

China No Longer Wants Your Trash. Here's why that's Potentially Disastrous.

The country has been the “world’s wastebasket” for decades. But starting Jan. 1, China has said “no more.”

By **Dominique Mosbergen**



JIANAN YU/REUTERS

A laborer disassembles motorcycles at a recycling factory in Hefei, Anhui province, China in 2009.

On Jan. 1, China made good on its promise to close its borders to several types of imported waste. By the next day, panic had already taken hold in countries across Europe and North America as trash began piling up by the ton, with no one having a clue where to now dispose of it all.

For more than 20 years, China has been the world’s recycling bin, accepting an enormous quantity of recyclable waste from nations worldwide. In 2016, China processed [at least half of the world’s exports of waste plastic, paper and metals](#). The U.S. exported [16 million tons of waste](#) to China that year, worth about \$5.2 billion. Britain sent China enough garbage to fill up [10,000 Olympic-size swimming pools](#).

It has long been a mutually beneficial arrangement for China and the exporting countries eager to get rid of their mounting waste. But last year, China told the World Trade Organization that it was no longer interested in playing the role of [global wastebasket](#). Beijing said that, beginning in 2018, it would be [banning the imports of 24 categories of solid waste](#), including waste plastics, unsorted scrap paper and waste

textiles. It was the most severe step China had taken since it began building its metaphorical “green fence” earlier this decade, which involved measures aimed at reducing the amount of “yang laji,” or foreign trash, that could arrive on its shores.

The ramifications of China’s recent ban has been described with language suggestive of a natural disaster. It has sent “[shockwaves](#)” worldwide, said Greenpeace East Asia plastics campaigner Liu Hua. Arnaud Brunet, head of the Bureau of International Recycling, compared the ban to an “[earthquake](#).”

Mere weeks after the ban took effect, waste management facilities in several countries, including the U.S., [Canada](#), [the U.K.](#) and [Germany](#), are groaning under the weight of trash that no one seems to know what to do with. There’s “a mad scramble for alternative destinations or solutions” for all the waste that’s piling up, said Von Hernandez, global coordinator for the nonprofit [Break Free From Plastic](#), speaking to HuffPost from the Philippines on Wednesday.



NATALIE BEHRING/GETTY IMAGES

Compressed blocks of plastic waste, which would have been exported to China, pile up at Far West Recycling in Hillsboro, Oregon.

In the U.S., a recycler in Oregon told The New York Times this week that his inventory had gone “out of control” since the year began. China’s decision, he said, had caused “[a major upset of the flow of global recyclables](#).”

Ireland has warned that its pile-up of garbage will soon “reach crisis levels” if an alternative destination for its trash is not found. The country sent [95 percent of its plastic waste to China in 2016](#), according to TheJournal.ie.

In Calgary, Canada, which had been sending half of its plastic waste and all of its mixed papers to China, the city's waste manager described [stockpiling thousands of tons of plastics and paper](#) in empty storage sheds, shipping containers and trailers as officials figure out what to do with all the detritus. In Halifax, where 80 percent of recyclable waste had been sent to China, 300 metric tons of plastic bags and other plastic film products had to recently be buried in a landfill because the city has no more space to store it, reported the Times.

"We have [relied on exporting plastic recycling to China for 20 years](#) and now people do not know what is going to happen," Simon Ellin, chief executive of The Recycling Association in the U.K., told The Guardian, adding that plastic waste had already started to pile up in recyclers' yards.

"A lot of [recycling organizations] are now sitting back and seeing what comes out of the woodwork, but people are very worried," Ellin said.



GRAINNE QUINLAN FOR HUFFPOST

An informal recycler in Shanghai sorting through bags of plastic waste. Trash — specifically imported trash — has been, for many years, big business in China. From the 1980s, the country has eagerly accepted recyclable waste from countries worldwide to feed its flourishing manufacturing sector and satisfy the demands of a growing population.

"Right up to 2008, China was desperate for raw materials," Adam Minter, author of *Junkyard Planet: Travels in the Billion-Dollar Trash Trade*, told HuffPost in an interview last year. "They needed it for manufacturing, infrastructure, housing. They were really desperate."

With an enormous and inexpensive labor force to tap into, it was cheaper in China to recycle scrap metals, as well as waste paper and plastic, than to make those materials from scratch. And countries like the U.S., Canada and Britain had more garbage than they knew what to do with, so they willingly sold their trash to China for cheap.

“Suddenly, there was such a huge demand for stuff that was hard to recycle in places like the U.S.,” said Minter, who lived in Shanghai for over a decade starting in 2001. “In China, they had the labor to sort through this stuff and take it apart.” Minter gave the example of electric motors, particularly those found in large machinery. Scrapyards in the U.S. didn’t know what to do with them, he said, despite the motors containing valuable recyclable materials like copper wiring.

“The problem is, it’s really hard to crack open the steel case. The labor to do it is too expensive,” said Minter, whose family has operated a scrap business in Minnesota for several generations. “These motors piled up in scrapyards and you’d have to pay people to take it off your hands. But that all changed in the 1990s when China began buying these motors for a few cents per pound.”

Minter, who now lives in Malaysia and [writes for Bloomberg](#), recalled walking into a recycling facility in southern China in 2002 and seeing “an ocean of electric motors” there.

“I was absolutely floored,” he said. “There were motors in one corner, cases in another and piles and piles of pure, beautiful cooper. Every part of the motor was being recycled. They’d figured out how to leverage the labor and they had a market for it. Enormous fortunes were made, hundreds of millions of dollars made from electric motors. That was a real ‘aha’ moment for me.”

China, said Minter, was accepting all sorts of recyclables at the time. “China would buy anything and everything, I’m not exaggerating,” he said. And the exporting countries happily contributed, sending shiploads full of waste to China every year. The U.S. currently exports about one-third of all its recycling, and [almost 50 percent of that has been going to China](#), according to NPR. In 2016, China [imported a total of 45 million tons](#) (or about \$18 billion worth) of scrap metal, waste paper and plastic from countries across the globe.

But last July, China made a bold announcement, notifying the WTO that out of concern for the environment and public health, it would be [restricting the imports of certain categories of solid waste](#).

“Large amounts of dirty wastes or even hazardous wastes are mixed in the solid waste that can be used as raw materials,” Beijing said, explaining its decision. “This polluted China’s environment seriously.”

The move has been characterized as sudden by some media, but China has in fact been signaling its desire to ditch its “world’s recycler” reputation for quite some time. In 2013, the government launched a campaign dubbed [Operation Green Fence](#), which sought to block imports of illegal and low-quality waste. As Minter put it, China made clear that it “didn’t want to buy everything anymore, they only wanted to buy the good

stuff.” A follow-up initiative called [National Sword](#), which saw customs officials cracking down on such imports, was introduced last year.

The reason for this sea change in China is manifold. From an economic perspective, recycling imported waste started to make less and less sense for China as the cost of labor rose steadily and the demand for raw materials fell.

As Beijing itself acknowledged, many environmental and public health issues had also arisen from this unchecked recycling boom. Because exporting countries had sent their waste willy-nilly to China — a lot of it so contaminated that it could not even be recycled — piles of imported garbage ended up filling China’s landfills and polluting the country’s waterways. Some of this imported waste also proved hazardous, like the time in 1996 when Chinese recycling factories accidentally imported [more than 100 tons of radioactive metal from Kazakhstan and Kyrgyzstan](#).

The incredible influx of waste into China also spawned entire towns devoted to recycling, where adults and children alike were often subjected to dangerous working conditions and [exposed to toxic chemicals](#). One such community was spotlighted in Wang Jiuliang’s [acclaimed documentary “Plastic China,”](#) which screened at the Sundance Film Festival last year. The film triggered a surge of public anger in China — and observers say the film, though scrubbed from the Chinese internet soon after its original release in 2014, may have [played a part](#) in forcing Beijing to rethink its role in the global waste industry.

Wang, who spent three years filming the documentary, told Chinese news outlet Caixin Global in December that he still has [scars on his face](#) from the chloracne, a nasty skin condition caused by an overexposure to certain chemicals, that he developed while creating the film.

Yifei Li, an assistant professor of environmental studies at NYU Shanghai, said a rise in nationalist sentiment also played a role in spurring Green Fence and other related initiatives.

“Nationalism is growing like crazy here,” he told HuffPost from his office in Shanghai in September. “People are asking why we’re processing American waste in the first place. They’re saying: ‘Why are we doing this for the American imperialists?’ or whatever they call them. ‘Why don’t we first deal with what’s in our own backyard instead of taking care of other people’s problems?’”

Ironically, while China has been focused on recycling waste imported from other nations, the country has neglected management of its own waste streams. In cities like Shanghai, the world’s most populous city, formal recycling of domestic waste has been almost unheard of. Informal waste pickers have instead taken up the mantle of recycling garbage produced locally.

But as the amount of domestic trash grows (Shanghai’s residents were reportedly generating some [22,000 tons of garbage per day](#) in 2015 and that number is expected to balloon), China has grown increasingly concerned about how to better manage its own waste.

“China recognizes that the problem has reached a tipping point,” said Richard Brubaker, an environmental activist and founder of [Collective Responsibility](#), a Shanghai-based sustainability consultancy. “They realize they now have enough of their own garbage. If they raise the price of recyclables here domestically, it forces other nations to take care of their own waste. China wants to close these loops, close off the cheap imports, and become more self-reliant.”

“The system here in China will adjust very quickly” to this arrangement, Brubaker added.



GRAINNE QUINLAN FOR HUFFPOST

An informal recycling center in Shanghai.

But though China may be amply ready for this shift, many countries have apparently been caught with their pants down.

“I think you can say that for the exporting nations, they got lucky [with China] and then they took it for granted,” Minter said.

When recently quizzed about what the U.K. intends to do in light of the new restrictions, Environment Secretary Michael Gove was tongue-tied.

“I don’t know what impact it will have. It is ... something to which — I will be completely honest — [I have not given sufficient thought](#),” he said, speaking to lawmakers last month.

As recyclers and governments now rush to figure out what to do with their mounting garbage, environmental activists warn that the initial effects of China’s ban could prove detrimental to the environment and human health.

For one thing, “there are fears that the ban will simply lead to these huge quantities of waste being [exported to less-developed, less well-regulated waste industries](#),” particularly India and the Southeast Asian nations of Vietnam, Malaysia and Thailand, Greenpeace said in a recent op-ed.

There are, however, “no new waste markets with equivalent capacity to China’s,” the nonprofit added. That means even if some waste is transported to other destinations, a lot of garbage could still end up getting incinerated by countries that would have otherwise exported it.

“This would then turn the problem into a toxic pollution issue,” said Hernandez of Break Free From Plastic. “The burning will contribute to greenhouse gas emissions and release cancer-causing dioxins,” among other problems, he noted.

In the longer term though, activists have stressed that there could be many positive effects of the ban. Exporting countries may be forced to consider ways to cut down on their waste and to improve their own recycling systems.

“This regulation will send shockwaves around the world, and force many countries to tackle the ‘out of sight, out of mind’ attitude we’ve developed toward waste,” Greenpeace’s Liu said in a statement.

Already, the U.K. and the European Union have unveiled plans to reduce waste — both partly in reaction to China’s ban. The EU said this week that it plans to [phase out single-use plastics](#) and to make all packaging reusable or recyclable by 2030. British Prime Minister Theresa May said earlier this month that the U.K. would [eliminate all avoidable plastic waste within 25 years](#).

In China, a dearth of imported waste could be the stimulus the country needs to spur its domestic waste management and recycling sectors — and thus help reduce its pollutive footprint locally and beyond. China has consistently ranked as [the globe’s worst ocean polluter](#); a 2015 report found that China was responsible for [one-third of all plastic waste polluting the world’s seas](#).

Ultimately, the outcome of this ban — whether positive or negative — depends on the choices made by China, the countries that export their waste and the nations that may take China’s place in accepting them, said Hernandez.

“We could say the China ban is a double-edged sword,” he said. “It could reduce plastics and other waste, and improve systems of recycling. ... But exporters could take easy, cheap and dirty ways out. It’s ultimately the actions of these governments that will dictate what happens next.”

CORRECTION: A previous version of this story stated that China imported 7.3 million tons of trash in 2016. In fact, that number referred only to plastic waste that China imported that year.