EXECUTIVE SUMMARY

When China took action to protect its borders from foreign plastic pollution by effectively shutting its doors to plastic waste imports in the beginning of 2018, it threw the global plastic recycling industry into chaos.

Wealthy countries had grown accustomed to exporting their plastic problems, with little thought or effort to ensure that the plastic they were exporting got recycled and did not harm other countries. Americans and Europeans exported not just their plastic waste, but the pollution that went with getting rid of it.

Last year China enacted a new policy, called National Sword, for economic and environmental reasons including pollution from importing and processing plastic waste.

By refusing to be the world's dumping ground, China's policy—and the fallout that resulted from it—revealed the true cost of rampant consumption, plastic production, and the problems and limitations of recycling as a solution to a world suffocating in its own plastic.

Plastic waste—and the environmental and health problems it causes—was diverted to other shores, stressing infrastructure and amplifying the problems of plastic pollution in developing countries awash in the trash of wealthy nations.

This report continues GAIA's research on the effects of China's National Sword policy and the broader implications of plastic pollution as the world attempts to adjust to a new landscape of global plastic recycling. As the crisis deepens, this report focuses on three countries in Southeast Asia, and particularly the stories of people on-the-ground who have been thrust to the frontlines of the world's plastic problem.

Malaysia took in more imported waste than any other nation.¹ Thailand had the largest percentage increase in plastic waste imports of any country in the world at over 1000 percent.²

Indonesia's imports increased at the end of 2018 as Malaysia and Thailand began imposing their own restrictions.

Through the stories of the people dealing with plastic imports in their communities, this report uncovers the complex human dimensions of a global trade in turmoil, from grassroots organizations rising up against plastic pollution, to the challenges that developing country governments face in implementing new bans patterned after China's National Sword, the crime, threats, corruption that govern the waste trade, and the persistent economic incentives that allow for its proliferation.



Lily binti Kamal's house is now in the shadow of a plastic recycling factory in Telok Gong, Malaysia. She grew up there and said that when she was a child, their house was surrounded by forests. The



air was fresh and smelled of leaves and flowers. She used to fish in the creeks. There are no flowers now and the water is too polluted for her children to fish, or even go outside; there are too many trucks from the plastic recycling factories rumbling through the neighborhood. Their roads are littered with flakes of plastic.

The dangers faced by people working in the waste trade underline the ultimate truth about plastic waste: recycling is not enough.

The global plastic waste trade puts people and communities at risk, has long-term impacts on health and the environment, and enables the continued production of new plastics and its unchecked consumption.

It is treated as a solution to plastic waste, but in reality a scant 9 percent of the plastic the world has produced since 1950 has been recycled.³

As countries historically dependent on exporting plastic collected for recycling now move to improve domestic plastic recycling infrastructure, it is becoming abundantly clear that recycling alone will not be sufficient to absorb the ever-increasing amounts of single-use, no-value plastic being produced and placed on store shelves. This means that efforts to transform plastic recycling should be complemented by a large-scale transformation of production and consumption of plastic.

As plastic waste exports continue at somewhat declining rates, more countries are now in the crosshairs. Citizens in receiving countries are angered by the uptick in trash burning, illegal disposal, and unregulated recycling operations that have transformed whole villages into dumping grounds almost overnight. The Malaysian government, after taking a stance of restricting plastic waste imports, is shouldering the burden of enforcement. They receive no tax revenue from the illegal plastic recycling operators but are the ones left with the cost of the clean-up, enforcement and monitoring instead of the industries and countries most responsible for the problem in the first place. In Indonesia, a burgeoning waste trade is engulfing entire villages in plastic, and sparking conflict.

In Thailand, one farmer living down a dirt road from a plastic waste factory had a message for Americans: "You are selfish."

Plastic pollution had made her ill and her water undrinkable. "Don't push the trash out of your country. It's your trash and you know it's toxic," she said. "Why do you dump your trash in Thailand?"

RECOMMENDATIONS



The plastic waste problem is complex, dynamic, and changing rapidly. Many actors can take important steps to safeguard human health and the environment, including the following actions:

- Governments should take collective action through the United Nations and binding international agreements to address the production, export, recycling, and disposal of plastic. One important element of this would be requiring plastic waste exporters to seek prior informed consent from countries receiving their exported waste. This will significantly enhance recipient countries' ability to enforce their policies and legislation on the management of plastic waste. Important upstream measures, including a phase-out of problematic single-use plastic products and packaging, an end to exports of plastic waste to lower-income countries, and the global implementation of Extended Producer Responsibility,⁷⁸ have also been proposed. Negotiations on some of these measures under the Basel Convention and the United Nations Environment Assembly are ongoing and need support from national governments, industry and civil society alike.
- Developing countries should impose bans on importing plastic waste to prevent the dumping of waste from high-income countries on poor and underresourced communities. To be effective, legislation on bans needs to be accompanied by robust, adequately resourced monitoring and enforcement measures.
- The private sector, having created the plastic problem, is in the best position to quickly address it. **Redesigning products, packaging, and delivery systems to eliminate the use of single-use plastic products and packaging is the ultimate solution to plastic pollution.** Companies must reduce both production and post-consumer waste and take financial responsibility for managing post-consumer waste that cannot be avoided, including existing plastic waste.
- Local and national governments must prioritize source reduction through bans on problematic plastic products and packaging and by mandating Extended Producer Responsibility. Banning toxic additives that undermine safe recycling and requiring the increased use of post-consumer plastic in recycling can help facilitate the collection and recycling of existing plastic. However, because plastic recycling does not happen in a closed loop, and plastic is rapidly downcycled to zero utility, these are primarily interim measures.



- Governments should make rights for waste pickers and recycling workers central to system reform. The economic incentives to accept plastic waste are a pervasive force that speaks to a larger failure to address poverty and ensure decent livelihoods for everyone. No one should have to endanger their health or environment for the ability to earn a living. Waste management reforms must incorporate worker leadership throughout the planning and implementation process.⁷⁹
- **Governments must prohibit the burning of plastic**, whether in the open, in waste incinerators, in cement kilns, in plastic-to-fuel operations, in makeshift furnaces as fuel, or in landfill fires. Shutting off the plastic waste trade by itself is insufficient if poor and marginalized communities continue to host polluting disposal technologies.
- Exporting countries must take responsibility for their plastic reduction and recycling domestically. Investment in domestic recycling infrastructure should achieve high environmental and social outcomes and prevent further exports. However, plastic recycling should not be used as justification for further single-use plastic production but as a pathway towards zero waste.

3. Geyer, R., Jambeck, J. R., & Law, K. L. (2017). Production, use, and fate of all plastics ever made. Science Advances, 3(7), e1700782. https://doi.org/10.1126/ sciadv.1700782

^{1.} Swamped with plastic waste: Malaysia struggles as global scrap piles up (2018, October 25). Reuters. Retrieved from https://www.reuters.com/article/ us-malaysia-waste-idUSKCN1MZ0P4

^{2.} Reed, J., Faunce, L., Hook, L., & Blood, D. (2018, October 25). Why the world's recycling system stopped working. Retrieved from Financial Times website: https:// www.ft.com/content/360e2524-d71a-11e8-a854-33d6f82e62f8