

INTRODUCTION

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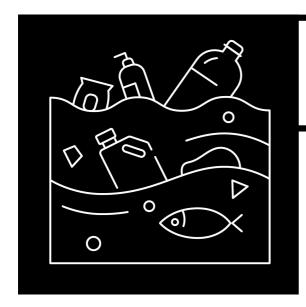


Plastic poisons our health and environment across its lifecycle, from extraction to disposal, in ways that are irreversible and irrefutably <u>threaten human existence</u>.

Plastic pollutes the environment and risks the <u>health</u> of communities through cancer-causing and endocrine-disrupting <u>chemical additives</u>, and possibly causes thousands of <u>deaths</u> from preventable diseases brought by mismanaged waste. It destroys <u>biodiversity</u> and ecosystems, accounting for at least 85% of the total marine waste, <u>threatening</u> whales, seals, turtles, birds, and fish as well as plankton, worms and corals. It exacerbates <u>climate change</u> as it is derived from <u>fossil fuels</u> and is often burnt as a method of disposal, generating even more greenhouse gases.

The dire consequences of plastic pollution demand urgent action and real solutions. At the 5th United Nations Environment Assembly (UNEA 5.2) held in Nairobi, Kenya, in early 2022, Member States came together and agreed to work towards an <u>international legally binding agreement</u> to end plastic pollution.

A key to unlocking solutions to plastic pollution is **to institute bans on the export of plastic waste from high-income, high-consuming countries to weaker economies**, with **stringent controls protecting countries from the harms stemming from the plastic waste trade**. Here are the reasons why.



Plastic waste trade is a source of marine plastic pollution.

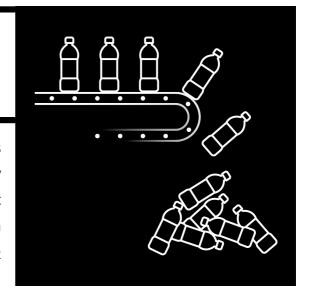
An estimated <u>80% of marine debris</u> stems from plastic, which includes consumer products and packaging, domestic waste, and discarded fishing gear. A portion of that volume comes from plastic waste that had been shipped for recycling.

Researchers estimated that up to 31% of polyethylene (PE) waste exported from Europe is not recycled at all, with as much as 24% of rejected plastic potentially ending up as marine pollution, while others were landfilled or burnt. Other researchers from the <u>U.S. National Academies of Sciences, Engineering, and Medicine</u> have published peer-reviewed studies proving that the plastic waste trade contributes significant amounts of plastic pollution to the ocean.

Plastic waste trade also increases ship traffic in the ocean. In 2019, <u>225 containers</u> <u>per day</u> were estimated to be shipped from the United States (US) to countries with poor waste management. This totals to <u>125,423 containers</u> of plastic waste, or 9 container ships (hauling capacity of 15,000 containers per trip), from just one country in one year. Increasing ship traffic threatens to disturb <u>seabed</u> <u>sedimentation</u> and <u>marine fauna</u>, and worsen <u>air quality</u>.

2. Plastic waste exports drive ever-expanding plastic production.

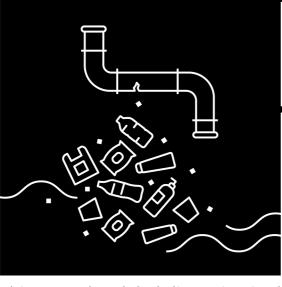
Since the mid-1950s, plastic production has increased by 18,300% as modern society embraced convenience and fast consumption, producing about 10 billion tonnes of plastic to date. The global <u>trade in plastic waste increased</u> even as global



plastic production increased. This raises a red flag.

More than a quarter of a billion tonnes of plastic waste has been exported around the world since 1988, with almost one-third of the exports originating from the US, Japan, and Germany. Almost half of all plastic waste is now generated in OECD countries.

Plastic waste exports have allowed people from high-consuming developed countries to avoid dealing with the environmental impacts of their own plastic consumption. Worryingly, the <u>US</u>, <u>EU</u>, and <u>China</u> are seeing a surge of investments from the petrochemical industry to produce even more plastic.



3. Plastic waste exports unjustly cause pollution in the Global South.

In 2018, China's National Sword Policy came into effect, banning 24 types of solid waste imports to the country, including plastic and paper waste. The list was later expanded to 32 types of waste.

This caused a global disruption in the recyclable material market and redirected plastic waste to new destination countries, primarily in Southeast Asia such as

Malaysia, <u>Thailand</u>, <u>Indonesia</u>, <u>Vietnam</u>, and <u>the Philippines</u>, as well as other countries like <u>Sri Lanka</u>, <u>India</u>, <u>Turkey</u>, <u>Tunisia</u>, and several in <u>Latin America</u>.

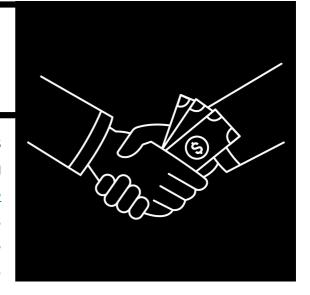
After years of being unable to control the illicit trade of hazardous materials, China instituted the ban to protect its environmental and human health. In a formal notification to the World Trade Organization (WTO) Committee on Technical Barriers to Trade dated 18 July 2017, in the Chinese government report "they found that large amounts of dirty wastes or even hazardous wastes are mixed in the solid waste that can be used as raw materials. This seriously polluted China's environment."

Plastic waste imports have led to increasing cases of illegal recycling, dumping, and burning of waste at destination countries, causing much harm including land, water and air pollution, and poisoning food chains. The waste trade privatises profits for companies involved in the waste trade and fails to account for the costs of environmental pollution and health deterioration.

In addition, the costs incurred by governments in terms of enforcement, monitoring, cleaning up, and rehabilitating polluted environments remain unknown. Many polluted dumpsites remain <u>unrehabilitated</u> due to resource constraints.

4. Plastic waste exports exacerbate corruption and illegality.

The illicit transboundary trade of plastics is a pressing problem. The plastics recycling industry in the UK was suspected of <u>abuse</u> and <u>fraud</u> by organised criminals and firms within the export system, while the misdeclaration of waste shipments were discovered in Spain.

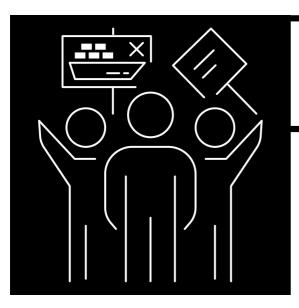


Annual <u>revenues</u> from illicit waste trafficking among 23 European Union (EU) Member States ranged between 4 and 15 billion Euros, and are expected to increase.

<u>INTERPOL</u> documented an increase in illegal waste shipments from 2018 to 2020, primarily rerouted to Southeast Asia through transit countries to camouflage the origin of the waste shipment, and involving organised crime, financial fraud, and corruption. Criminal groups involved in illegal plastic waste recycled <u>threatened</u> those who exposed them.

The <u>European Anti-Fraud Office (OLAF)</u> also highlighted the problem of waste trafficking, revealing cases where OLAF assisted the Italian authorities to block smuggled waste shipments to Malaysia and Turkey.

Furthermore, the <u>Global Initiative Against Transnational Organized Crime (GITOC)</u> exposed the intricate networks in illicit plastic waste flows, involving "brokers, recycling companies, logistics and shipping entities, as well as corrupt officials who arrange the shipping of hazardous and mixed waste from countries such as the US, the UK or The Netherlands to Malaysia, the Philippines and other countries predominantly in the Global South. In destination countries, consignments are illegally disposed of in the absence of suitable processing facilities". GI-TOC also found groups involved in <u>drugs and prostitution</u> moving into the plastic waste economy.



5. Plastic waste exportation is equivalent to waste colonialism.

Global plastic waste trade has led to the diversion of land and water resources, establishment of polluting infrastructure for waste management, and human rights violations in importing countries all over the world.

This is akin to "waste colonialism", where more powerful countries export their toxic waste problem to developing countries and acquire local resources to meet their own goals.

Local communities, often marginalised groups, find themselves living in

environments polluted by other peoples' waste. They face health risks from <u>toxic</u> <u>chemicals</u> at dumpsites, or greenhouse gases, dioxin, furan, and polychlorinated biphenyls (PCBs) from fires that frequently occur.

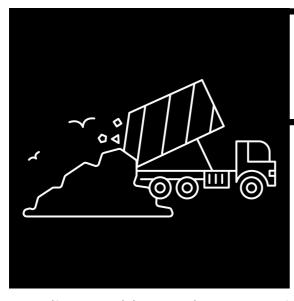
Problems arise not only through illegal waste dumping, as even the <u>mechanical recycling</u> of plastic has been found to be a likely major source of microplastics pollution. Workers at waste sorting and recycling facilities are also exposed to occupational hazards without adequate protection, while whole communities have become dependent on sorting imported waste. locked into dirty jobs.

Sustainable economic growth and resilience depend on healthy ecosystems. The global trade in plastic waste, which has decimated local natural environments with imported plastic scraps, is not facilitating economies of scale to enhance circularity. It perpetuates injustice, and poisons the circular economy as <u>toxic chemicals</u> are recycled from old waste into new products.

As the world recovers from COVID-19 and faces up to the threat of climate change, economies must pursue low-carbon recovery. Job creation and economic growth should be rooted in environmental sustainability across all sectors, protecting human health, creating equitable and liveable cities, and safeguarding the environment for future generations.

Resource efficiency, responsible waste management, and stringent pollution and emissions controls should be prioritised in both the Global North and the Global South. Plastic is the new coal that must be phased out.





6. Plastic waste exports undermine domestic waste management.

China's waste import ban exposed the inadequacy of Western plastic "recycling" programmes. The oil and gas industry sold the idea that the majority of plastic could be and would be recycled, continuing to make and sell new plastic while aware that

recycling would never be economically or environmentally viable. In 2019, only <u>9% of plastic waste</u> was recycled globally, while 22% was mismanaged.

The China ban redirected foreign plastic waste to other countries in the Global South, which already have a low capacity to process their own domestic waste and weak regulatory frameworks to protect workers and the environment.

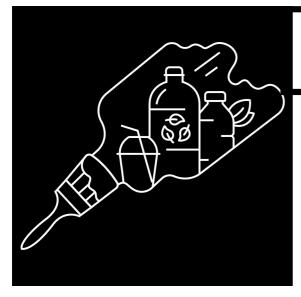
For example, <u>Malaysia</u>'s installed plastic recycling capacity is 515,009 tonnes but now imports on average 835,000 tonnes of plastic waste annually, while producing an estimated 2.4 million tonnes of plastic waste per year domestically.

<u>Indonesia</u> has an installed plastic recycling capacity of 729,730 tonnes per year, imports on average 246,000 tonnes per year and produces around 12.24 million tonnes of plastic waste. This potentially leaves 11.7 million tonnes per year mismanaged.

A new <u>report</u> found that the US is by far the world's largest generator of plastic waste, producing an estimated <u>42 million tonnes</u> in 2016. In 2021, the <u>US exported</u> 81,000 tonnes of plastic waste to Malaysia and 42,000 tonnes to Indonesia, as well as to several <u>other countries</u>.

When there is insufficient plastic recycling capacity, the plastic waste trade increases waste mismanagement by undermining <u>domestic collection</u> and recycling programmes.

In both exporting and importing countries, trade distorts the externalities of dealing with waste and removes incentives for proper waste management. Pollution and responsibility are traded off together with the waste.



7. Plastic waste exports allow greenwashing.

Japan reported an effective plastic utilisation rate of 84% in 2018, which included thermal recycling, or in other words, incineration. Japan's plastic waste exports to other Asian countries, meanwhile, also remain high. Similarly, Australia announced an export ban for

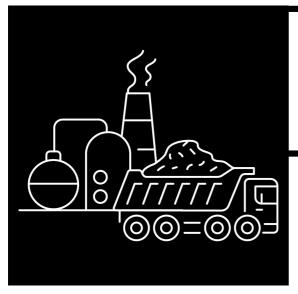
mixed plastic waste, but continues to allow the export of plastic waste dried and compacted into "refuse-derived fuel", driving massive investment in plastic waste-to-fuel processing domestically and abroad.

Other top plastic waste exporters such as the <u>US</u>, <u>Germany</u>, and the <u>UK</u> also continue to pass on the toxic burden of waste management to the importing countries. Germany exports an average of <u>1 million tonnes</u> of plastic waste annually, topping the list of exporting countries from the EU.

Meanwhile, the UK exported <u>61%</u> of their plastic <u>packaging</u> waste in 2019 for recycling or recovery treatment, helping the UK achieve a 49.5% recycling rate for plastic packaging that year. In 2020, <u>20%</u> of UK plastic waste (equating to 890,000 tonnes) of various types of plastic waste was exported, contributing to a 54% plastic recycling rate. That year, recovery treatment was rightly excluded from being counted as "recycling" under the UK Extended Producer Responsibility packaging scheme.

Significant quantities of plastic waste also travel as contaminants in paper waste, notably from the US and Canda to India and Indonesia. Much of this exported plastic waste ends up being burned — in open fields, in small-scale industrial

cookers, in waste-to-energy incinerators, or in cement kilns. Plastic waste also forms a large portion of <u>electronic</u> and automotive waste streams. A majority of textile waste also comprises plastic waste.



8. Plastic waste trade promotes false solutions: chemical recycling, waste-to-energy, plastic-to-fuel.

Despite the global outcry, international plastic waste dumping continues under the guise of recycling, and plastic waste exports may feed into polluting and

climate-harming thermal and chemical recovery and disposal operations in importing countries.

Reuters exposed how <u>"advanced recycling" projects</u> that have emerged in recent years in response to the global explosion of plastic waste and failed, after significant financial losses, including a <u>Unilever "chemical recycling"</u> plant in Indonesia, which in fact uses thermal treatment (pyrolysis) in conjunction with solvent-based processing.

Japan is expanding and exporting waste-to-energy and plastic-to-fuel technologies to <u>Southeast Asia</u>, while Germany is doing the same in <u>India</u> and other <u>developing countries</u>. These technologies refer to the processing of municipal solid waste or plastic waste to produce energy through burning in incinerators, cement kilns or other industrial boilers, as well as other thermal treatment such as pyrolysis or gasification.

Thermal technologies including <u>incineration</u> are extremely costly and environmentally unsound approaches to <u>managing plastic waste</u>, producing significant amounts of greenhouse gases, toxic air pollutants, highly toxic ash, and other potentially hazardous residues.

Imported plastic waste always comes with some level of contamination resulting in residual non-recyclable waste that needs to be dealt with. Sending plastic waste to developing countries and subsequently pushing these waste incineration technologies on them is akin to taking others' land, water, and air to dump and burn plastic waste.

Other solutions to the plastic waste problem include downcycling activities such as eco-bricks, plastic roading, and community-based recycling of plastic waste, which contains the risk of toxic substances, additives, and microplastics leaching into the open environment. Bio-based plastics are sometimes proposed as alternatives but do not address waste or toxicity concerns and create other challenges such as land use for crops.

Conclusion: we must eliminate plastic waste trade from rich to weaker economies.

Several international agreements support the reduction of marine pollution to protect marine ecosystems, including the Global Partnership on Marine Litter, the United Nations Convention on the Law of the Sea, and the Convention on Biological Diversity.

The <u>Basel</u>, <u>Stockholm and Rotterdam</u> conventions exist to regulate the trade and disposal of hazardous and other wastes (including plastics), persistent organic pollutants, and toxic chemicals.

Nevertheless, these end-of-life solutions are too little, too late. Pledges to eliminate the discharge of plastic litter and microplastics into the oceans, including by increasing recycling, will not be effective if plastic waste is still allowed to be transported to countries with insufficient capacity to manage their own domestic plastic waste.

Plastic pollutes throughout its entire lifecycle; this must be acknowledged and the leaks, particularly through the plastic waste trade, must be plugged now.

Plastic waste must be managed and disposed of as close as possible to where it was generated, except where infrastructure is lacking to manage such waste without harming the environment or human health. Exports from OECD to non-OECD countries, Turkey, and Mexico, should be banned.

The negotiations and commitment to eliminate marine plastic pollution must ensure continuous support for an ambitious and legally binding **global plastic treaty** that addresses the full lifecycle of plastics, in particular, ensuring adequate provisions for the reduction of virgin plastic production. Limiting plastic waste exports without reducing plastic production will likely <u>trigger</u> more dumping, landfilling, and burning.

In conclusion, allowing the trade of plastic waste and pursuing false solutions like incineration will only block incentives for low-cost zero waste initiatives in exporting and importing countries. Solutions should focus on creating zero-waste economies with reduced plastic production, community-based delivery systems prioritising reuse and refill, and waste collection with separation-at-source, organics management, and truly circular recycling of non-toxic materials.

THE END

ACKNOWLEDGEMENTS

Trashed - Elephant in the Room: Plastic Waste Trade in Asia Pacific. ©2022 Break Free From Plastic

This briefing paper was authored by Pui Yi Wong for Break Free From Plastic to raise awareness about the issue of plastic waste trade, especially in Asia Pacific.

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Cover image: Lay Peng Pua on an abandoned bale of imported plastic waste, at

a former illegal plastic recycling factory site.

Location: Kampung Sungai Rambai, Selangor, Malaysia.

Date of capture: 16 May 2022.

Image credit: Mageswari Sangaralingam, Sahabat Alam Malaysia.

Page 1 image: A group of Malaysian activists at a former illegal dumping ground for imported wastes uncovered plastic packaging that has fragmented into microplastics.

Location: Kampung Sungai Rambai, Selangor, Malaysia.

Date of capture: 16 May 2022.

Image credit: Mageswari Sangaralingam, Sahabat Alam Malaysia.

Page 6 image: A visit to a plastic waste dumping ground.

Location: Kampung Sungai Rambai, Selangor, Malaysia.

Date of capture: 2019. Image credit: Reuters.

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