Global NIP Update Webinar –

Activity Options for Action Plans on the Management and Elimination of PCBs and POP Pesticides (16. December 2025, 14:00 -16:30 CEST, GMT 2)

CET	Theme	Speaker
14:00	Moderator: Ms. Anastasiya Buchok, Component 4, GGKP	
	Welcome and Opening Remarks	Ms. Anastasiya Buchok
14:05	Some basic considerations on Action Plan development and integrated approach	Dr. Roland Weber; POPs Environmental Consulting
14:30	Action Plan considerations for management and elimination of POPs Pesticides & Highly Hazardous Pesticides (synergy with GFC)	
15:00	An alternative approach to substitute POP pesticides and HHPs	Lars Neumeister
15:20	Action Plan options for polychlorinated biphenyls (PCBs) (and polychlorinated naphthalenes (PCNs))	Dr. Roland Weber
15:45	Environmentally sound management of remaining PCBs in line with the Stockholm Convention goals - the financial mechanism and other tools	Agustin Harte (BRS Secretariat)
16:10	Q&A session	All
16:30	Closing remarks	

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Global NIP Update Webinar “Activity Options for Action Plans on the Management and Elimination of PCBs and POP Pesticides”, 16. December 2025, 14:00 -16:30 CET, UTC+1

Some Basic Considerations on Action Plan Development and Integrated Approach for NIPs

Dr. Roland Weber
POPs Environmental Consulting,
73527 Schwäbisch Gmünd, Germany
https://www.researchgate.net/profile/Roland-Weber-2

37 POPs listed in the Stockholm Convention (2025)

Chemical	Pesticides	Industrial chemicals	Unintentional production	Annex
DDT	+			B
Aldrin, Dieldrin, Endrin, Chlordane, Chlordecone, Toxaphene	+			A
Alpha-, Beta-, Gamma-HCH,	+		By-product of lindane	A
Endosulfan, Heptachlor, Mirex, PCP,	+			A
Dicofol, Methoxychlor, Chlorpyrifos	+	+		A
Commercial PentaBDE		+		A
Commercial OctaBDE (Hexa/HeptaBDE)		+		A
Commercial DecaBDE		+		A
Hexabromobiphenyl (HBB)		+		A
Hexabromocyclododecane (HBCD)		+		A
PFOS, its salts and PFOSF	+	+		B
PFOA and related compounds		+		A
PFHxS and related compounds		+		A
Long-chain PFCAs (C9-C21)		+		A
SCCPs, MCCP, Dechlorane Plus		+		A
UV-328				
PCB, PeCBz, HCB, PCN, HCBD	+	+	+	A/C
PCDD, PCDF			+	C

Many are **chlorinated** compounds including **most pesticides and all unintentional POPs**.

5 are **brominated** flame retardants.

2 chlorinated FRs (DP & SCCPs)

SCCPs plasticizer in PVC/rubber.

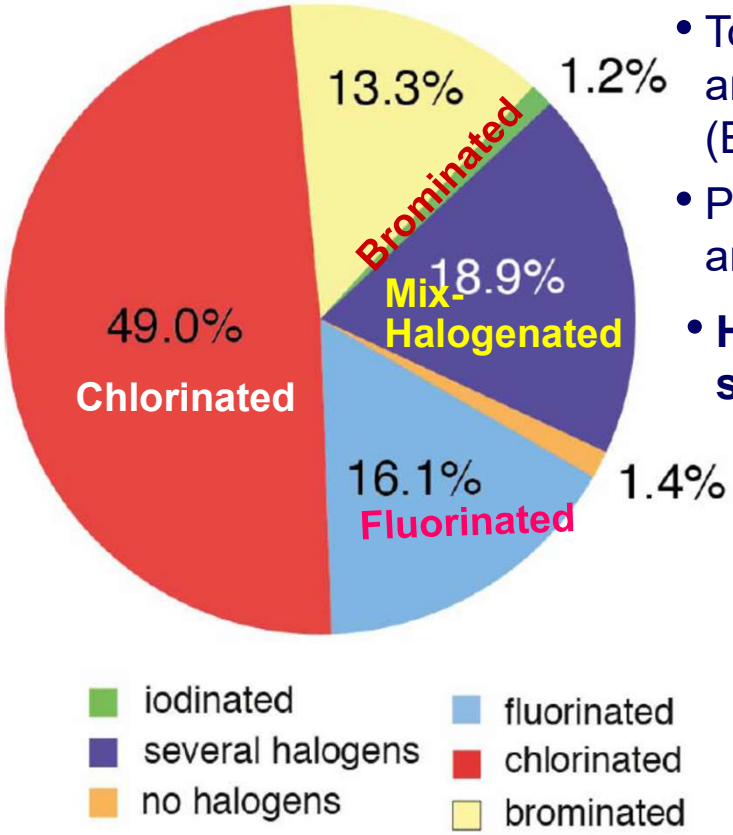
4 PFAS groups used in wide range of uses.

First **non-halogenated** plastic UV stabilizer (**UV-328**).

How many potential POPs are in use?

Scientific assessment of approx. 100,000 chemicals in chemical database according POP criteria of Annex D of the Stockholm Convention indicated:

574 potential POPs



- Today many chemicals in use have POPs-like/PBT properties and many of them are used in consumer goods often in plastics (EEE, cars, buildings, furniture, textiles, synthetic carpets).
- PBTs in products pose a risk for human health, the environment and the recycling/recovery flows.
- **Here, chlorinated, brominated and fluorinated persistent toxic substances need to be assessed and managed systematically.**

UN environment programme Global Framework on Chemicals

The 37 POPs listed – are only the tip off the ice-berg!

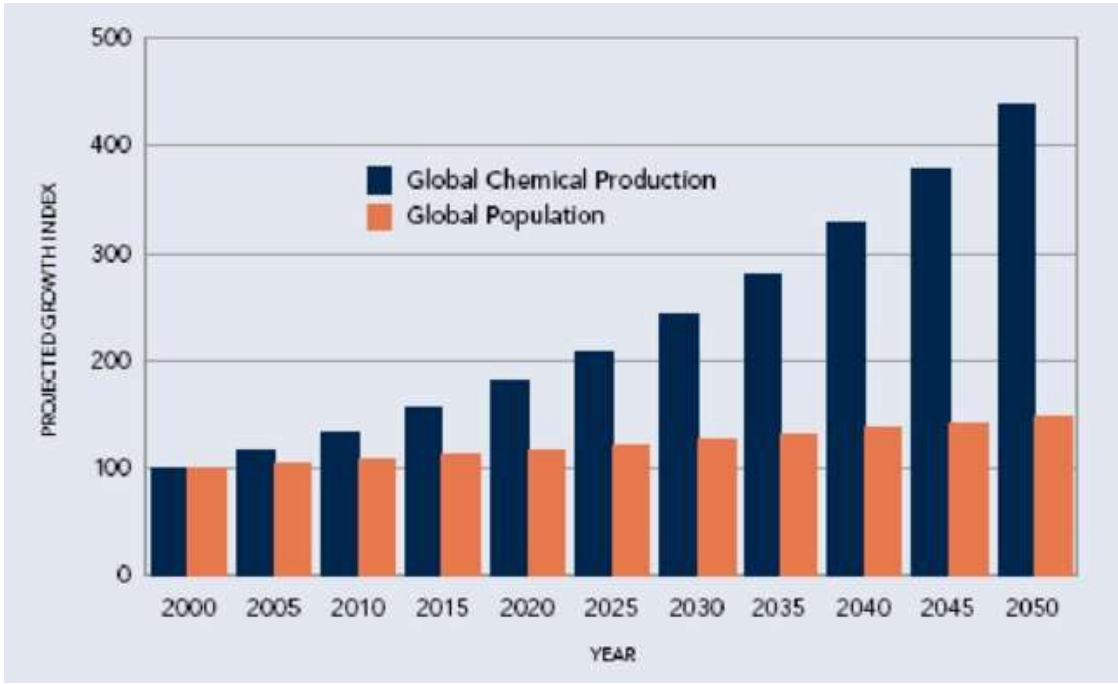
STOCKHOLM CONVENTION

Scheringer et al. (2012) Atmos. Pollut. Res. 3, 383–391.

- >**350'000** chemicals produced (Wang et al. 2020)
- Many are in daily products (>13,000 in plastics) (UNEP 2023)
- >100 million chemicals registered (CAS)

Wang et al. (2020) ES&T 54(5), 2575-2584.

OECD report projects that **overall chemical production** is expected to **quadruple between 2020 and 2060**



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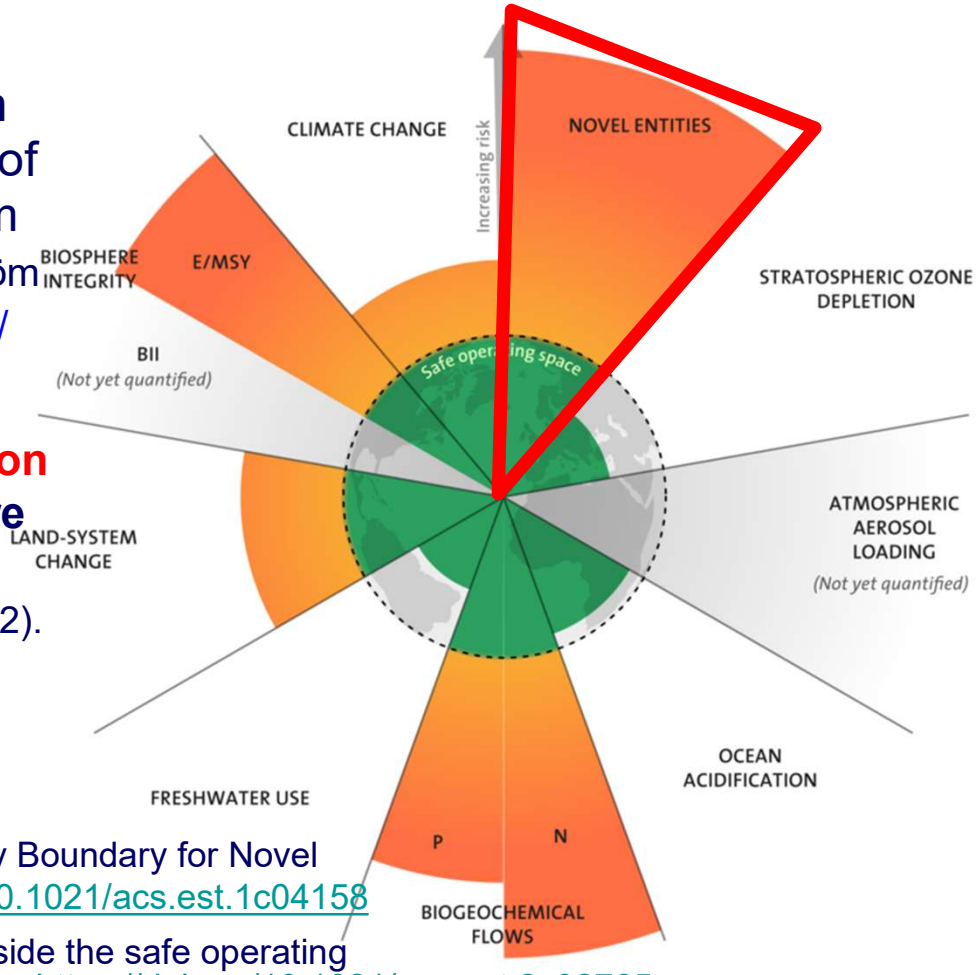
Global Framework on Chemicals

European Commission Study for the strategy for a non-toxic environment of the 7th EAP, Sub-study g: Early Warning Systems for emerging chemical risks Technical Report08/2017

“Novel Entities” chemicals & plastic crossed Planetary Boundaries

- The planetary boundaries **– which define the environmental limits within which humanity can safely operate –** have been evaluated for a range of critical anthropogenic pressure on the Earth System (climate, biodiversity, phosphorus, nitrogen; Rockström et al. 2009). http://www.ecologyandsociety.org/vol14/iss2/art32/

- **Studies concluded that “Novel entities” including chemical of concern (e.g. PFAS) and plastics pollution have crossed planetary boundaries and are therefore of high concern for humanity and a risk for several ecosystem services** (Persson et al. 2022; Cousins et al. 2022).



Persson et al. (2022) Outside the Safe Operating Space of the Planetary Boundary for Novel Entities. Environ. Sci. Technol. 2022, 56, 3, 1510–1521. https://doi.org/10.1021/acs.est.1c04158

Cousins IT, Johansson JH, Salter ME, Sha B, Scheringer M. (2022) Outside the safe operating space of a new planetary boundary for PFAS. ES&T. 56(16), 11172-11179. https://doi.org/10.1021/acs.est.2c02765

Rockström et al. (2009) Ecology & Society 14(2):32; Update: Richardson et al. (2023): https://www.science.org/doi/10.1126/sciadv.adh2458

United Nations: The World faces a Triple Planetary Crisis

- The United Nations highlight, that humanity faces a Triple Planetary Crisis of climate change, nature & biodiversity loss, and chemical pollution & waste (Antonio Guterres).
- There are interlinkages of chemicals/waste and other drivers of the Triple Planetary Crisis.
- **Strong links of chemicals & waste to climate change** (e.g. open burning of waste, or management of plastic foams containing POPs and F-gases with high GWP).
- Chemicals including POPs & HHPs are also a **relevant cause for biodiversity loss,** e.g., reduced reproduction of predators at the top of the food chain (killer whale population collapse; eagle eggshell thinning). Groh et al (2022) ES&T. 56(2):707-710.
- "*The "toxic trail" of economic growth – pollution and waste - results every year in the premature deaths of millions of people across the world*." Inger Andersen director of UNEP

https://unfccc.int/news/what-is-the-triple-planetary-crisis
https://www.unep.org/news-and-stories/story/campaign-against-plastic-pollution-world-making-tentative-progress

Integrated approach for POPs management: Linking NIP activities and national priority activities on general chemicals and waste management

NIP Update Guidance stresses: "***The development, review, and updating of a NIP should build on existing work and assessments….". Therefore:***

- **POPs should not be addressed on their own but should be linked/integrated with general chemicals and waste/plastic management.** This may include, National Profiles, national GHS implementation plans/strategies, national chemical and waste management plans.
- **Synergies** of **Basel, Rotterdam and Stockholm Convention** and **Minamata Convention**.
- **Linking to broader issues of the Global Framework on Chemicals (GFC) and synergies.**
- **Linking to the management of major plastic use and waste sectors.**
- **There are synergies with climate change mitigation** (e.g. reduction open burning, BAT/BEP).
- Linkage to Sustainable Production & Consumption and to the SDGs.

MINAMATA CONVENTION ON MERCURY

BASEL CONVENTION

STOCKHOLM CONVENTION

United Nations Framework Convention on Climate Change

Convention on Biological Diversity

MONTREAL PROTOCOL

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Global Framework on Chemicals

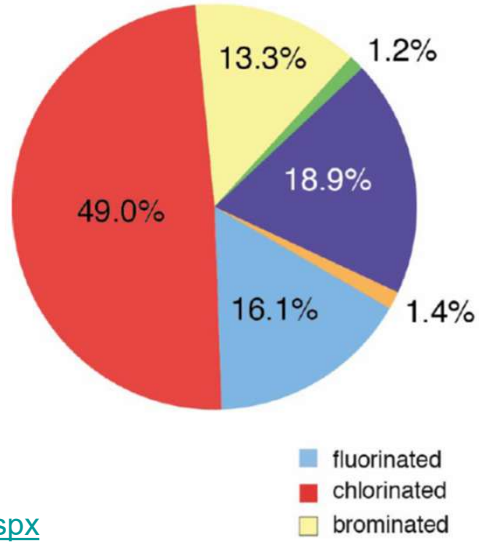
Integrated approach of POPs management: Stockholm Convention and synergies with the Global Framework on Chemicals (GFC/SAICM)

There are close links between POPs and GFC (former SAICM) **"issues of concern":**

- Highly Hazardous Pesticides (HHPs)
- Perfluorinated and polyfluorinated (as precursors) alkylated substances (PFAS) and the transition to safer alternatives.
- Chemicals in products
- Hazardous substance within the life cycle of electrical and electronic products.
- Endocrine-disrupting chemicals
- Environmentally persistent pharmaceutical pollutants
- Lead in paints
- Nanotechnology and manufactured nanomaterials

UN environment programme Global Framework on Chemicals

saicm



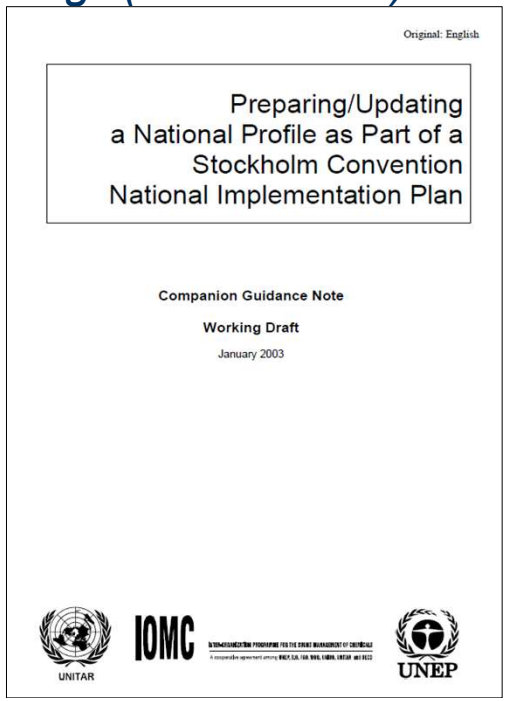
Here the specific POPs issue can/should be addressed within the larger frame of managing a wider group of POPs-like and other hazardous substances with a science-based approach.

http://www.saicm.org/Implementation/EmergingPolicyIssues/tabid/5524/language/en-US/Default.aspx

Action plan: Linking POPs and overall chemical management

The NIP update is an opportunity to mainstream POPs and general chemicals management and to explore further synergies with the Global Framework on Chemicals:

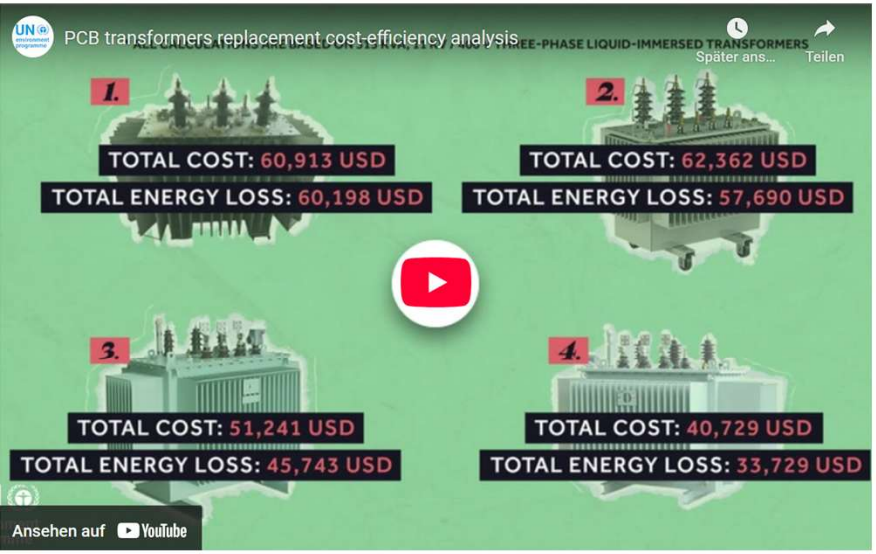
- One opportunity **to align NIP development with broader chemicals management efforts** is through **the development or updating of the National Chemical Profile within the NIP**.
- NIP update Guidance: "*If a National Profile has not been prepared, then consider whether it should be initiated and integrated with NIP development, review, or updating" (UNEP 2017)*.
- Similarly UNITAR stresses that "Understanding the country's baseline situation regarding POPs, and chemicals in general – through the preparation of a National Profile – can be seen as a fundamental component of a NIP" (UNITAR 2003).
- In this context, **UNITAR prepared a Guidance "Preparing/Updating a National Profile as Part of a Stockholm Convention National Implementation Plan"** (UNITAR 2003).
- In the **current NIP update project** of **UNEP**, some countries, including Malawi and Gambia, **are updating their chemical profiles within the NIP update**. They also looked in this respect to Targets of the GFC.



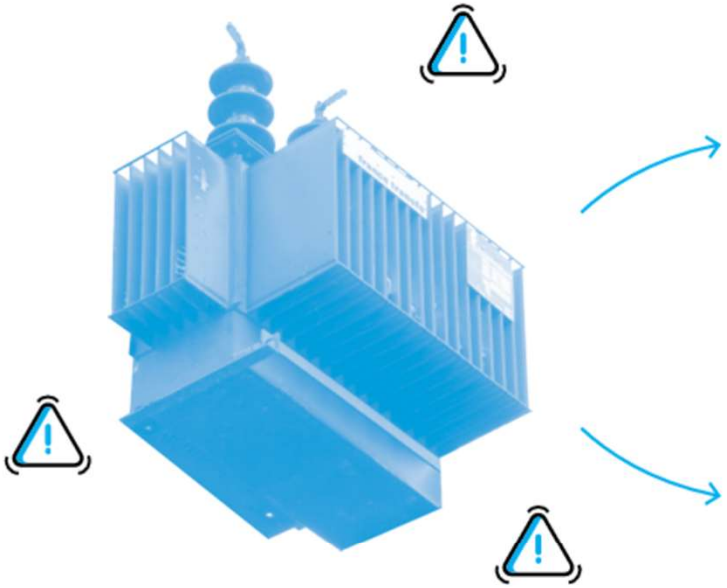
Integrated approach of PCB phase-out: POP & carbon emission reduction

The phase-out of PCB transformers can also contribute to climate change mitigation:

- Phasing out the old PCBs transformers with new energy-efficient models saves energy and reduces carbon emission. Over the transformer‘s lifetime, the **money saved** can be 10 times the investment.
- When considering this win-win, companies can easier phase out PCB transformers (aim by 2025!).



https://www.unep.org/toward-elimination-pcbs



Phasing out **PCB transformers** with new energy-efficient models offers numerous benefits, reducing carbon emissions, saving energy, and promoting a transition towards **a net-zero future.**

An **energy-efficient transformer** will have a higher cost, but energy loss can be reduced by 50% during running time. Over a transformer's lifetime, the saved money will be **10 times** the initial investment.

The **elimination of PCBs** and the reduction of carbon footprint are crucial steps in **combating climate change and pollution.**

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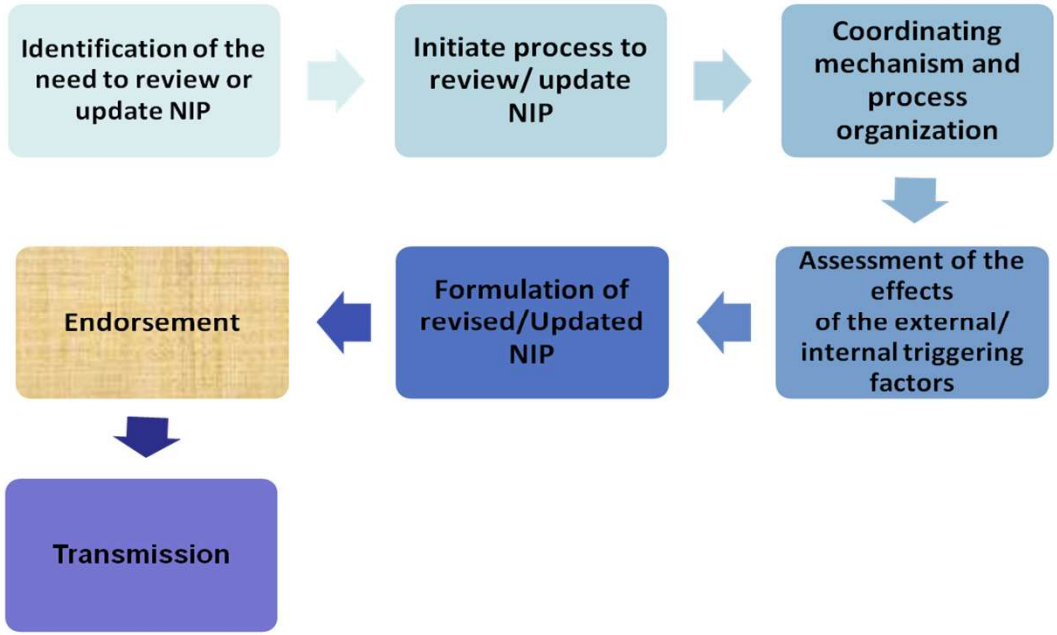
National Implementation Plan (NIP) - Enabling Activities

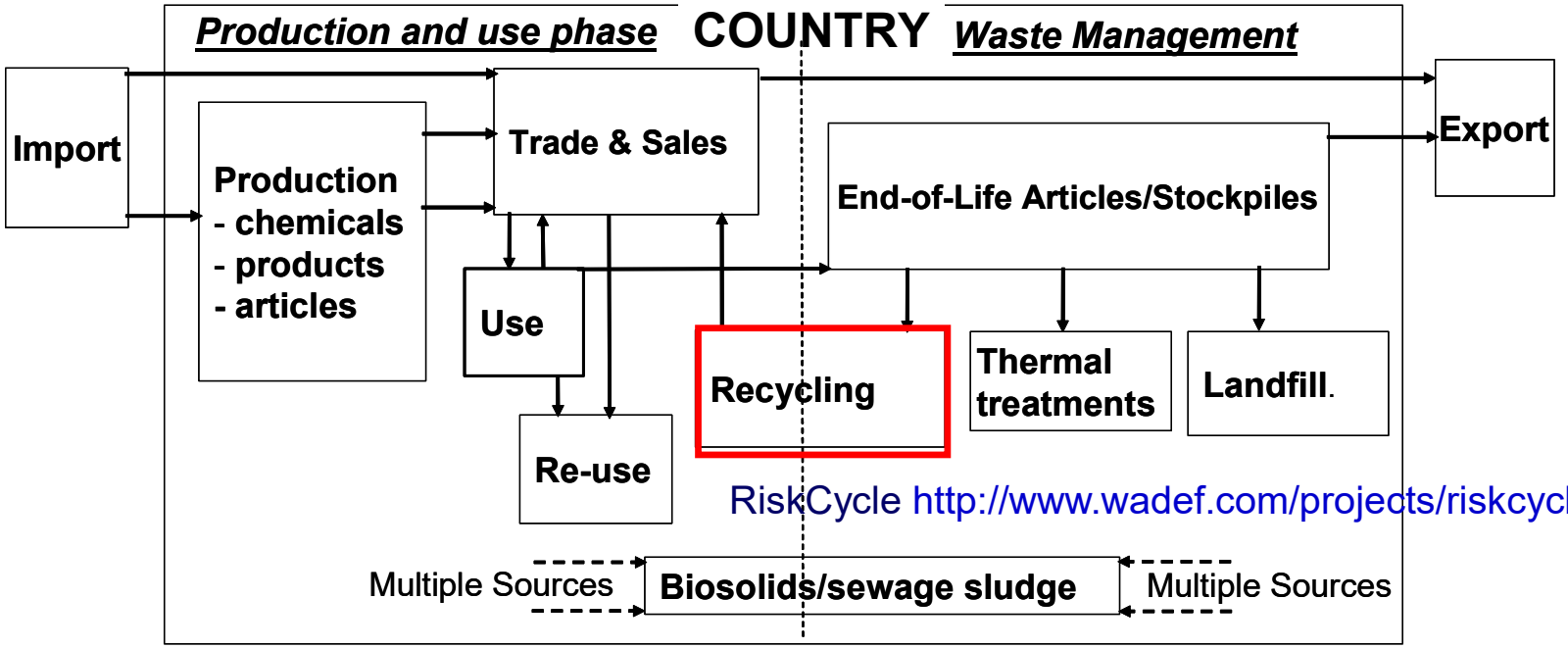
1. **Coordination mechanism and organization**
2. Inventory of POPs, NIP review & national capacity
3. Assessment and priority setting for management of legacy and new listed POPs
4. **NIP and National Action Plans formulation**
5. NIP endorsement & submission; Article 7 SC: Each Party shall “Review and update, as appropriate, its NIP on a periodic basis and in a manner to be specified by a decision of COP”.



Annex to decision SC-2/7

Action plan consideration: POPs need to be controlled along the life cycle

- Different ministries and governmental institutions (e.g. customes or market surveillance) and other stakeholders (e.g. industry, retail, consumers) have their responsibilities in the life cycle management of chemicals (including POPs and products containing POPs). Responsibilities for import/export, production, use in production, use phase and end-of-life phase should be defined by a regulatory framework considering the life cycle. **Also action plans should be based on life cycle thinking.**
- Control of recycling becomes increasingly relevant as countries move towards a circular economy and POPs are increasigly in products/plastics.



RiskCycle http://www.wadef.com/projects/riskcycle/results.php

Enabling activity & implementation framework: **Coordination mechanism – crucial for integrated approach**

- **A national inter-ministerial & multi-stakeholder coordination mechanisms for chemicals (& waste) management** may already exist. **Then NIP development, review, and updating (and implementation) activities could be included in this frame.**
- **Countries without a national coordination mechanism** for chemicals & waste management may establish one as part of their Stockholm Convention NIP development activities, ensuring that it functions beyond the NIP Update project and best addresses all chemical MEAs.
- **One aim: Development of a national multi-stakeholder coordination mechanism for chemicals and waste management,** which **aims** to **address cross-cutting topics** (**Chemical MEAs**, **overall chemicals management**, **waste/resource management**; GHS, SDGs/SCP).
- The **improvement** of the **coordination mechanism towards such an integrated frame is an enabling activity within the NIP development and can be part of the action plan**.

Gender considerations for NIP update including action plan development

√ Are mechanisms in place to promote gender balance?

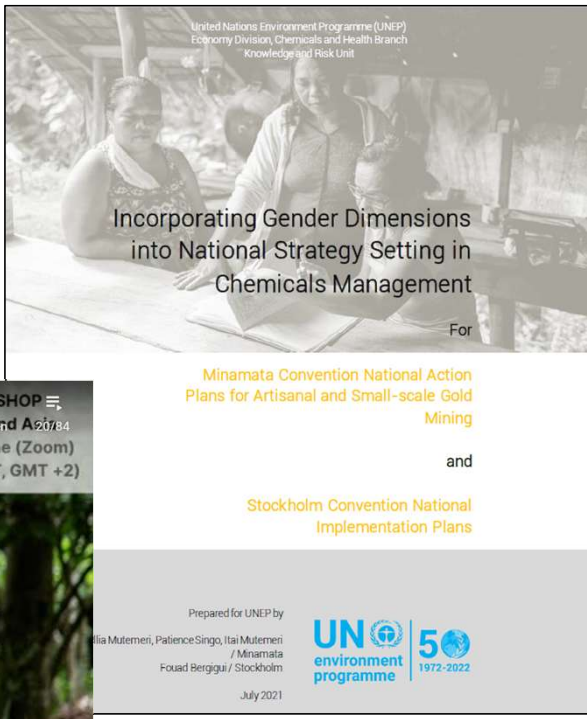
√ Do professional women participate (e.g. industries, women's groups, universities)

√ Are industries with specific exposures adequately considered (agriculture; manufacturing; waste management).

√Are industries possibly impacting the health of workers participating in stakeholder consultations?

√ Are NGOs/CSOs working on gender, health and environmetal issues participating?

√ Are vulnerable groups considered in respect to health and socio-economic activities?



https://www.greenpolicyplatform.org/webinar/regional-workshop-europe-asia-and-africa-mainstreaming-gender-national-implementation-plans

Action plan considerations during POP inventory activity

- **During POP inventory development already a chapter on suggested activities for the action plan can be included in the inventory reports.**
- **The improvement and refining of inventories can be an activity in the action plans** (but please try to come as far as possible with information gathering for current inventory!).
- During the inventory development also the **communication lines between ministries** and stakeholders can be assessed for effectiveness and **improvements can possibly be made**.
- **The need of improvement of the inter-ministerial and multi-stakeholder communication can be part of the action plan** but should also be improved during the NIP development.

Action plan – POPs specific and cross-cutting activities

POPs specific and cross-cutting activities in the action plans:

- There are activities which are specific for an individual POP (e.g. activity of BAT/BEP for PFOS in plating; PCB equipment/oil management).
- Other activities might rather be compiled in a general activity covering all POPs (e.g. monitoring of POPs, contaminated site assessment, or awareness raising).

- **When drafting the action plans, the NIP drafting team decides which activities should be grouped into a cross-cutting action plan that addresses a range of POPs and which activities should be kept specific for an individual POP action plan.**
- It might be mentioned in a POP specific action plan, that related activities like POP monitoring or contaminated sites are included in the related cross cutting action plans.

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Assessment of action plans in former NIP – lessons learned

Assessment of the former NIP and the former action plans are one important task for the development of action plans for the NIP update:

- What suggested activities of former NIP are still relevant?
- What activities need to be updated and modified?
- Why were activities not conducted or only to a certain degree?
- What lessons learned from the implementation of the former action plan? This should be considered for the new action plan & related activities (also approach, budget, time line).

The assessment of the key reasons why activities were not conducted, or were only conducted to a limited extent is important, in order to improve in the next phase:

- No (GEF) project was developed?
- A project had been developed but was not granted or is still in the pipeline?
- Challenges in national institutions and national commitment of stakeholders?
- Other reasons?

Action plans in the recommended NIP structure – Chapter 3

3. Strategy and action plan elements of the national implementation plan

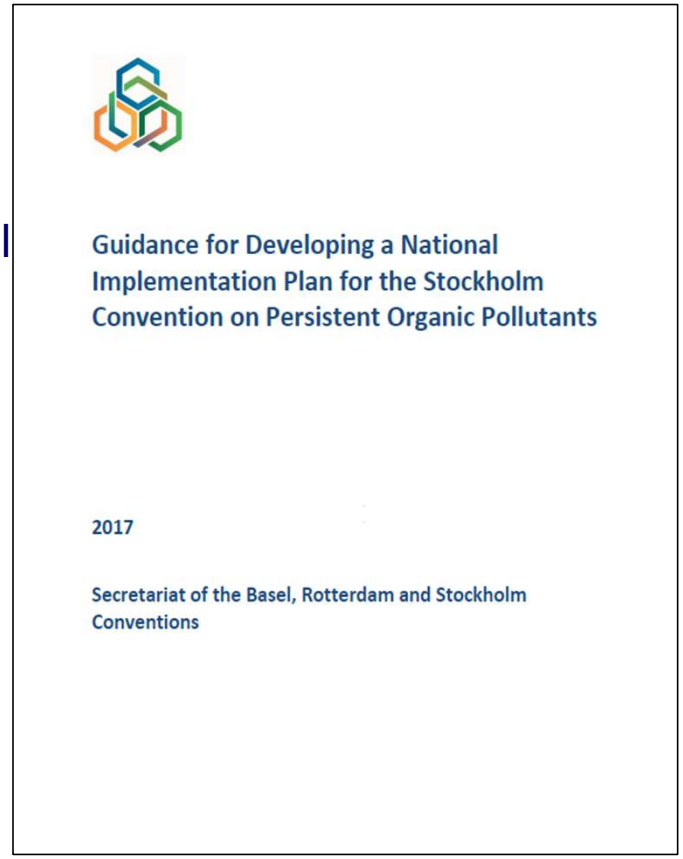
3.1 Policy Statement

3.2 Implementation Strategy

This section can be used to elaborate on the integrated approach, including how the NIP links and can contribute to national chemical management and national waste management including plastic management. Also the link to Sustainable Consumption & Production, circular economy, and One Health can be elaborated.

3.3 Activities, strategies and action plans

- Subchapter 3.3 **would list country-specific activities, action plans, and strategies, including those required by the Convention, designed to meet Convention obligations**.
- For each action plan a short introduction can highlight the needs.



Structure and content of the NIP – Chapter 3

3. Strategy and action plan elements of the national implementation plan

3.3 Activities, strategies and action plans

- **Each action plan would identify objectives/goals and activities**.
- **The NIP harmonized template** includes also **templates for the action plans** considering **Objectives, Activities and Performance Indicators as content.**
- **Also Time Frames, Implementers and Resource Needs are included.**
- **In today's webinar options for objectives and activities for Action Plans for PCBs and POP pesticides/HHPs will be introduced.**

https://www.youtube.com/watch?v=46Nd5ShR-I4
https://www.youtube.com/watch?v=cGJgmVcpp74

Objectives	Activities	Performance indicators	Time Frame	Implementers (and stakeholder)	Resources / Needs	Remarks

Thank you for your attention ! Questions?

More Information https://www.thegef.org/; https://en.wikipedia.org/wiki/Triple_planetary_crisis

Basel Convention: www.basel.int

Rotterdam Convention: www.pic.int

Stockholm Convention: http://chm.pops.int/;

Montreal Protocol/Vienna Convention: http://ozone.unep.org

GFC: https://www.chemicalsframework.org/ **FAO:** www.fao.org **WHO** www.who.int/

Climate Convention https://unfccc.int/ **Biodiversity Convention:** https://www.cbd.int/

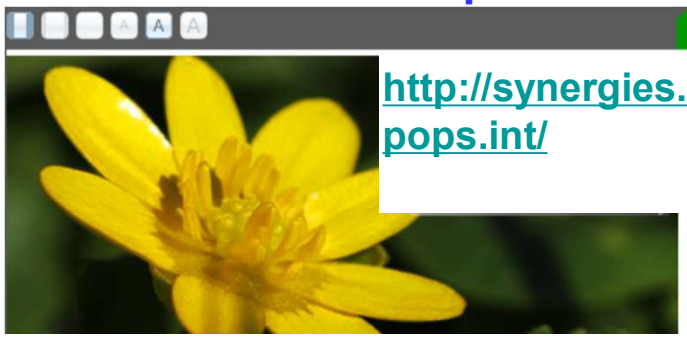
OECD/IOMC: http://www.oecd.org/chemicalsafety/

Science:; https://www.ipcc.ch/; https://www.ipbes.net/; www.unep.org/oewg-spp-chemicals-waste-pollution

Industry: http://www.suschem.org/; https://icca-chem.org/; https://cefic.org/

NGO: www.ipcp.ch; www.ipen.org; www.ciel.org/; www.ban.org; www.chemsec.org; www.wecf.org

Better-world-links: http://www.betterworldlinks.org/



http://synergies.pops.int/