Comments on the Basel Convention plastic waste amendments: implementation, challenges, impacts, and possible further activities

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1. Introduction

The Basel Convention plastic amendments were historic, and were followed by a reduction in global plastic waste traded under the HS 3915 code.[1] Still, the plastic pollution and related health crisis continues unabated, harming human health, the climate, planetary boundaries and human rights. Microplastics are everywhere, including in our own bodies.

The global plastic waste trade continues to contribute to plastic pollution, especially in the Global South. In fact, harm to health and the environment from plastic waste trade is poised to increase dramatically, as the growing adoption of Extended Producer Responsibility and other recycling-focused policies fuels greater plastic waste exports for recycling, while more recycling capacity is relocated from Global North to Global South countries, in what some refer to as "waste colonialism".[2]

In the absence of caps on plastic production, recycling only adds industrial processes and recycled materials to our economies on top of primary plastic production, and does not replace it[3] - breaking the myth of plastic circularity.[4] Furthermore, chemicals of concern in plastics create toxic recycling, and remain effectively unregulated at the global level, even with the Basel Convention plastic waste amendments.

[1] Basel Action Network (2025) Plastic Waste Transparency Project, Global Export Data
[2] For trends in Latin America, see GAIA (2025) Regional Outlook on imports of plastic waste into Latin America Executive Report submitted to the United Nations Special Rapporteur on Toxics and Human Rights
[3] Zink, T. & Geyer, R. (2018) Material Recycling and the Myth of Landfill Diversion, *Journal of Industrial Ecology*
[4] GAIA (2024) INC-5 Booklet, Chapter 13.

The obstinate policy focus on recycling, with the adoption of unrealistically high plastic recycling and recycled content targets, shows industries and governments committed to recycle plastics at any cost - including at the cost of poisoning Global South ecosystems and communities.

As plastic treaty negotiations stall and harm from plastic pollution continues, it is all the more critical for the Basel Convention to remedy the gaps in its plastic waste trade controls and show continued leadership.

Recommendations

1. **On plastic wastes:**
- Remove Annex IX listing B3011, such that all plastic wastes are subject either to Annex II listing Y48, or Annex VIII listing A3210.

2. **On textile wastes:**
- Replace Annex IX entries B3030 and B3035, which no longer reflect the composition, waste management and pollution associated with current textile waste, with a narrow entry for pre-consumer, unblended, single-type natural fibres that have not been chemically treated;
- Add a new Annex II listing (e.g. Y50) to include textile wastes including ones traded under HS 63.09 except where those are hazardous wastes and should be controlled under a dedicated hazardous textile waste listing;
- Add a new Annex VIII listing for hazardous textile waste (e.g. A3211).

3. **On paper wastes:**
- Amend listings Y48 (Annex II plastic waste) and B3020 (Annex IX paper waste) to ensure that paper waste shipments with more than 2% plastic contamination are controlled under Y48, or A3210 when the plastic contaminants are hazardous.

4. **Cross-cutting:**
- Mandate public disclosure of transboundary plastic waste and textile shipments subject to PIC, as well as of facilities accepting imported waste, to ensure transparency and accountability of both exporting and importing countries and territories.

GAIA also echoes all recommendations made by the Basel Action Network (BAN) and the International Pollutants Elimination Network (IPEN) in their submissions, including:
- The removal of outdated Annex IX listings that interfere with the correct implementation of the plastic waste amendments, as recommended by BAN in this submission process; and
- The removal of the unwarranted PIC exemptions for condensation products, fluorinated polymers and cured polymers, as demonstrated by IPEN and GRID-Arendal in their 2025 technical publication.[5]

GAIA shares concerns regarding the following violations flagged by BAN:
- The repeated non-Party violations against Basel Convention Parties including Malaysia;[6] and

[5] GRID-Arendal and IPEN (2025) Plastic Waste Management with a Focus on Polymers: Cured Resins, Condensation Products, and Fluorinated Polymers – Technical Report with Policy
[6] Basel Action Network & The Last Beach Cleanup (2025). 2025 Fact Briefing: California's Household Paper Waste Exports are Polluting Asia and Breaking Country Import Laws

- The use of Article 11 agreements as loopholes to evade the plastic waste amendments, both by Parties and non-Parties.

2. "Environmentally-sound" plastic recycling: still undefined, elusive

Listing B3011 (Annex IX) includes the following condition for plastic wastes to be traded without prior informed consent: *"provided it is destined for recycling in an environmentally sound manner"*. Seven years after the adoption of this requirement, there is still no positive, measurable definition of what constitutes "environmentally-sound recycling" of plastic wastes.

And indeed, the obstacles to "environmentally-sound" plastic recycling are both considerable and structural. In particular, the overwhelming quantity and variety of chemicals in plastics (intentional and otherwise) coupled with the absence of chemical transparency, as well as microplastic release during plastic processing for recycling, make "environmentally-sound" plastic recycling a perhaps unsurmountable challenge. Technological innovation is of no assistance in this context, as it is unrealistic to expect safe recycling of unsafe materials.

At the very least, any definition of "environmentally-sound" recycling should include benchmarks for resource intensity (energy, water - with closed-loop water systems being mandatory), emissions (toxics, greenhouse gases), full-lifecycle impacts (e.g. generation of solvents and safe disposal of solvent waste) as well as yield (excluding toxic recyclate), that technologies can be tested against. Given the persistence of microplastics in the open environment and in human bodies, and the impossibility of remediation, zero microplastic leakage may be tolerated.

Toxic additives: a continued threat to the uptake of plastic recyclate

Elusive transparency: Chemical transparency remains a critical gap for plastics, undermining public and market confidence in the safety of recyclate. Brominated flame retardants have been found in recycled plastic products including toys, hair accessories, office supplies, and kitchen utensils in China, Russia and Indonesia, often at concerningly high levels.[7] The production of plastics and chemicals is now totally integrated, resulting in the use of over 350,000 chemical additives and 200,000 polymers in plastics.[8]

Precautionary PIC: Until recyclate can be guaranteed to be safe and free from toxic chemicals, all plastic waste should be subjected to the prior informed consent procedure. Halogenated plastic materials - including halogenated polymers and plastic with halogenated additives - should be controlled as hazardous waste in line with Basel Convention, and exemptions, including those for fluoropolymers, should be ended.

[7] IPEN (2022) How plastic poisons the circular economy;
[8] Wang, Z., Walker, G. W., Muir, D.C.G. & Nagatani-Yoshida, K. (2020) Toward a Global Understanding of Chemical Pollution: A First Comprehensive Analysis of National and Regional Chemical Inventories, *Environmental Science and Technology*.

"Chemical recycling": Pollution, cancer, low yields and hazardous waste

Some industry players are continuing to promote polluting thermal and solvent-based processing of plastic waste under the banner of "chemical", "advanced" or "molecular" recycling, claiming that these will complement the weaknesses of mechanical recycling of plastics. This push must be interpreted in the context of the rise of Extended Producer Responsibility policies, as an attempt to perpetuate the dominance of plastics in sectors such as packaging, over other materials that are intrinsically more safe to reuse and recycle.

Still not environmentally sound: The Basel Convention rightly did not include pyrolysis, gasification, and solvolysis in its 2023 update of its Technical guidelines on the environmentally-sound management of plastic wastes, as they could not be shown to be environmentally sound. And data that has emerged since this assessment confirms that these technologies are neither recycling, nor safe for human health or the environment.

Yields too low to count as recycling: pyrolysis is the main type of process marketed as "chemical recycling" for plastics and is expected to retain its dominance in the coming decade.[9] Pyrolysis burns most of the plastic waste that is inputted, and produces a low yield of highly-contaminated pyrolysis oil that needs dilution with large amounts of virgin petroleum naphtha to become usable in a steam cracker to make recycled plastic polymer. In the best case scenario, only 2% of the plastic waste fed into pyrolysis will actually make the round trip into the steam cracker and effectively be recycled.[10] The Basel Convention cannot consider such low yields as recycling, or processes that mainly burn waste to be recycling.

Cancer risk in virtually every person exposed over a lifetime: The US EPA estimated a 100% cancer risk from lifetime exposure to a boat fuel component made from the pyrolysis of plastic waste at a US facility.[11] It also estimated, conservatively, that air pollution from making fuels out of plastic waste at a separate facility could lead to cancer in 1 out of 4 people exposed to it over a lifetime.[12]

A doubling of greenhouse gas emissions: Cutting-edge research shows that the widespread adoption of current "chemical recycling" technologies could double the greenhouse gas emissions from plastic production - largely due to the climate impact of making solvents and managing solvent waste.[13]

Toxic harm underestimated: A recent study shows that even government and peer-reviewed lifecycle assessments of "chemical recycling" systematically underestimate harm to human health and the environment from toxic and hazardous substances, due to three structural flaws:

- they omit the generation and disposal of hazardous waste and the need to purify the complex and contaminated chemical mixtures resulting from pyrolysis, gasification, and solvolysis;

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[9] Marvin Kusenberg, Andreas Eschenbacher, Marko R. Djokic, Azd Zayoud, Kim Ragaert, Steven De Meester, Kevin M. Van Geem (2022) Opportunities and challenges for the application of post-consumer plastic waste pyrolysis oils as steam cracker feedstocks: To decontaminate or not to decontaminate?, *Waste Management*

[10] Dr Andrew Rollinson (2023) Leaky loop "recycling": A technical correction on the quality of pyrolysis oil made from plastic waste, Zero Waste Europe

[11] Sharon Lerner (2023) EPA Approved a Fuel Ingredient Even Though It Could Cause Cancer in Virtually Every Person Exposed Over a Lifetime, *ProPublica*

[12] Sharon Lerner (2023) This "Climate-Friendly" Fuel Comes With an Astronomical Cancer Risk, *ProPublica*

[13] Nihan Karali, Nina Khanna & Akshay Sharma (2025) Global Assessment of the Emission Impacts of Chemical Recycling Technologies for Plastics, *pre-print*

- they rely on inadequate data lacking information on plastic-related chemicals and their harm to human health and the environment;
- they wrongly assume that pyrolysis outputs can replace virgin petrochemical inputs at a 1:1 ratio.[14]

Hazardous waste disposal burdens: A neglected aspect of "chemical recycling" facilities is their generation of significant amounts of hazardous waste, creating additional hazardous waste management burdens for jurisdictions where they are located. The NRDC's review of "chemical recycling" facilities in the U.S. showed that all forms of "chemical recycling" produce hazardous waste, hazardous emissions, and/or rely on toxic solvents. EPA data shows that between 2021 and 2024, just three pyrolysis facilities processing plastic waste generated over 2 million pounds of hazardous waste. The risk of harm from such waste is not limited to communities located near the facilities, since hazardous waste often has to be transported across long distances on the way to disposal.[15]

Persistence of incineration

Japan: Japan exports a significant portion of its plastic waste, totaling around 600,000 to 750,000 tons annually in recent years, primarily to Southeast Asian nations like Malaysia, Vietnam, and Thailand. Since 2021, Japan implements the Basel Convention plastic waste amendment. Japan's Ministry of the Environment distinguishes between "non-Basel items" (clean, sorted plastic) and "Basel items" (mixed or dirty waste), with strict controls on the latter, as well as public disclosure of exporters.[16] However, concerns persist regarding the environmental impact on importing countries and whether all exported waste is properly processed. Japan currently mechanically recycles 23% of its plastic waste domestically, and incinerates most of its plastic waste.

The Basel plastic waste amendments' entry B3011 is predicated on the assumption that the environmentally-sound recycling of plastic waste is possible at scale. Persisting contamination, toxic pollution, and preponderance of plastic burning bring this assumption into question.

While the latest technologies promoted under the banner of "chemical recycling" clearly fall short and remain excluded from the Basel Convention Technical guidelines on the ESM of plastic waste, even mechanical recycling technologies struggle to supply safe recyclate, due to persisting lack of transparency on the chemical composition of plastic products and packaging, while microplastic emissions remain pervasive. In this context, the best approach to preserve the intent of the plastic waste amendments is to remove Annex IX listing B3011, so that all plastic wastes are subject either to Annex II listing Y48, or Annex VIII listing A3210.

Recommendation: Remove Annex IX listing B3011, such that all plastic wastes are subject either to Annex II listing Y48, or Annex VIII listing A3210.

3. Plastic waste flooding other waste streams, fuelling dumping and burning

A 2023 analysis by IPEN, Last Beach Cleanup, Microplastics Research Group and the University of Gothenburg showed that up to 40% of the global plastic waste trade is not accounted for by plastic waste

[14] Dr Veena Singla, PhD (2025) Major gaps in chemical recycling life cycle assessments (LCAs) UCSF
[15] Dr Renée Sharp, Shannon Goff, Vivian Xu, Caroline Kim (2025) "Chemical Recycling" Is a Toxic Trap NRDC
[16] See https://www.env.go.jp/recycle/yugai/nintei.html

HS code 39.15. Plastic waste also makes up an estimated 60-70% of shipments under textile-related listings HS 55.05, HS 63.09, and an estimated 5-30% of shipments with paper waste listing HS 47.07.90.00.00 ("Other, including unsorted waste and scrap"). E-waste (HS 85.49), rubber waste (HS 40.04 and HS 40.12.20) and refuse-derived-fuel listings (sometimes reported under HS 38.25.10.00 "Municipal waste") also have a large fraction of plastic waste, among other listings.[17]

Plastic waste shipments escaping controls: Parties are not currently subjecting plastic wastes shipped under listings other than HS 39.15 to the Basel Convention plastic waste amendments - though they should, as the Basel Action Network has demonstrated for textiles.[18]

Plastic dumping and burning: Up to one third of textile and unsorted paper waste shipments are plastics that end up dumped, open burnt, or burnt as refuse-derived fuel (RDF) or similar waste-based fuels,[19] including in small boilers in bathhouses (see Ghana situation below) and small tofu factories (see Indonesia situation below) lacking any emissions filtration or monitoring, poisoning communities and their environment with toxics and microplastics (see Chile situation below).

Textiles

Industry and waste trade trends: Synthetic fibers dominate global textile production, representing 69% of global fiber production in 2024.[20] This adds the dimension of microplastic pollution to the pre-existing toxic burden of textiles stemming from residual pesticides, dye chemicals, as well as chemical treatments for water repellency and other performance properties. Apparel represents the largest application for textiles, followed by home textiles.[21] Textiles have high chemical complexity, with some chemical additives and treatments potentially conferring textile waste hazardous status, particularly use of halogenated additives. Used and waste textiles flow largely from Global North countries to the Global South, with volumes set to grow under the twin pressures of the global fast fashion industry and of newly-adopted recycling targets in exporting country textile EPR schemes.

Used clothing loophole: The transboundary flow of textiles under the label of "used clothing" (HS code 63.09) has expanded. In reality, a large fraction of those textiles (up to 50%) are unsellable waste, ending up dumped in landfills, open-burnt, polluting rivers, or burnt as refuse-derived fuel (RDF), generating macro and microplastic pollution, toxic pollution and climate pollution.[22]

Ghana: Accra's Kantamanto second-hand market in Ghana receives approximately 15 million second-hand garments weekly. Up to 40% of used clothing bales are unsellable. These end up discarded in informal dumpsites where they often end up burnt or littered into nearby rivers, beaches and into the ocean. They are also used to fuel water heating at public bathhouses in the nearby Old Fadama informal settlement,

[17] IPEN (2023) Plastic Waste Trade: The Hidden Numbers
[18] Basel Action Network (2025) The Dumping of Mixed and Synthetic Textile Waste in Chile without Notification and Consent: A Basel Convention Violation
[19] Other waste-based fuels include Processed Engineered Fuel (PEF), Solid Recovered Fuel (SRF) and Tyre Derived Fuel (TDF). See IPEN research and case studies for further information: https://ipen.org/tags/srf
[20] Textile Exchange (2025) Materials Market Report
[21] Textile Exchange (2025) Materials Market Report
[22] GAIA, Greenpeace Africa and BFFP (2025) Factsheet: Draped In Injustice — Unravelling The Textile Waste Crisis In Africa

releasing pollutants including benzene and polycyclic aromatic hydrocarbons at alarming levels.[23] Ghana is only one of several African countries on the frontlines of global textile waste flows, with other importing countries including Angola, Kenya, DRC, Tunisia[24] and Nigeria.[25]

Chile: Used clothing imports to Chile transit mainly through the coastal city of Iquique, with much of it ending up nearby in Alto Hospicio in the Atacama desert,[26] in an illegal dumping ground characterized by frequent open burning. Researchers have noted an increase in respiratory disease, infections disease and cancers proportionate to the increase in size of the Alto Hospicio dumpsite, and called for further investigation of potential causation through exposure to textile-related toxics including airborne microplastics.[27] Chile currently does not control textile waste imports in line with the plastic waste amendments, even though textile waste is mostly plastic.[28]

Vietnam: The smuggling of used clothing into Vietnam for resale still persists[29] in spite of import prohibitions covering textiles, footwear and clothing, among other items.[30] On August 19, 2024, a representative of the General Department of Market Management stated that authorities had seized a large quantity (8.4 tons) of used clothing of various types, manufactured abroad, without accompanying legal invoices or documents, which was being transported from North to South for resale in second-hand markets.[31]

As demonstrated, textile waste shipments are mostly plastic waste, and their poorly-sorted, low-quality, mixed-fiber, chemically-complex profile undermines their ability to be reused, while recycling technologies are still emerging and are not demonstrated to be environmentally sound. In practice, nearly half of used textiles that are traded globally end up dumped or burnt, including as RDF.

A prior informed consent regime would both remedy the controls needed for synthetic textile waste trade, and offer importing countries the opportunity to discriminate between well-sorted shipments of high-quality non-synthetic textiles with a strong potential for reuse, or environmentally-sound recycling based on their domestic infrastructure, from problematic shipments. They would also offer importing country authorities the opportunity to request further information allowing them to better identify shipments that might constitute hazardous wastes, and prevent their entry.

Recommendations:
- Replace Annex IX entries B3030 and B3035, which no longer reflects the composition, waste management and pollution associated with current textile waste, with a narrow entry for pre-consumer, separated, single-type natural fibres that have not been chemically treated;

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[23] Greenpeace Africa (2024) Fast Fashion Slow Poison: The Toxic Textile Crisis in Ghana
[24] GAIA, Greenpeace Africa and BFFP (2025) Factsheet: Draped In Injustice — Unravelling The Textile Waste Crisis In Africa
[25] Anthony Akpan, PAVE Nigeria, personal communication, 28 January 2026.
[26] Alianza Basura Cero Chile & GAIA (2024) Secondhand Textiles: Data about import and export in Chile
[27] Research poster by Dr Karla Andrea Pozo Gallardo, personal communication, 28 January 2026.
[28] Basel Action Network (2025) The Dumping of Mixed and Synthetic Textile Waste in Chile without Notification and Consent: A Basel Convention Violation
[29] Đức Duy (2024) Phát hiện hơn 8 tấn quần áo nghi nhập lậu vận chuyển từ Bắc vào Nam tiêu thụ, *Vietnamplus*
[30] See Section 2, Appendix 1, Decree 69/2018/ND-CP of the Government of Vietnam.
[31] VTC News (2025) Nhập lậu 94 tấn quần áo cũ, chủ hộ kinh doanh ở Hải Phòng bị phạt 52 triệu đồng; see also Phong Vân (2023) Phát hiện kho quần áo rằn ri nhập lậu lớn tại Kon Tum, *Thương Hiệu & Công Luận*

- Add a new Annex II listing (e.g. Y50) to include textile wastes including ones traded under HS 63.09 except where those are hazardous wastes and should be controlled under a dedicated hazardous textile waste listing;
- Add a new Annex VIII listing for hazardous textile waste (e.g. A3211).

Paper

Plastics in paper waste: The use of paper-plastic composites, particularly in the packaging and food container sector (e.g. plastic-lined paper cups and beverage containers) has created a structural plastic contamination issue in paper bales exported for recycling, notably bales under the "Other paper waste" HS 47.07.9 code.[32] This problem is exacerbated by the adoption of packaging EPR schemes centered around recycling, which inflates exports of unrecyclable plastic-coated paper to paper recycling facilities in order to claim compliance with recycling targets. These plastics, in addition to other plastic wastes that are often buried in paper bales, can reach 30%,[33] and ends up being burned (see Indonesia situation below) or dumped in the open environment (see Nigeria, below).

Toxics: Many paper products, including newspapers and paper goods used in packaging foods, contain lead. The lead content of newspapers, an important constituent of recycled paper, varies with color of ink, type of printing process, and source of newsprint. Recycled newsprint is richer in lead than virgin newsprint. Lead on or in food packages ranged from 2 to 10,000 ppm, and varied with the quantity of printing and color of ink. Printed packages contained more lead than unprinted material, although some unprinted ones contained up to 58 ppm.[34]

Indonesia: Indonesian and international environmental groups have documented the fate of the plastic contaminant fraction in paper waste shipments. It is burned, increasingly as refuse-derived fuel, that a growing number of paper mills are processing themselves, for use either onsite or to be sold for burning in other facilities.[35]

Nigeria: Paper waste shipments imported to Nigeria frequently contain high levels of plastic contamination that the Nigerian waste management infrastructure cannot process. As a result, these plastics are discarded, contributing to the 3.5 million tonnes of plastic emitted into the Nigerian environment annually. This contamination also interferes with the functioning of local paper mills and exacerbates the clogging of drainage systems, leading to increased flooding in urban centers like Lagos and Ibadan.[36]

Recommendation: Amend listings Y48 (Annex II plastic waste) and B3020 (Annex IX paper waste) to ensure that paper waste shipments with more than 2% plastic contamination are controlled under Y48, or A3210 when the plastic contaminants are hazardous.

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[32] Basel Action Network & Last Beach Cleanup (2025). 2025 Fact Briefing: California's Household Paper Waste Exports are Polluting Asia and Breaking Country Import Laws
[33] Ecoton research referenced in Basel Action Network (2025), Plastic Waste Trade Watch: November 2025
[34] Heichel, G.H., Hanking, L. & Botsford, R.A. (1974). Lead In Paper: A Potential Source Of Food Contamination, *Journal of Food Protection*
[35] Ecoton research referenced in Basel Action Network (2025), Plastic Waste Trade Watch: November 2025
[36] Anthony Akpan, PAVE Nigeria, personal communication, 28 January 2026.

4. Conclusion

As plastic waste exports continue to grow, it is important that the plastic waste amendments be updated to address the evolving waste trade landscape, close existing loopholes, and remain current with the best available science. In particular, since plastic waste recycling has yet to be demonstrably safe and effective, the loopholes allowing for exports for recycling must be closed. Loopholes allowing plastic waste to be exported under the guise of paper, textiles, or other materials, must be closed. And the categorization of plastic waste should be simplified and clarified.

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GAIA is a global network of grassroots groups and national and regional alliances representing more than 1000 organizations from 92 countries. We envision a just, zero waste world built on respect for ecological limits and community rights, where people are free from the burden of toxic pollution, and resources are sustainably conserved, not burned or dumped. We work to catalyze a global shift towards environmental justice by strengthening grassroots social movements that advance solutions to waste and pollution.