

Activity Options for Action Plans for Brominated, Chlorinated and other New POPs

22 January 2026



DISCLAIMER

The views and opinions expressed by the speakers and participants during the webinar/workshop, as summarized in this report, are their own and do not necessarily reflect the views, policies, or positions of the Secretariat of the Basel, Rotterdam and Stockholm Conventions (BRS), Global Environment Facility (GEF), United Nations Environment Programme (UNEP), Green Growth Knowledge Partnership (GGKP), or any contributory organizations.

The information contained in this summary report is presented in good faith for information and knowledge-sharing purposes. GGKP and the speakers of the events do not accept responsibility for the accuracy or completeness of the content and shall not be liable for any loss or damage arising from its use.

The designations employed and the presentation of material in this document do not imply the expression of any opinion whatsoever on the part of BRS, GEF, UNEP, or GGKP concerning the legal status of any country, territory, city, or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.



global
environment
facility
INVESTING IN OUR PLANET



GGKP

Introduction

On 22 January 2026, the Green Growth Knowledge Partnership (GGKP) convened the third session of the action plans webinar series under the GEF-funded and UNEP-led Global NIP Update project (GEF ID 10785). The session focused on brominated, chlorinated and other newly listed persistent organic pollutants (POPs) under the Stockholm Convention used as plastic additives.

The webinar introduced an integrated approach to reducing and eliminating POPs plastic additives, with particular attention to listed brominated flame retardants (PBDEs, PBB and HBCD), chlorinated flame retardants (Dechlorane Plus, SCCPs/MCCPs) and the UV-stabilizer UV-328, across key use sectors: electrical and electronic equipment (EEE)/waste electrical and electronic equipment (WEEE), transport/end-of-life vehicles (ELVs) and buildings/construction and demolition waste (CDW).

Effective National Implementation Plan (NIP) action plans are essential for managing and phasing out POPs while avoiding regrettable alternatives and meeting core obligations under the Stockholm Convention, including Article 15 reporting. Action plans provide the basis for sound POPs management by guiding exposure reduction, informing regulatory controls, addressing national priorities identified in the NIP and supporting the preparation of elimination projects. They should also align with broader national chemicals and waste management priorities to ensure a coherent and integrated approach. For this reason, action plans need to be well-developed, technically robust, and reviewed by relevant ministries and stakeholder groups.

CET 14:00	Welcome and opening remarks	Moderator: Hannes Mac Nulty (GGKP, UNEP) Dr Kateřina Šebková (SCRC Czech Republic, RECETOX)
14:05	Basic considerations on action plan development and integrated approach	Dr Roland Weber (POPs Environmental Consulting)
14:30	Action plan considerations for management and control of POPs, other Chemicals of Concern, plastics and resources in major sectors	
15:15	Financing (sectorial) circularity: Basic principles of Extended Producer Responsibility	Alexander Batteiger (GIZ, PREVENT Waste Alliance)
15:45	Action plan considerations for management and phase-out of Short- and Medium-Chain Chlorinated Paraffins (SCCP/MCCPs)	Dr Roland Weber
16:15	Q&A session	All
16:30	Closing remarks	

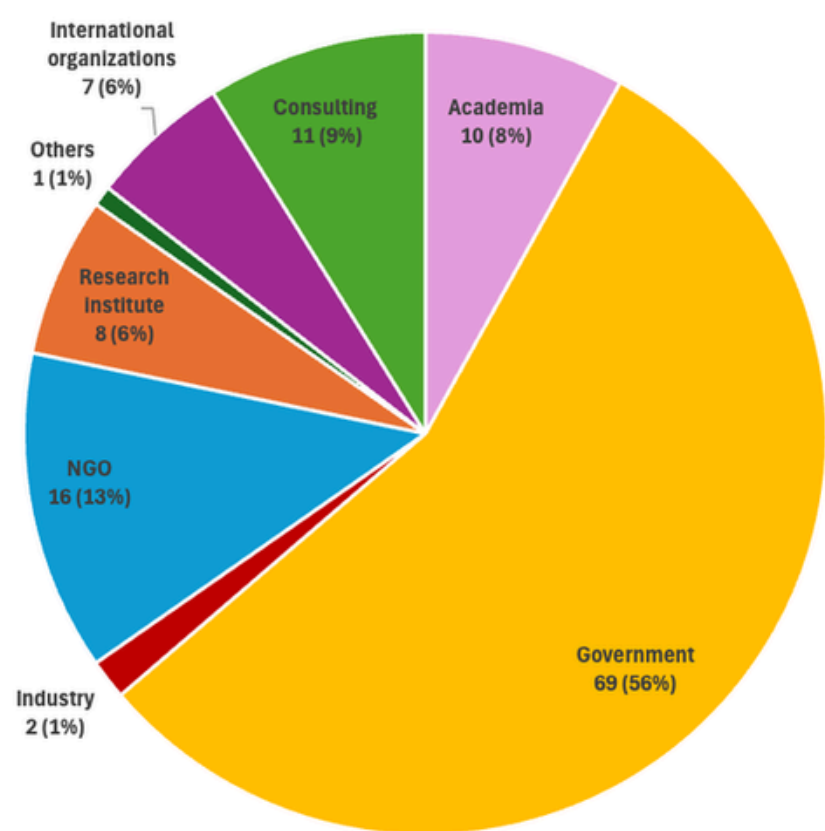
Registration and attendance

Number of registrants: 217 / total attendance: 124
(approx. 54% female, 44% male, 2% prefer not to answer)

Participants by country

Country	Attendees	Country	Attendees	Country	Attendees
Nigeria	7	Zambia	2	Bulgaria	1
Canada	7	Zimbabwe	2	United Republic of Tanzania	1
Peru	6	Brazil	2	Eswatini	1
Uganda	4	Bahamas	2	Suriname	1
Germany	4	Norway	2	Saint Kitts and Nevis	1
Ghana	3	China	2	Mexico	1
Kenya	3	Cameroon	2	Micronesia (Federated States of)	1
Switzerland	3	Egypt	2	Albania	1
North Macedonia	3	Liberia	2	Chile	1
Argentina	3	Morocco	2	Mozambique	1
Costa Rica	3	Serbia	2	Niger	1
Ethiopia	3	Armenia	1	Colombia	1
Lesotho	3	France	1	Montenegro	1
Czech Republic	3	Gambia	1	Togo	1
Botswana	2	Indonesia	1	Cabo Verde	1
India	2	Japan	1	Croatia	1
Portugal	2	Madagascar	1	Guyana	1
Senegal	2	Myanmar	1	Qatar	1
Thailand	2	Republic of Congo	1	Republic of Korea	1
United Kingdom of Great Britain and Northern Ireland	2	South Africa	1	Tajikistan	1
Uruguay	2	Dominican Republic	1	Finland	1
		Bosnia and Herzegovina	1	Honduras	1

Participants by sector



Key highlights

The third session in the GGKP action plans webinar series focused on how NIP action plans can more effectively address newly listed POPs amid a shifting global chemical landscape, characterized by the rapid increase of plastic additives such as brominated flame retardants and chlorinated paraffins (SCCPs/MCCPs). From linking POPs management to global chemicals and waste management and circular economy frameworks to securing long-term financing with informal sector integration, the discussions provided actionable insights for building resilient, life-cycle-oriented action plans that align with global environmental goals.

Dr Kateřina Šebková, Head of the National Centre for Toxic Compounds and the Stockholm Convention Regional Centre in the Czech Republic (SCRC), RECETOX, opened the session by sharing a regional analysis. It revealed that inventories for brominated flame retardants show unexpected differences linked to regional market networks: construction dominates in Balkan countries, while transport is the primary sector in the Caucasus. She stressed the importance of revisiting inventories to gain a consolidated view, comparing chemical groups, and assessing data flows alongside waste management impacts and timing (immediate or delayed), urging a more systematic, long-term perspective when designing national actions.

Basic considerations on action plan development and integrated approach

Dr Roland Weber, POPs Environmental Consulting, emphasized that many newly listed POPs under the Stockholm Convention are plastic additives or polymer-related chemicals. These include brominated and chlorinated flame retardants, various per- and polyfluoroalkyl substances (PFAS) groups and UV-328. The hazardous “novel entities,” including Chemicals of Concern (CoCs) like PFAS, have exceeded planetary boundaries and their management has some direct links to climate change and biodiversity loss.

According to Dr Weber, NIP action plans should no longer treat POPs in isolation. Instead, Parties should adopt an integrated, sector-based approach focusing on the largest stocks and flows of POP-containing plastics, specifically in the electronics, transport and building sectors. This approach links POP control to plastic management, resource recovery and broader international chemicals and waste frameworks.

Action plan considerations for management and control of POPs, other Chemicals of Concern, plastics and resources in major sectors

Weber stressed that effective action plans should update regulatory frameworks by listing POPs as banned or restricted substances, setting low POP content and unintentional trace contaminant (UTC) limits, reviewing existing exemptions and drawing on international regulatory benchmarks. For data management, countries were advised to refine sectoral inventories for POPs and other CoCs in electronics, transport and buildings, integrating data on plastics and valuable resources such as metals to support a circular economy. Dynamic material and substance flow analysis can then enable decision-makers to track material import and flows, stocks, end-of-life volumes and recycling/reuse pathways — supporting projections and robust life-cycle planning.

Key highlights

Environmentally sound life-cycle management remains a core objective. Countries should compile information on how POP-containing products and waste are currently managed and assess recycling, separation and destruction options at the national or regional level. Weber highlighted that while brominated, chlorinated and fluorinated plastics can be separated from non-impacted plastics in full-scale facilities, it is essential to ensure impacted plastics do not enter sensitive uses. Alternatives assessment must be approached carefully to avoid regrettable substitutions — whether replacing a specific flame retardant, changing the resin system, or redesigning products to eliminate them altogether.

If plastics from e-waste, ELVs, or construction and demolition waste (CDW) are not properly managed and openly burnt, they release POPs and metals that contaminate soils, livestock and food chains. Related contaminated sites management is therefore critical to prevent food chain and community contamination. While large-scale remediation may be complex and costly, immediate protective measures—such as access restrictions and exposure prevention—can significantly reduce risks. Targeted and continuous monitoring of POP flame retardants and other CoCs in products, waste streams and recycling facilities can strengthen both inventories and risk management.

Financing (sectorial) circularity: Basic principles of Extended Producer Responsibility

Alexander Batteiger, Head of the Secretariat of the PREVENT Waste Alliance and Global Action Partnership for Extended Producer Responsibility, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), highlighted that many developing countries face a rapid increase in products containing POPs — including electronic equipment, batteries and vehicles — driven by rising consumption, imports and the energy transition. In practice, informal recycling sectors often extract valuable fractions like metals while dumping or burning components containing hazardous substances, creating serious environmental and health risks. Without dedicated financing mechanisms and a level playing field, recyclers employing sustainable practices are consistently outcompeted by actors that do not meet environmental standards, making environmentally sound management structurally difficult.

He presented EPR as one of the most promising long-term financing approaches to address this gap by making producers responsible for managing environmental externalities at the end of a product's life. EPR systems can be designed as financial or operational schemes, implemented individually, or collectively through Producer Responsibility Organizations (PROs). These systems work best when mandatory rather than voluntary, ensuring broader coverage, stronger enforcement and reduced free-riding.

Successful implementation requires structured stakeholder consultation across governments, producers, municipalities, recyclers and informal collectors, as well as clear producer registers and enforcement against free riders (including online marketplaces). While EPR is not a short-term infrastructure solution, it can provide predictable financing for hazardous waste collection and pre-treatment, complement product-related regulation, and support long-term incentives such as the eco-modulation of fees. This makes it a valuable tool as countries integrate NIP action plans with broader circular economy objectives.

Key highlights

Action plan considerations for management and phase-out of Short- and Medium-Chain Chlorinated Paraffins (SCCP/MCCPs)

Dr Weber explained that SCCPs and MCCPs represent one of the highest-volume groups of newly listed POPs, with current global production estimated at approximately 1.4 million tonnes per year and cumulative production projected to approach 40 million tonnes by 2026. Listed under Annex A of the Stockholm Convention in 2017 and 2025 respectively, both substances are found extensively in plastics (particularly plasticized PVC), rubber, lubricants and building materials across the electronics, transport and construction sectors and other uses.

Effective action plans for SCCPs/MCCPs should also start with building a regulatory framework. It is recommended to align it with the best international practices, such as the EU POP Regulation, and ensure that any remaining exemptions — some of which extend to 2031 or 2036 for MCCPs — are science-based and regularly reviewed. Robust inventories are essential for quantifying existing stocks, tracking recycling streams and anticipating future waste peaks. Given that SCCPs and MCCPs historically served as substitutes for polychlorinated biphenyls (PCBs) and polychlorinated naphthalenes (PCNs) in many open applications, conducting combined inventory assessments can improve efficiency and coherence. With sustained awareness-raising and capacity building, Best Available Techniques (BAT) and Best Environmental Practices (BEP) must be rigorously applied to minimize environmental releases and worker exposure wherever exempted uses continue.

Monitoring capacity was noted as indispensable yet technically demanding for SCCPs/MCCPs. However, evidence of rising concentration levels of SCCP/MCCP in human milk—particularly in lower-income countries—underscores the urgent need for intervention. Dr Weber concluded by emphasizing that action plans must address contaminated sites throughout the SCCP/MCCP lifecycle, including production facilities, industrial application sites and end-of-life treatment areas.

Questions and answers

Q1. How do the costs of treatment options for plastic POPs compare, and what factors should be considered in choosing a treatment method?

Dr. Roland Weber: The cheapest option for the thermal destruction of plastics containing POPs is normally cement kilns, which can utilize plastics as an alternative fuel. The price depends on negotiation. However, cement kilns have a limit for halogens (in particular chlorine and bromine) and need to calculate how much of a halogen load they can take without experiencing operational troubles. So, the halogen content is key to choosing treatment options. Also, the costs for destruction in hazardous waste incinerators in Europe depend strongly on the halogen content. One option can be solvent-based recycling, which can separate polymers from additives. If solar energy is used for energy production, the process can be cheap and sustainable.

Q2. How important is lifecycle assessment in evaluating the sustainability of substitutes for plastics, and what criteria should be prioritized?

Dr. Roland Weber: Life cycle assessment (LCA) is of key importance in evaluating the sustainability of substitutes for plastics. There are standardized methods for conducting LCAs, which should be applied (ISO 14040 and ISO 14044). But there are also deficiencies in LCA in addressing the plastic problem (see Miller 2022: <https://doi.org/10.3389/frsus.2022.1007060>).

I suggest having a look at some reviews on the LCA of plastics and alternatives: <https://journals.sagepub.com/doi/pdf/10.1177/0734242X241241606>

What seems not to have been adequately addressed by LCAs is the environmental burden, which several authors highlighted and need to be better taken into account. See the review by Gomez: <https://doi.org/10.1016/j.spc.2021.11.021>

Q3. How do you imagine the management of POPs in plastics where there is only limited capacity and infrastructure to manage plastic waste, particularly in developing countries?

Dr. Roland Weber: One key is the financing of waste management, and Extended Producer Responsibility (EPR) is one part of the solution. The Basel Convention has a Forum on Extended Producer Responsibility for Plastic Wastes (<https://www.basel.int/Implementation/Plasticwaste/PlasticWastePartnership/EPRForum/tabid/9658/Default.aspx>). The reduction of overall plastic use and the application of the essential use concept for plastics are also important.

Q4. Are there defined limit values for new industrial POPs to determine whether the articles or products containing them are contaminated?

Dr. Roland Weber: The Basel Convention has Low POP Content (LPC) limits for POPs which define if a waste is considered a POP waste. The current LPC limit values are listed in the Basel Convention [1, Table 2]. The POPs limits for products are called Unintentional Trace Contaminant (UTC) limits. There are no defined UTC limits prescribed in the Stockholm or Basel Conventions, but countries are developing UTC limit values to regulate POPs in products. The most comprehensive regulation is the European POPs Directive which includes a list of UTC limits in Annex 1 of the EU POPs Regulation. The consolidated version with all amendments can be downloaded here [2]. In the recent GGKP webinar on action plan options for unintentional POPs, UTC limits of the EU were introduced and recorded here [3].

[1] UNEP (2025) General technical guidelines on the environmentally sound management of wastes consisting of, containing or contaminated with persistent organic pollutants. UNEP/CHW.17/5/Add.1/Rev.1

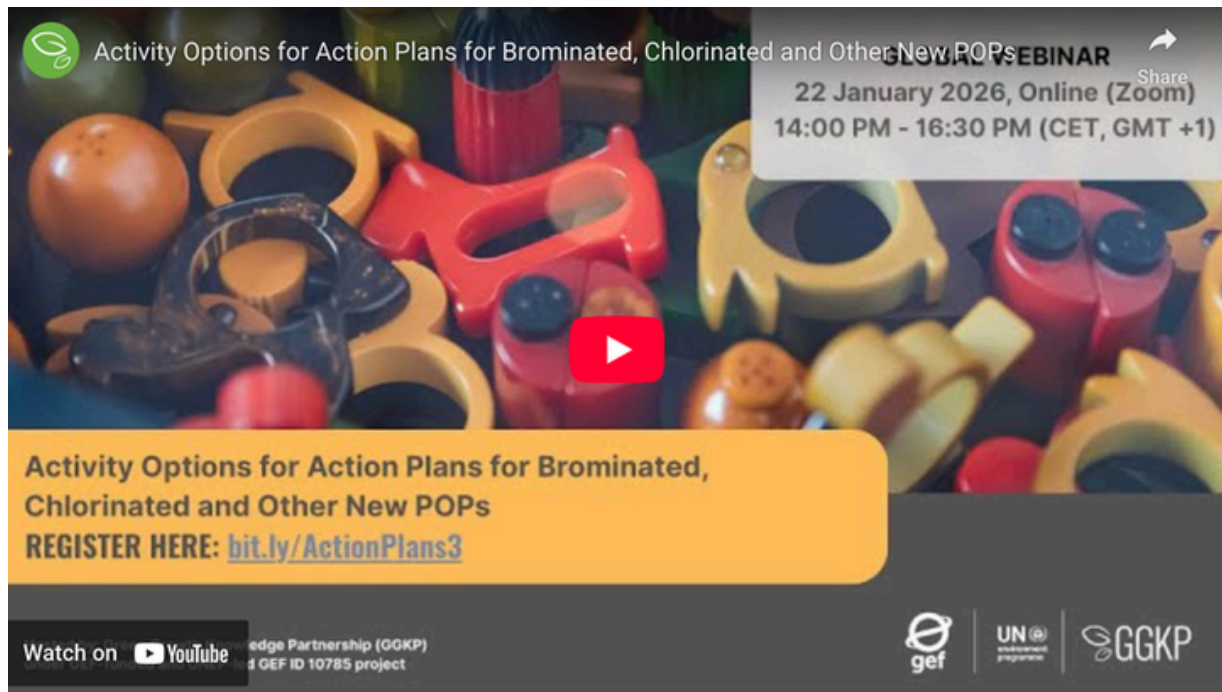
[2] REGULATION (EU) 2019/1021 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 June 2019 on persistent organic pollutants <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02019R1021-20251203>

[3] GGKP (2025) 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>

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-brominated-chlorinated-and-other-new-pops>



Spanish



French



Russian



- **Chemicals and plastics crossed planetary boundaries**
 - Persson, L. et al. (2022). Outside the Safe Operating Space of the Planetary Boundary for Novel Entities. Environmental Science & Technology. 2022, 56, 3, 1510–1521. <https://doi.org/10.1021/acs.est.1c04158>
 - Cousins, I.T. et al. (2022). Outside the safe operating space of a new planetary boundary for PFAS. Environmental Science & Technology. 56(16), 11172–11179. <https://doi.org/10.1021/acs.est.2c02765>
 - Richardson, K. et al. (2023). Earth beyond six of nine planetary boundaries. Science Advances. 9, eadh2458. DOI:[10.1126/sciadv.adh2458](https://doi.org/10.1126/sciadv.adh2458)
- **Integrated and sectoral approach of POPs management**
 - SAICM Emerging Policy Issues and Other Issues of Concern. <https://www.saicm.org/Implementation/EmergingPolicyIssues/tabid/5524>
 - GGKP (2024). Sectoral Guidance for Inventories of POPs and Other Chemicals of Concern in Buildings/Construction, Electrical and Electronic Equipment, and Vehicles. <https://www.greenpolicyplatform.org/guidance/sectoral-guidance-inventories-pops-and-other-chemicals-concern-buildingsconstruction>

- **POPs plastic additives and related waste & recycling**
 - Charbonnet, J. A. et al. (2020). Flammability standards for furniture, building insulation and electronics: Benefit and risk. *Emerging Contaminants*. 6, 432-441
<https://www.sciencedirect.com/science/article/pii/S2405665020300160>
 - UNITAR, ITU (2024) The Global E-waste Monitor 2024.
<https://ewastemonitor.info/the-global-e-waste-monitor-2024/>
- **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
- **Regulatory framework for POP-BFRs and other POPs plastic additives and impacted product/waste categories**
 - ECHA (2023). Regulatory strategy for flame retardants.
<https://op.europa.eu/en/publication-detail/-/publication/24097cfb-cf78-11ed-a05c-01aa75ed71a1/language-en>
 - ECHA (2024). Investigation report on aromatic brominated flame retardants.
https://echa.europa.eu/documents/10162/17233/rest_aromatic_brominated_flame_retardants_investigation_report_en.pdf
- **Refining of the inventory for POPs plastic additives, other CoCs, and resources of related major products and wastes**
 - GGKP (2024). Sectoral Approach to Inventories of POPs and Other Chemicals of Concern in Construction, Electronics and Vehicles.
<https://www.greenpolicyplatform.org/webinar/sectoral-approach-inventories-pops-and-other-chemicals-concern-construction-electronics-and>
 - GGKP (2024). Strengthening the Collaboration with National Statistical Offices to Address Gaps in POPs Data and Related Information.
<https://www.greenpolicyplatform.org/webinar/strengthening-collaboration-national-statistical-offices-address-gaps-pops-data-and-related>
 - GGKP (2024). Case Study of Inventory of POPs in Electrical and Electronic Equipment (EEE) and Related Waste (WEEE) In Nigeria.
<https://www.greenpolicyplatform.org/case-studies/case-study-inventory-pops-electrical-and-electronic-equipment-eee-and-related-waste>
 - GGKP (2024). Case Study of Inventory of POPs in the Transport Sector in Nigeria.
<https://www.greenpolicyplatform.org/case-studies/case-study-inventory-pops-transport-sector-nigeria>
 - GGKP (2024). Case Study of Inventory of POPs in the Transport Sector in Nigeria.
<https://www.greenpolicyplatform.org/case-studies/case-study-inventory-pops-transport-sector-nigeria>

- **Refining the inventory for SCCP/MCCPs (and other CP) use**
 - GGKP (2024). Introduction to SCCP/MCCP and PFAS and Inventory Development. <https://www.greenpolicyplatform.org/webinar/introduction-sccpmccp-and-pfas-and-inventory-development>
 - UNEP (2021). Guidance on alternatives to shortchain chlorinated paraffins (SCCPs). <https://www.greenpolicyplatform.org/guidance/guidance-alternatives-shortchain-chlorinated-paraffins-sccps>
- **Life cycle management of stocks and waste in major sectors that contain POPs-plastic additives**
 - UNEP (2023). Technical guidelines on the environmentally sound management of plastic wastes. Secretariat of the Basel, Rotterdam and Stockholm Conventions. <https://www.basel.int/Portals/4/download.aspx?d=UNEP-CHW-WAST-GUID-ESM-PlasticWastes-20230512.English.pdf>
- **Education and capacity building on alternatives assessment**
 - 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
 - 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>
- **Assessment and selection of alternatives to POP plastic additives and SCCPs/MCCPs**
 - Stockholm Convention. Register of Specific Exemptions: Decabromodiphenyl ether. <https://chm.pops.int/Implementation/Exemptions/SpecificExemptions/DecabromodiphenyletherRoSE/tabid/7593/Default.aspx>
 - Stockholm Convention. Register of Specific Exemptions: Dechlorane Plus. <https://chm.pops.int/Implementation/Exemptions/SpecificExemptions/DechloranePlus/tabid/10238/Default.aspx>
 - Stockholm Convention. Register of Specific Exemptions: UV-328. <https://chm.pops.int/Implementation/Exemptions/SpecificExemptions/UV328/tabid/10277/Default.aspx>
 - Stockholm Convention. Register of Specific Exemptions: Short-chain chlorinated paraffins. <https://chm.pops.int/Implementation/Exemptions/SpecificExemptions/ShortchainchlorinatedparaffinsRoSE/tabid/7595/Default.aspx>

- **Application of BAT/BEP in exempted uses of POPs plastic additives and SCCPs/MCCPs**
 - UNEP (2024). Guidance on best available techniques and best environmental practices relevant to polybrominated diphenyl ethers and Dechlorane Plus listed under the Stockholm Convention on Persistent Organic Pollutants. Secretariat of the Basel, Rotterdam and Stockholm Conventions. <https://www.greenpolicyplatform.org/guidance/guidance-best-available-techniques-and-best-environmental-practices-relevant-0>
 - UNEP (2024). Guidance on best available techniques and best environmental practices relevant to short chain chlorinated paraffins listed under the Stockholm Convention on Persistent Organic Pollutants. Secretariat of the Basel, Rotterdam and Stockholm Conventions. <https://www.greenpolicyplatform.org/guidance/guidance-best-available-techniques-and-best-environmental-practices-relevant-short-chain>
- **Education and training for relevant stakeholder groups on life-cycle management of POPs-containing products**
 - Basel Convention. The E-waste Challenge Massive Open Online Course (MOOC). <https://www.basel.int/Implementation/Ewaste/MOOC/tabid/4966/Default>
 - GIZ. Environmentally and socially responsible handling of e-waste. <https://www.giz.de/en/projects/recycling-and-disposal-waste-electrical-equipment-environmentally-sound-way-0>
 - GIZ (2022). Manual Dismantling of Cars on the Old Fadama Scrapyard. <https://www.giz.de/de/downloads/giz2022-en-manual-dismantling-of-cars-ghana.pdf>
 - European Commission (2024). The EU Construction & Demolition Waste Management Protocol. <https://build-up.ec.europa.eu/en/resources-and-tools/publications/eu-construction-demolition-waste-management-protocol-2024-updated>
 - Wahlström, M. et al. (2019). Hazardous substances in construction products and materials: PARADE. Best practices for Pre-demolition Audits ensuring high quality RAW materials. EIT RawMaterials. https://cris.vtt.fi/ws/files/27439115/EIT_RM_PARADE_Hazardous_substances_in_construction_Final_2019.pdf
- **Education and awareness raising on POPs plastic additives within general awareness on CoCs in products**
 - Hurley, S. et al. (2019). A breast cancer case-control study of polybrominated diphenyl ether (PBDE) serum levels among California women. Environment International, 127, 412–419. <https://doi.org/10.1016/j.envint.2019.03.043>
 - Women Engage for a Common Future (WECF), AEEFG Tunisia and CEJAD Kenya (2023). Tackling Toxics: Case Studies Kenya and Tunisia 2022. Secretariat of the Basel, Rotterdam and Stockholm Conventions. <https://www.wecf.org/gender-chemicals-and-waste-scoping-study-kenya-tunisia/>

- **Assessment, management, database of sites potentially contaminated with POPs plastic additives and other POPs**

- 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>
- 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>
- 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>

- **Financing (sectorial) circularity: Basic principles of Extended Producer Responsibility**

- PREVENT Waste Alliance. EPR Toolbox. <https://prevent-waste.net/epr-toolbox/>
- Global Action Partnership for EPR. <http://gap-epr.prevent-waste.net>
- OECD (2024). Extended Producer Responsibility: Basic facts and key principles. <https://doi.org/10.1787/67587b0b-en>.

- **Useful links**

- [Developing Integrated Action Plans for NIPs 5: POPs Plastic Additives, Related Plastics and Resources](#)
- [Developing Integrated Action Plans for NIPs 6: Managing and Phasing Out SCCP/MCCPs](#)
- [How EPR Can Finance Circular Hazardous Substances Management](#)

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

Fabienne Pierre, fabienne.pierre@un.org
Soomin Bae, soomin.bae@ggkp.org