoral approach focusing on major sectors such as electronics, transport, construction, textiles and agriculture is important to identify overlaps, reduce duplication and target limited resources where impact is greatest.

Mihaela Paun called for strengthening synergies with other conventions, aligning NIP inventories with Basel Convention waste inventories, coordinating with Rotterdam's Prior Informed Consent (PIC) procedures, and pursuing joint inventories and emission controls with the Minamata Convention. Chemicals management can also be coordinated with climate and biodiversity goals, using BAT/BEP to generate co-benefits and recognizing POPs as drivers of biodiversity loss.

Managing POPs contributes to Sustainable Development Goals (SDGs), supporting improved health outcomes, food safety, clean water, sustainable cities and responsible production and consumption. She underscored that NIPs provide tested operational frameworks that, when aligned with the GFC and linked with climate, biodiversity and SDG objectives, become strategic platforms for integrated chemicals and waste management that protect human health and the environment.

Resources

- **The concept note and video recording in English, Spanish, French and Russian are available on the Global NIP Update platform:** https://www.greenpolicyplatform.org/webinar/activity-options-action-plans-cross-cutting-issues-specific-stockholm-convention-articles

Spanish | French | Russian

- **GGKP action plan webinars on individual POPs groups**
  - GGKP (2025). Activity Options for Action Plans on the Management and Elimination of PCBs and POP Pesticides. https://www.greenpolicyplatform.org/webinar/activity-options-action-plans-management-and-elimination-pcbs-and-pop-pesticides
  - GGKP (2026). Activity Options for Action Plans on the Reduction of uPOPs and Management of PFASs. https://www.greenpolicyplatform.org/webinar/activity-options-action-plans-reduction-upops-and-management-pfass
  - GGKP (2026). Activity Options for Action Plans for Brominated, Chlorinated and Other New POPs. https://www.greenpolicyplatform.org/webinar/activity-options-action-plans-brominated-chlorinated-and-other-new-pops

- **Action plans in the recommended NIP structure**
  - UNEP (2017). Guidance for Developing a National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants. Secretariat of the Basel, Rotterdam and Stockholm Conventions. https://www.pops.int/Implementation/NationalImplementationPlans/GuidanceArchive/GuidanceforDevelopingNIP/tabid/3166/Default.aspx
  - GGKP (2025). Stockholm Convention Integrated Electronic Toolkit: NIP Harmonized Template and Online Submission. Regional Workshop for Latin America and the Caribbean / Regional Workshop for Europe, Asia and Africa

Resources

- **BAT/BEP guidance**
  - UNEP (2021). Guidance on best available techniques and best environmental practices for the use of perfluorooctane sulfonic acid (PFOS), perfluorooctanoic acid (PFOA), and their related compounds listed under the Stockholm Convention. Secretariat of the Basel, Rotterdam and Stockholm Conventions. https://www.greenpolicyplatform.org/guidance/guidance-best-available-techniques-and-best-environmental-practices-use-perfluorooctane
  - UNEP (2025). Guidance on best available techniques and best environmental practices for the management of sites contaminated with persistent organic pollutants. Secretariat of the Basel, Rotterdam and Stockholm Conventions. https://chm.pops.int/Implementation/BATandBEP/POPscontaminatedsites/Guidance/tabid/9649/Default.aspx

- **Production, import/export, use, stockpiles and wastes of HCBD**
  - UNEP (2022). Guidance on preparing inventories of hexachlorobutadiene (HCBD). Secretariat of the Basel, Rotterdam and Stockholm Conventions. https://www.greenpolicyplatform.org/guidance/guidance-preparing-inventories-hexachlorobutadiene-hcbd
  - US EPA (2025). FACT SHEET 2024 Final Risk Management Rule for
  - Perchloroethylene under TSCA. https://www.epa.gov/system/files/documents/2024-12/pce-fact-sheet_english.pdf
  - US EPA (2025). FACT SHEET 2024 Final Risk Management Rule for Trichloroethylene under TSCA. https://www.epa.gov/system/files/documents/2024-12/tce-fact-sheet.pdf
  - Tang, J. et al. (2025). Formation Characteristics and Emission Inventory of Hexachlorobutadiene in Trichloroethylene/Perchloroethylene Coproduction. Environmental Science & Technology 59 (49), 26741-26749. https://pubs.acs.org/doi/10.1021/acs.est.5c09592
  - Weber, R., Fantke, P., Hamouda, A. B., & Mahjoub, B. (2018). 20 case studies on how to prevent the use of toxic chemicals frequently found in the Mediterranean Region. https://backend.orbit.dtu.dk/ws/files/163013878/Weber_2018.pdf
  - UNEP. Guidelines on best available techniques and provisional guidance on best environmental practices relevant to Article 5 and Annex C of the Stockholm Convention on Persistent Organic Pollutants. https://chm.pops.int/Implementation/BATandBEP/Releasesfromuni%20ntentionalPOPs/BATandBEPGuidance/tabid/9647/Default.asp

- **Public awareness, information and education**
  - ISC3 Trainings. https://www.isc3.org/page/trainings
  - Jain, S. D. et al.(2024). Green Chemistry: A Sustainable Path to Environmental Responsibility and Innovation. Asian Journal of Research in Pharmaceutical Sciences. Sci. 14(1):51-5. DOI: 10.52711/2231-5659.2024.00008
  - UNEP (2021). Green and Sustainable Chemistry: Framework Manual. https://www.unep.org/resources/toolkits-manuals-and-guides/green-and-sustainable-chemistry-framework-manual

Resources

- **Education and capacity building on alternatives assessment**
  - SUBSPORTplus - Substitution Support Portal. Federal Institute for Occupational Safety and Health. https://www.subsportplus.eu/EN/Home/Home_node
  - OECD. Substitution and Alternatives Assessment Toolbox (SAAToolbox) for chemicals and nanomaterials. https://www.oecd.org/en/data/tools/substitution-and-alternatives-assessment-toolbox-for-chemicals-and-nanomaterials.html
  - Fantke, P., Weber, R., & Scheringer, M. (2015). From incremental to fundamental substitution in chemical alternatives assessment. Sustainable Chemistry and Pharmacy, 1, 1-8. https://linkinghub.elsevier.com/retrieve/pii/S2352554115300024

- **Assessment and selection of alternatives to POP-PFASs**
  - ChemSec. Beyond PFAS: The Safer Alternatives. https://chemsec.org/knowledge/beyond-pfas/
  - Zero Pollution of Persistent, Mobile Substances (ZeroPM). Alternative Assessment Database. https://zeropm.eu/alternative-assessment-database/
  - UNEP (2024). Guidance on alternatives to PFOS, PFOA and PFHxS. Secretariat of the Basel, Rotterdam and Stockholm conventions. https://www.informea.org/en/documentsandliterature/documents/21-guidance-alternatives-pfos-pfoa-and-pfhxs
  - US Executive Office of the President (2023). Per- and polyfluoroalkyl substances (PFAS) Report. https://bidenwhitehouse.archives.gov/wp-content/uploads/2023/03/OSTP-March-2023-PFAS-Report.pdf

- **Research, development and monitoring**
  - GGKP (2025). National Implementation Plans: Research Needs and Opportunities in Asia. https://www.greenpolicyplatform.org/research/national-implementation-plans-research-needs-and-opportunities-asia
  - GGKP (2025). National Implementation Plans: Research Needs and Opportunities in Africa. https://www.greenpolicyplatform.org/webinar/national-implementation-plans-research-needs-and-opportunities-africa
  - Ågerstrand, M. et al. (2023). Key Principles for the Intergovernmental Science–Policy Panel on Chemicals and Waste. Environmental Science & Technology 2023 57 (6), 2205-2208. DOI: 10.1021/acs.est.2c08283
  - Diamond, M. L. et al. (2026). A Call to Action: Engaging with the Intergovernmental Science-Policy Panel on Chemicals, Waste and Pollution. Environmental Science & Technology 2026 60 (5), 3716-3719. DOI: 10.1021/acs.est.5c18169

- **Science-policy advice: Essential use concept**
  - Figuière, R., Borchert, F., Cousins, I.T. et al. The essential-use concept: a valuable tool to guide decision-making on applications for authorisation under REACH?. Environ Sci Eur35, 5 (2023). https://doi.org/10.1186/s12302-022-00708-x
  - Garnett, K. & Van Calster, G. (2022). The Concept of Essential Use: A Novel Approach to Regulating Chemicals in the European Union. Transnational Environmental Law 10(1), 159-187. DOI:10.1017/S2047102521000042
  - Bălan, S. A. et al. (2023). Optimizing Chemicals Management in the United States and Canada through the Essential-Use Approach. Environmental Science & Technology 57 (4), 1568-1575 DOI: 10.1021/acs.est.2c05932

Resources

- **IPEN research and guidance**
  - Petrlik, J. et al. (2022). Monitoring dioxins and PCBs in eggs as sensitive indicators for environmental pollution and global contaminated sites and recommendations for reducing and controlling releases and exposure. Emerging Contaminants 8, 254–279. https://doi.org/10.1016/j.emcon.2022.05.001
  - Petrlik, J. et al. (2025). Review of brominated flame retardants and polybrominated dibenzo-p-dioxins and dibenzofurans in eggs and contamination sources. Emerging Contaminants 11, 100567. https://doi.org/10.1016/j.emcon.2025.100567
  - Karlsson, T., Brosché, S., Alidoust, M. and Takada, H. (2021). Plastic pellets found on beaches all over the world contain toxic chemicals. International Pollutants Elimination Network. https://www.stoppoisonplastic.org/blog/portfolio/plastic-pellets-found-on-beaches-all-over-the-world-contain-toxic-chemicals/
  - Karlsson, T. and Miller, P. (2023). Are Your Children's Toys Hazardous Waste? High levels of chlorinated paraffins in plastic toys from ten countries. International Pollutants Elimination Network. https://ipen.org/documents/are-your-childrens-toys-hazardous-waste
  - Bell, L. (2021). Non-Combustion Technology for POPs waste destruction: Replacing incineration with clean technology. International Pollutants Elimination Network. https://ipen.org/documents/non-combustion-technology-pops-waste-destruction

- **Next Exit: Chemical safety – educational game**
  - BRS Conventions. Next Exit: Chemical Safety. https://www.brsmeas.org/MediaHub/Educationalmaterial/EscapeGame/tabid/9566/language/en-US/Default.aspx
  - UNEP. Next Exit: Chemical Safety - The Game. https://www.unep.org/resources/e-learning/next-exit-chemical-safety-game

- **Useful links**
  - GGKP (2026). Strengthening Chemicals and Waste Management through Sectoral Approaches: Interlinkages between Stockholm Convention National Implementation Plans, Other Relevant International Conventions and the Global Framework on Chemicals. https://www.greenpolicyplatform.org/research/strengthening-chemicals-and-waste-management-through-sectoral-approaches-interlinkages
  - Developing Integrated Action Plans for NIPs 7: Key Provisions of the Stockholm Convention.
  - Awareness Raising on POPs and Other Pollutants.
  - Turning Global Commitments into Local Action: Raising Awareness on POPs in Armenia.
  - Sectoral Approaches for Stronger Chemicals and Waste Management.

If you have any questions or comments, please contact the GGKP team:

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