



AN OPPORTUNITY FOR THE WORLD TO PREVENT TOXIC RECYCLING AND CONTAMINATION OF THE CIRCULAR ECONOMY THROUGH THE SUBSTANTIAL STRENGTHENING OF LIMIT VALUES FOR POPS IN WASTE

Civil society comments and briefing for Parties to the Basel and Stockholm Conventions

We urge Parties to the Basel and Stockholm Conventions to support stronger limit values for POPs in waste than those currently proposed. Weak limits undermine the Stockholm Convention and lead to POPs recycling that is incompatible with the goals of a circular economy.

The Basel Convention's bodies are currently discussing new limit values for persistent organic pollutants (POPs) in waste. POPs are the most toxic and persistent chemicals ever studied and include dioxins (PCDD/Fs), polychlorinated biphenyls (PCBs), perfluorinated compounds (PFAS), and brominated flame retardants (PBDEs). The Stockholm Convention requires the destruction of wastes that exceed the set POPs limit values (known as Low POP

Content Levels, set by the Basel Convention) and bans the recycling of wastes contaminated with POPs to maintain toxic-free material cycles. However, the current proposal for POPs limits in waste will actually allow plastic and other wastes contaminated with POPs to be recycled by industries worldwide. The transition to high-quality and toxic-free material cycles cannot be achieved while allowing POPs to be recycled into new materials.

The strong limit values highlighted in the table below should be adopted:

POP	IPEN proposal
HBCD	100 mg/kg
Hexa-, hepta-, tetra-, penta-, and decabromodiphenyl ether (PBDEs)	50 mg/kg as a sum
PCDDs, PCDFs, and dioxin-like PCBs	1µg TEQ/kg
SCCPs	100 mg/kg
PFOS, PFOA, PFH _x S and related compounds	0.025 mg/kg for PFOS, PFOA or PFH _x S and their salts individually; 10 mg/kg for sum of PFOS, PFOA, PFH _x S and related compounds

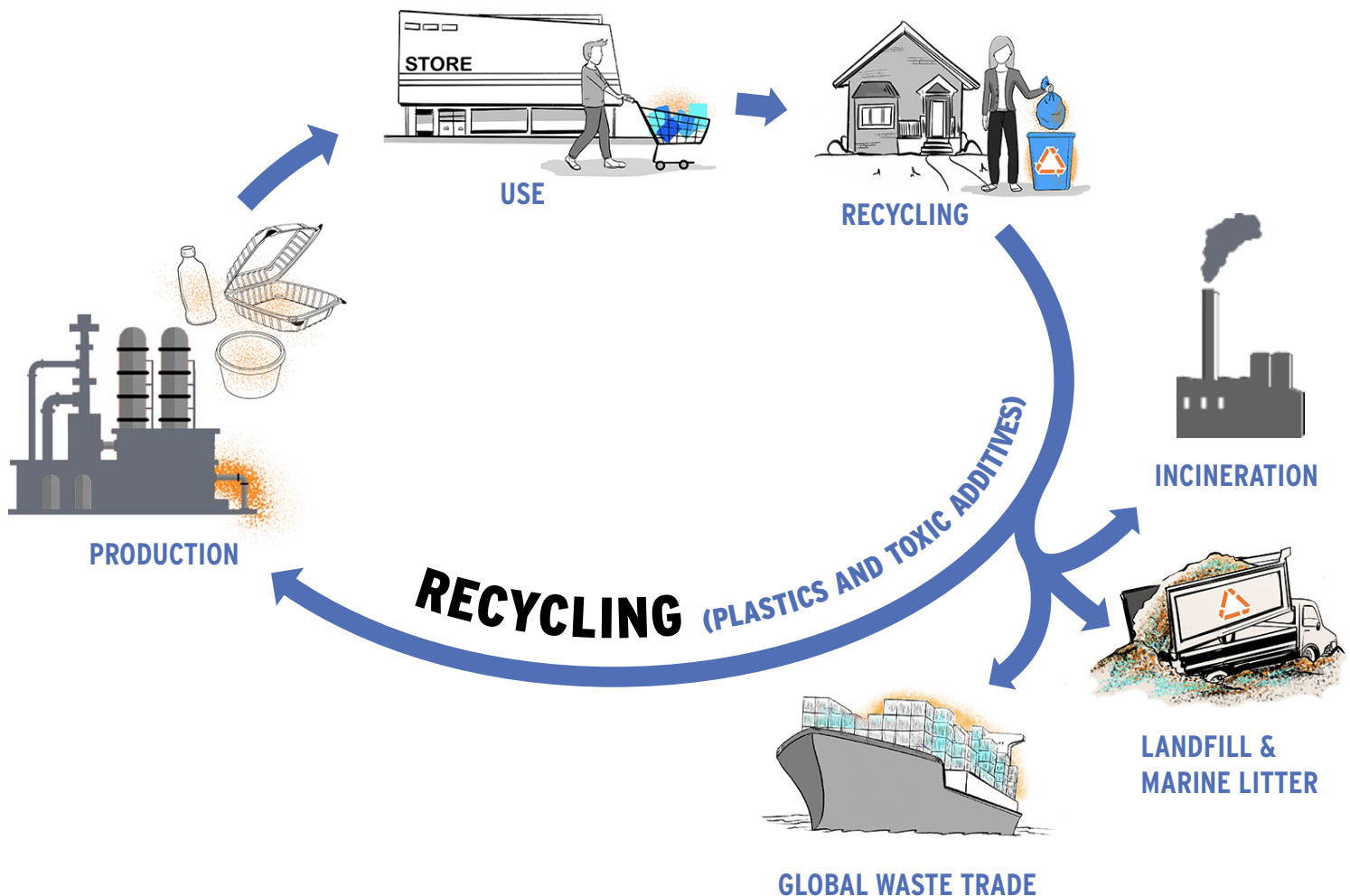
Recycling POPs in wastes leads to contamination of new products, including toys, made of the recyclate. This disrupts the circular economy by allowing POPs-rich materials to circulate in our products and waste, and increases the exposure of vulnerable populations. Some industry players are pushing regulators to set weak limits that would allow them to access more materials for recycling, even when they are heavily contaminated with POPs. If such recycled POPs-containing materials are used to manufacture new products, the credibility of the recycling system and of the circular economy as a whole will be jeopardized in the eyes of the public.

The Parties to the Basel and Stockholm Conventions can set POPs standards that are consistent with the ambitions of a global circular economy, but this can only be achieved by suggesting strong POPs limit values for wastes. Establishing toxic-free material cycles, protecting public health, and building confidence in recycled products will only be possible if international institutions ensure the recovery of clean waste streams into recycled products.

THE PROBLEM: THE CURRENTLY PROMOTED POP LIMITS FOR WASTE ARE BASED ON ECONOMIC CRITERIA INSTEAD OF STRONG AND HEALTH-PROTECTIVE CRITERIA

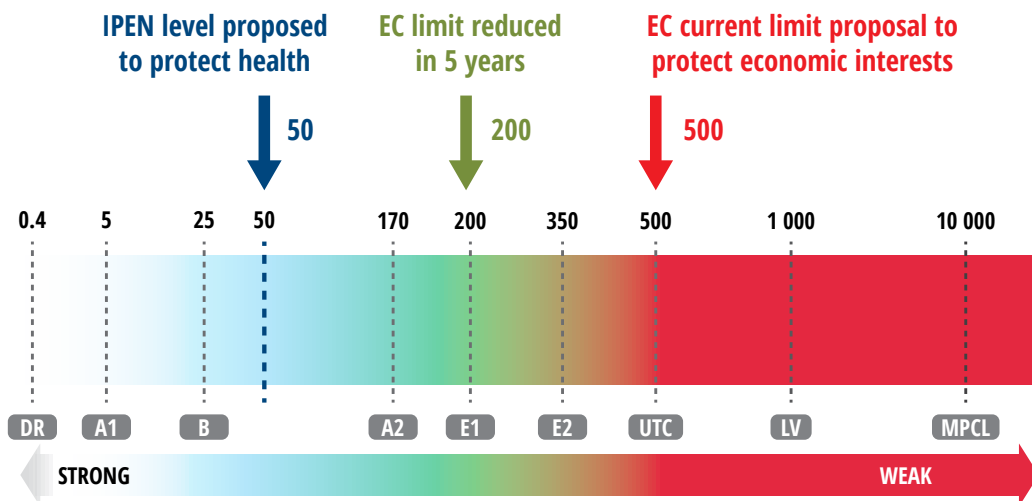
The methodology to determine POPs limits suggests a range of values from strong limits that protect human health down to weak limits that are based on 'economic considerations' of the plastic, recycling, and waste incineration industries. Unfortunately, the 'recycle at all costs' approach neglects the serious harm for human health and related socioeconomic costs that can arise from recycling wastes that contain POPs, which translates into the current suggestion for middle ground limit values.

It is also important to mention that with the adoption of such values, the downstream user industries will suffer from receiving recycled materials containing high levels of legacy chemicals, which will further prevent them from increasing the use of recycled materials and re-introducing them back into the economy.



PBDE Limitation criteria

- A** Analytical potential
- B** Background contamination
- DR** Disposal and Recovery capabilities
- E** Economic feasibility
- LV** Existing Limit Value
- MPCL** Maximum POP Content Limit
- R** Risk (possible adverse effects on human health and the environment)
- UTC** Current Unintentional Trace Contaminant limit (to be lowered soon)



Other factors such as the technical ability to measure low concentrations of POPs and their background levels in the environment are also considered in the methodology. The proposed levels in the middle of this range would allow POP-rich plastic and dioxin-rich ashes to be recycled, which would mean abandoning the precautionary principle and health-protective POPs limits.

Using the PBDE example, Figure 1 shows a comparison between the recommended range of levels presented to the EC by its expert consultants, the levels proposed by the EC, and finally, the strong, scientifically and technically justifiable limits proposed by IPEN and civil society organizations.

The consultants also considered the following aspects: the levels at which analytical capabilities are reliable, the background contamination levels in the environment, disposal and recovery capabilities and the risks to public health and the environment. IPEN and civil society organizations propose a limit value of 50 mg/kg for PBDE, which can be implemented with current technologies.

The same methodological approach was used for all POPs. Options ranging from strong health-protective limits to weak limits that protect economic interests were presented to the Basel Convention expert group. In nearly all cases, the currently used and promoted levels are more prone to protect economic interests than public health.

While some of the proposed limits for POPs are a slight improvement in comparison to the previously agreed Basel Convention global Low POPs Content Levels,

they are still far too weak to protect the environment and the public health.

The transition to high-quality, toxic-free material cycles cannot co-exist with an approach that allows the recycling of POPs-containing wastes based on weak POPs limit values. By establishing strong POPs limit values for waste, the Parties to the Basel Convention can demonstrate global leadership, increase human health protection and promote the development of a circular economy free of contamination. On the contrary, adopting weak limit values will do more harm than good and reduce the long-term credibility of recycling. Establishing strong limit values for POPs in waste today will significantly promote the future of a toxic-free circular economy, because it will promote innovation in recycling, increase the pressure on industrial designers to remove POPs from products, and ensure that the circular economy is not poisoned in its infancy.

Therefore, we strongly call on the Parties to the Basel and Stockholm Conventions to support more ambitious limit values for POPs in waste as suggested by the NGOs and described in this briefing.

For more information please contact:

Jitka Straková or Jindřich Petrlík at IPEN and Arnika:
jitkastrakova@ipen.org
jindrich.petrlik@arnika.org

