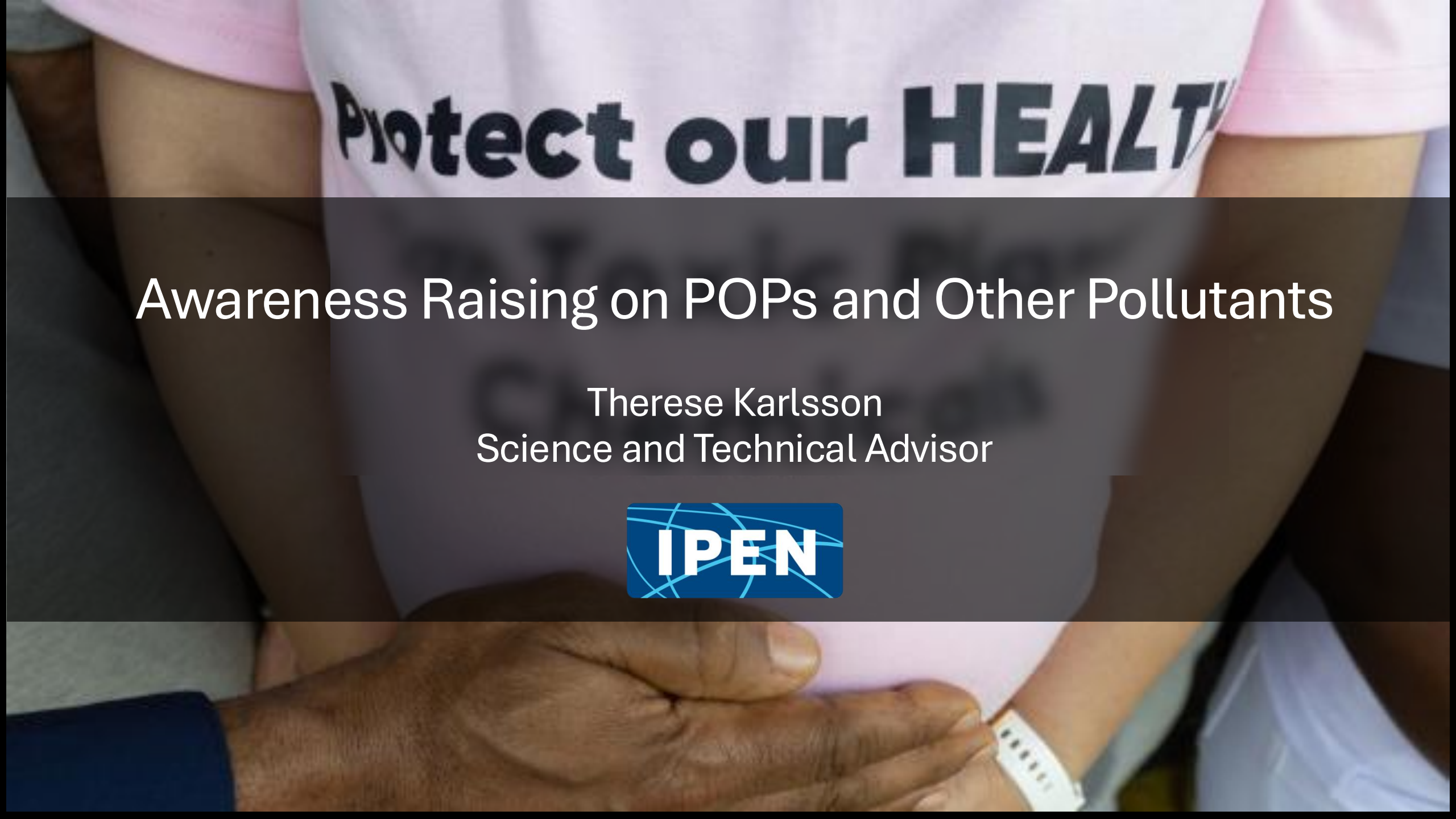




Protect our HEALTH

Awareness Raising on POPs and Other Pollutants

Therese Karlsson
Science and Technical Advisor



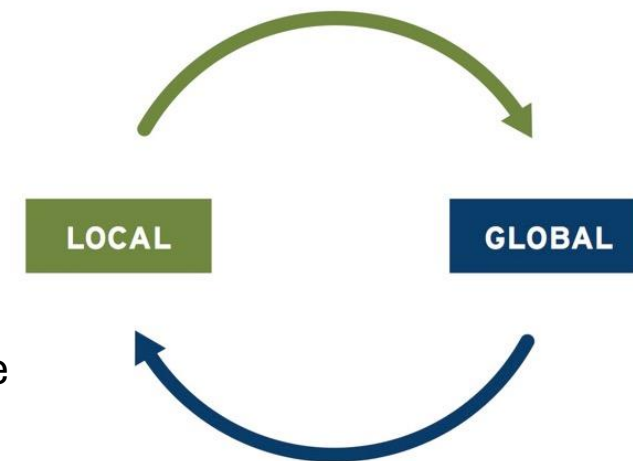


International Pollutants Elimination Network (IPEN) is a global network with almost 700 organizations in more than 130 countries working for a toxics-free future for all.



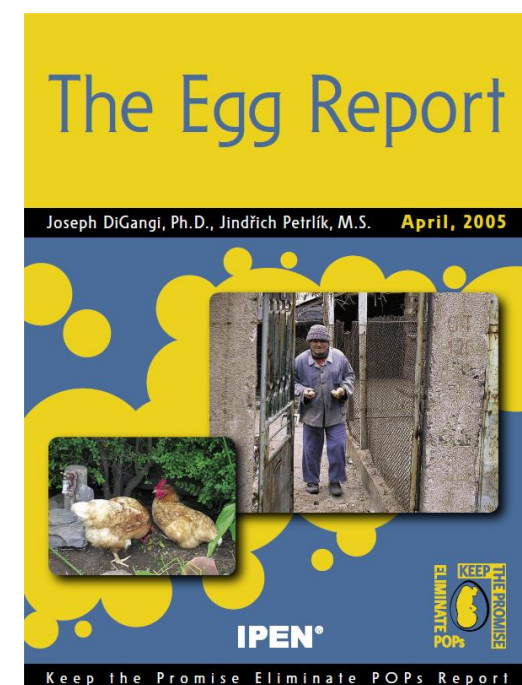
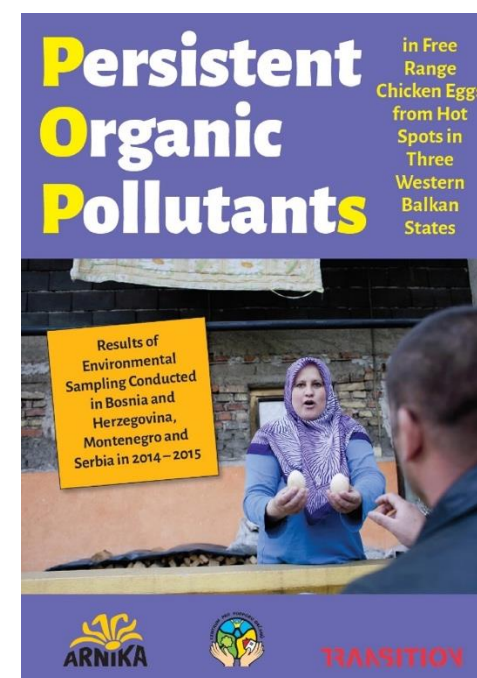
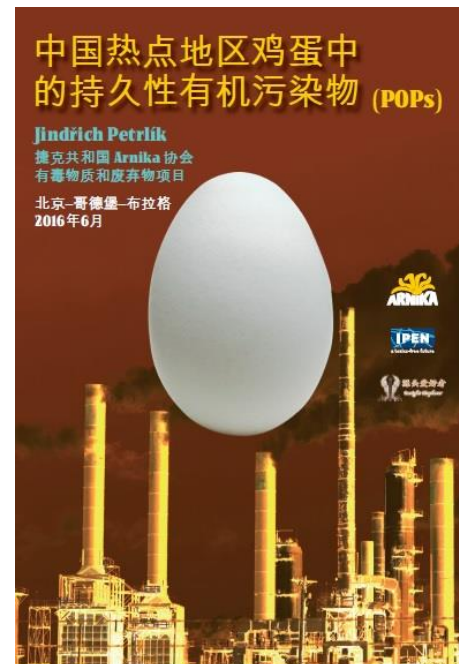
IPEN was created during the negotiations that formed the Stockholm Convention. Among other things, our work includes

- Participating in the evaluation of new POPs under POPRC
- Doing studies on POPs in articles and management of POPs wastes
- Bridging Science and Policy, including through developing IPEN Quick Views prior to policy meetings, publishing briefs and reports, doing webinars and side events



Free-ranged chicken eggs as passive samplers

IPEN has been monitoring eggs for POPs for two decades





Dioxin contaminated eggs highlight areas that are important to address in action plans, including that:

- Open burning of wastes contaminates our food with POPs and therefore needs to be prevented
- Ashes from incineration of wastes need to be better managed
- More robust action is needed to manage articles and wastes containing POPs (incl. brominated flame retardants and PCBs), since many waste-management practices can lead to the unintentional formation of dioxins
- Action is needed to investigate and secure contaminated sites

The highest contaminated egg had such high concentrations that if a child ate just one egg, it would ingest more dioxins than what the EU consider a tolerable intake for 5 years

A recent review also noted high levels of brominated dioxins



Contents lists available at [ScienceDirect](#)

Emerging Contaminants

journal homepage: www.keaipublishing.com/en/journals/emerging-contaminants

Review of brominated flame retardants and polybrominated dibenzo-p-dioxins and dibenzofurans in eggs and contamination sources

Jindrich Petrlik^{a,b}, Lee Bell^{a,c}, Joseph DiGangi^a, Aileen Lucero^d, Gilbert Kuepouo^e, Griffins Ochieng Ochola^f, Nikola Jelinek^b, Miroslava Jopkova^b, Jana Pulkrabova^g, Tomas Grambicka^g, Martin Skalsky^h, Yuyun Ismawatiⁱ, Eric Akortia^j, Sam Adu-Kumi^k, Penchom Saetang^l, Thitikorn Boontongmai^l, Maria Carcamo^m, Bjorn Beeler^a, Peter Behnischⁿ, Christine Herold^o, Hana Walaska^{b,p}, Roland Weber^{o,*}

Recommendations included:

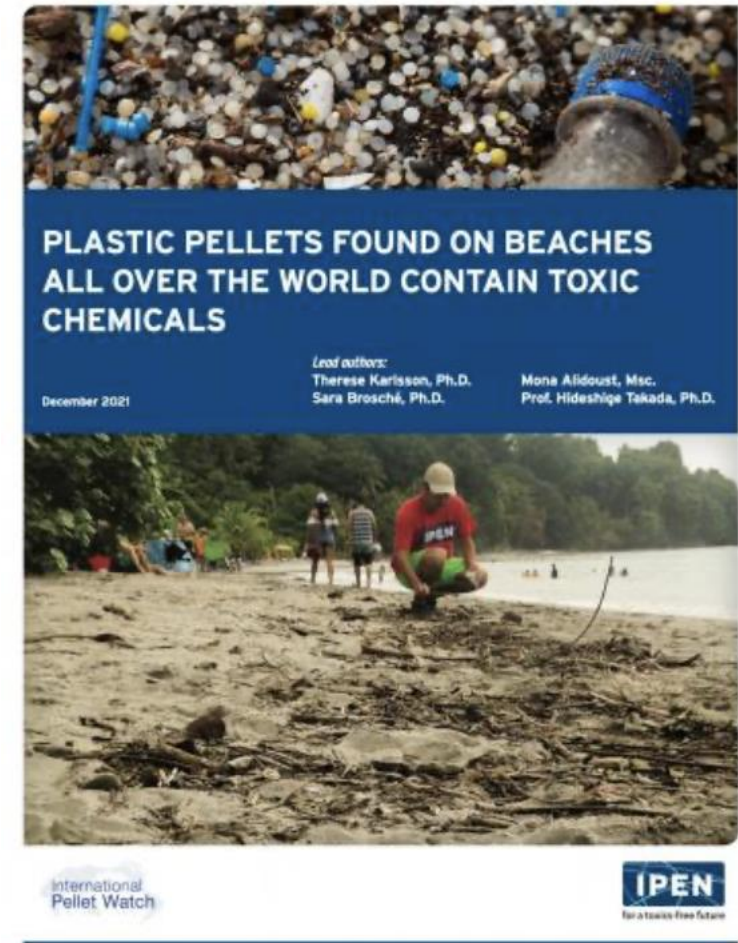
- listing PBDD/Fs and mixed brominated-chlorinated dioxins (PXDD/Fs) under the Stockholm Convention,
- banning exports of e-wastes and plastic wastes to developing countries,
- environmentally sound management of ashes from waste incineration and metallurgical processes,
- prevention of recycling of plastics containing brominated compounds and
- substitution of brominated flame retardants with safer alternatives.

Plastic pellets

Beached plastic pellets from 23 countries were analyzed for benzotriazole UV stabilizers (incl. UV-328) and PCBs.

Findings include that:

- Pellets from all locations contained PCBs and UV-328.
- Concentrations of toxic chemicals were especially high in the samples from African countries highlighting that these often bear a heavy burden of plastic pollution, even though they are not major producers of neither chemicals nor plastics.
- Plastics can transport chemicals over large distances.

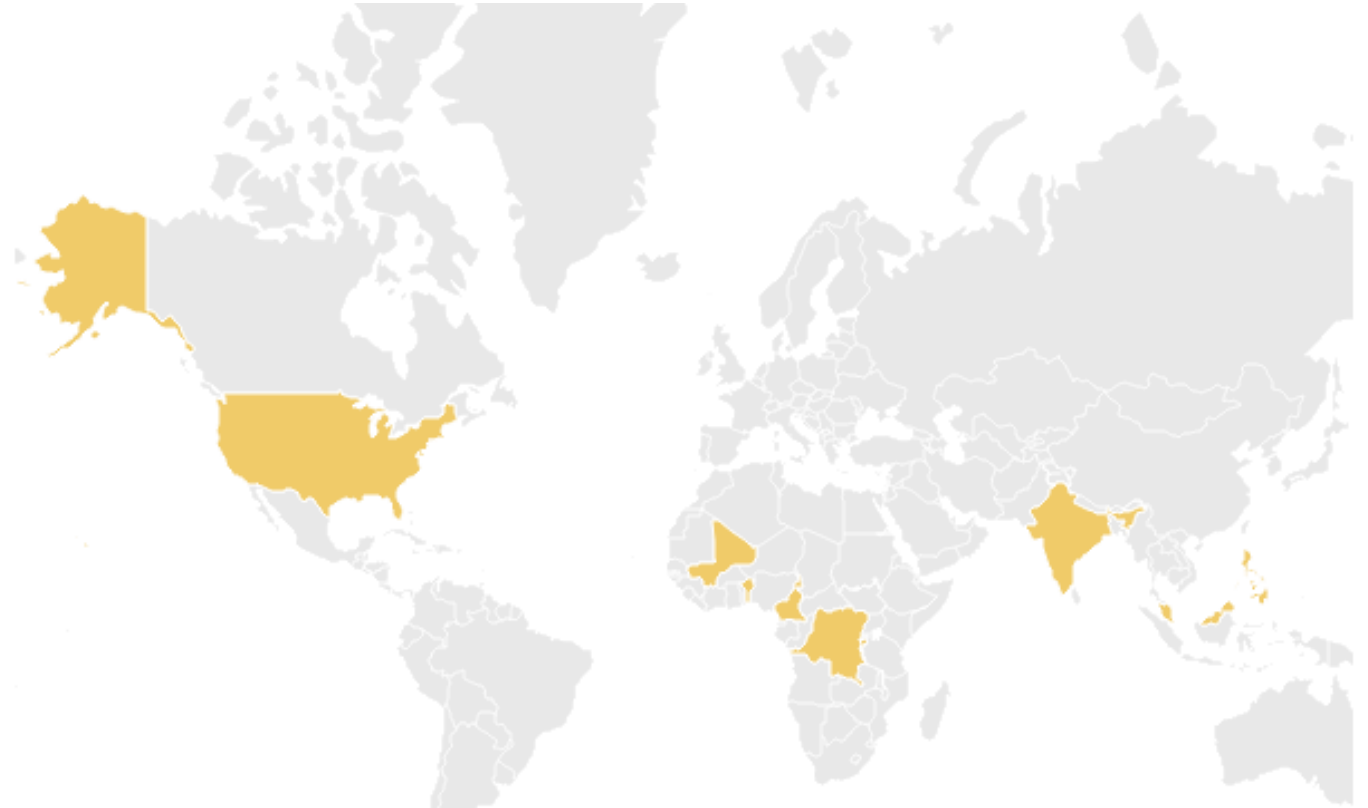


ARE YOUR CHILDREN'S TOYS HAZARDOUS WASTE?

HIGH LEVELS OF CHLORINATED PARAFFINS
IN PLASTIC TOYS FROM TEN COUNTRIES



October 2023



A light blue teddy bear with a pink bow around its neck. The bear has black eyes and a black nose. It is sitting and facing forward.

100%
Of the toys
contained
SCCPs



0%

of the toys were labelled for the
presence of toxic chemicals.

GUSTO KO NANG **LIGTAS
NA LARUAN PARA SA
AKING MGA ANAK**

BAN
TOXICS

IPEN
for a toxics-free future

Stockholm Convention

Article 6

“... each party shall:

(a) Develop appropriate strategies for identifying [...] products and articles in use and wastes consisting of, containing or contaminated with a chemical listed in Annex A, B or C”.





BROMINATED FLAME RETARDANTS IN PLASTIC PRODUCTS FROM CHINA, INDONESIA, AND RUSSIA

February 2022



All analyzed toys contained brominated flame retardants. 72/73 contained DecaBDE

The concentrations do not perform a flame retarding function so likely there because of recycling



FROM HIDDEN HAZARDS TO OPEN DATA: ADVANCING TRACEABILITY AND TRANSPARENCY FOR POPS

MARCH 2025

For future listings, Parties should:

- Ensure that listings are accompanied with a specific requirement for means of identification.
- Limit exemptions to justified, narrow, time-limited applications that are necessary for the functioning of society so that the volumes of stockpiles, products in use, and wastes that need to be traced and managed are minimized.

Parties should also explore how to strengthen Global Cooperation and Harmonization to improve transparency and traceability of POPs

Methods for managing POPs wastes and stockpiles

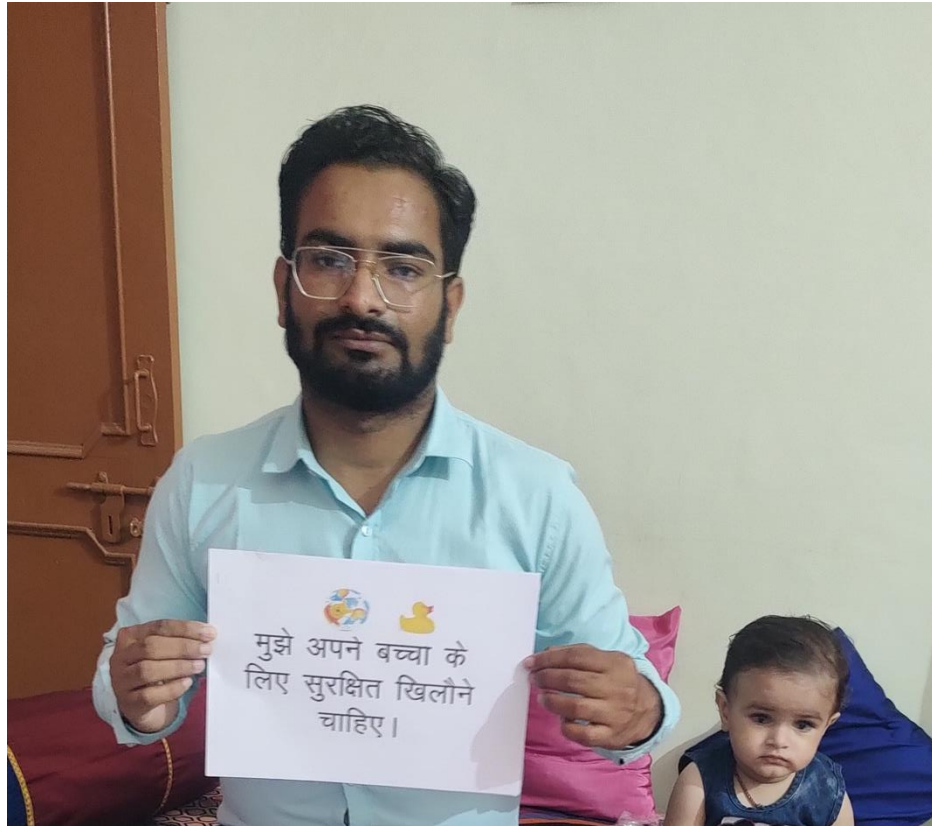
APRIL 2019

NON-COMBUSTION TECHNIQUES FOR POPS WASTE DESTRUCTION: AN IPEN BRIEF ON ENVIRONMENTALLY SOUND MANAGEMENT OF POPS

In Arabic, Spanish, Russian, French, English, Chinese [here](#)



In Spanish, English [here](#)





Examples from work on the ground by IPEN POs

AWHHE awareness raising activities as contribution to the SC NIP update in Armenia

by Gohar Khojayan, IPEN co-chair and Communication Specialist, Armenian Women for Health and Healthy Environment (AWHHE)

24 February 2026

AWHHE contribution to the awareness raising part of the ongoing GEF Enabling Activity project in Armenia

- AWHHE works successfully with the Government as NGO Focal Point for SC and member of the National Steering Committees for the Stockholm Convention.
- AWHHE is currently engaged in the awareness raising part for Armenia of the ongoing GEF Enabling Activity project “Review and Update of the National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants (POPs) in Albania, Armenia and Kazakhstan”.
- AWHHE carries out awareness raising activities and a communication campaign for general public about newly listed POPs:
 - ✓ Creates and disseminates information materials, uses information materials created by SC National Focal Point
 - ✓ “Next Exit” game
 - ✓ Organizes seminars and webinar
- **AWHHE works as per the agreement with the Stockholm Convention Regional Centre hosted by RECETOX, Faculty of Science, Masaryk University, Brno, Czech Republic**



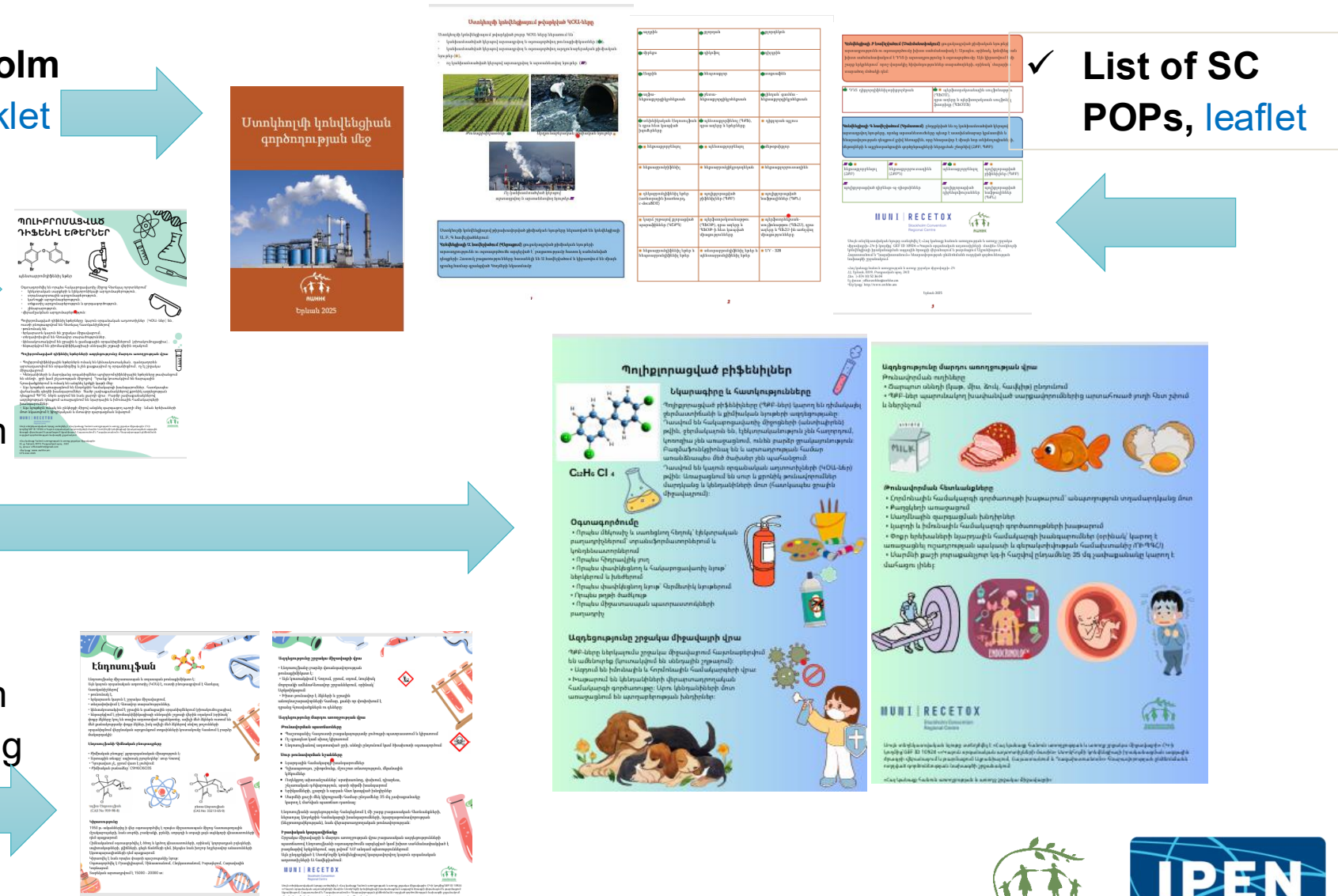
AWHHE information materials, in Armenian language

✓ **“Implementation of Stockholm Convention on POPs”, booklet**

✓ **PBD, leaflet** (POPs characteristics, use, human health impact)

✓ **PCB, leaflet** (POPs characteristics, use, environmental impact, human health impact, poisoning consequences)

✓ **Endosulfan, leaflet** (POP characteristics, use, environmental impact, human health impact, acute poisoning signs, legal status)





“Next Exit” game

- **Link to the game:** at UNEP <https://www.unep.org/resources/e-learning/next-exit-chemical-safety-game> or at BRS <https://www.brsmeas.org/MediaHub/Educationalmaterial/EscapeGame/tabid/9566/language/en-US/Default.aspx>
- The game to raise awareness on POPs was conducted,
- feedback collected
- (to continue)
- AWHHE developed a presentation in Armenian language to ensure participation for those with just basic knowledge of English (also to be available on project webpage)

in the Yerevan Aarhus Center with NGO representatives



Among 10-16 years old pupils of secondary school of Nigavan village in Aragatsotn province



Among 10-16 years old pupils of secondary school and young women in Arzakan village in Kotayk province



SEMINARS

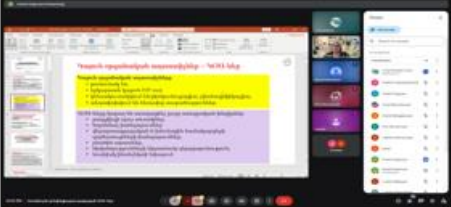
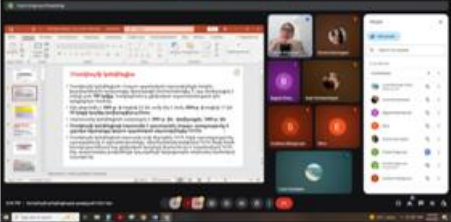
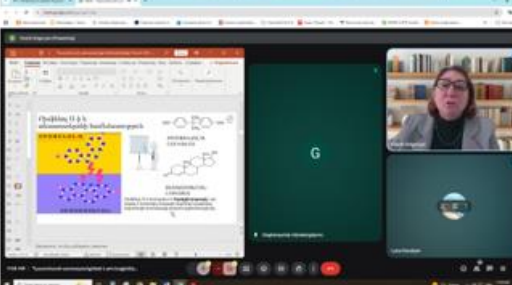
Seminars to raise awareness on POPs among civil society stakeholders were conducted:

- for the students of College of Agriculture of Spitak in Lori province,
- for young women of Aratashen in Armavir province,
- for the students of Erebuni Medical College in Yerevan

24.09.2025 21 participants	<u>Aratashen</u>	Armavir		
9.10.2025 50 participants	<u>Erebuni Medical Academy, Yerevan</u>	Yerevan		
21.11.2025 24 participants	<u>College of agriculture, Spitak</u>	Lori		



WEBINARS

Date / participants	settlement	Province	Photos
15.08.25 17	Sisian	Syunik	
8.10.2025 8	Sevan	Gegharkunik	
10.11.2025 32	Gegharkunik secondary school	Gegharkunik	 

Dissemination of information

- AWHHE website (soon, at <https://awhhe.am/chemicals-waste/>),
- Facebook (<https://www.facebook.com/awhhe/>),
- Interviews:
 - on air pollution in Yerevan, including POPs impact on human health, <https://youtu.be/PTHPjDwOqjw?si=3RodxAdYpvQhctlh>
 - and <https://youtu.be/W2iU28G1yfs?si=h-zyOOZm-TsHPEiS> – starting from 11:40”



Токсичное сердце Еревана — Нубарашенская свалка. #Ереван #Армения
#Нубарашен #Экокатастрофа,



Անտեսանելի թույլն՝ քաղաքում. քաղցկեղածին բնակավայր է դարձել
Երևանը



Thank you
www.awhhe.am

- ❖ The Stockholm Convention is the definitive global instrument for assessing, identifying, and controlling some of the most hazardous chemical substances on the planet to protect human health and the environment.
- ❖ Without the BRS Conventions, this opportunity for AWHHE to work with the Armenian Government wouldn't have existed.
- ❖ The Green Growth Knowledge Partnership provides an excellent platform for learning and sharing (<https://www.greenpolicyplatform.org/initiatives/global-nip-update/About>)
- ❖ AWHHE is grateful to the SC Regional Center in Brno (RECETOX) for guidance in this work (<https://www.recetox.muni.cz/rc>)