

PLASTIC PILE-UP

by Tracy Vonder Brink

What happens
when 7 million
tons of plastic
has nowhere
to go?





Trash day again. Recycling trucks chug along, picking up all the bins. Then the paper, plastic, and aluminum we've discarded can be made into new products. But have you ever thought about where that happens? In the United States and much of the world, companies collect and sort recyclables, but do not also repurpose them. They sell the sorted items to other companies that use them to create new products. For decades, companies in China bought most of the world's recycling.



AMERICANS RECYCLE LESS THAN ONE-FOURTH OF ALL OUR TRASH. THERE'S SO MUCH ROOM TO IMPROVE!

That ended in 2018, when the whole system came crashing down.

THE WAY IT WAS

In 1995, Chinese entrepreneur Zhang Yin opened a recycled paper business. She thought she could make money by buying waste paper from around the world and turning it into new products. She was right, and her business made her China's first female billionaire. Other Chinese companies quickly followed her lead, opening facilities to process all kinds of recyclables. Other factories in China used some of this material to produce new items. The world's thrown-away plastic, paper, and cardboard became new toys, electronic parts, and home goods.

It was a system that seemed to work well for everyone. China sent shipping containers of new goods to the US. Unloading the new products left containers empty and available to fill up with recyclables and ship back to China. By 2016, the US was exporting nearly 700,000 tons of plastic waste per year to China. That's the weight of more than 25,000 full garbage trucks. And the US wasn't the only country looking to get rid of recyclables. Chinese companies

bought nearly 70 percent of the world's plastic waste. It all added up to about 7 million tons of plastic, or the weight of over 270,000 loaded garbage trucks. Picture an enormous parking lot with every space filled.

SO WHAT HAPPENED?

The Chinese government didn't like what it saw coming into the country. Some of what they received couldn't be recycled easily, or even recycled at all. Shipments hadn't been well sorted and cleaned. Some were contaminated with food, dirty diapers, and medical waste. Many of the shipments were no longer recyclable; they were trash. China decided it didn't want to be the world's dump.

NATIONAL SWORD

In 2018, Chinese officials announced a new policy for imported recyclables, called National Sword. The policy completely banned 24 types of trash, including many kinds of plastic and unsorted paper. National Sword also established severe restrictions on the few materials it accepted. For example, China only accepted shipments of recyclables with a .05

percent contamination level. (In this case, "contamination" means non-recyclables mixed in with the good stuff.) Any shipment that wasn't 99.5 percent recyclable would be rejected.

Think about when you throw something in your recycling bin. Do you know exactly what your local company accepts, or do you toss in anything you think might be OK? Few people pay close enough attention to what they put in their bins. Sorting out the jumbled-up mess of non-recyclables to meet China's demands was nearly impossible for most recycling facilities. The ban and the new restrictions meant big trouble for recycling around the world.

THE RESULT

The export of plastic recyclables to China dropped 99 percent in one year. Paper also felt the pinch—a third of all paper collected in the US had been exported, and 75 percent of that had always been sold to China. All that plastic and paper had to go somewhere. At first, other countries stepped in. The US sent more and more recyclables to Thailand. But countries in Southeast Asia quickly became overwhelmed. They couldn't handle it all. Some began to limit what kinds of recyclables they

would accept. Then India announced a full ban of imported plastic in 2019. Recyclables began to pile up again.

Around the world, recycling facilities had to cut back on what types of materials they accepted. In some communities, recycling stopped completely. Recyclable material ended up in landfills. Or it went to the incinerator. In England, more than half a million tons of plastic and other material was burned instead of being recycled.

NOW WHAT

Where some see crisis, others see opportunity. Some recycling facilities are adding workers and improving their equipment so they can meet the new standards. Some Chinese companies hurt by the ban are opening new facilities in the US. One Chinese company opened a recycled plastic processing plant in Alabama. Another is building a factory to repurpose cardboard in South Carolina. More are planned.

A number of communities are building more waste-to-energy plants,



The world's system of buying and selling recyclables has changed. Time for some new ideas!

which burn trash and recyclables to generate electricity. Creating energy out of trash is better than sending it to a landfill. But even the best-managed facilities can hurt air quality. That's especially true when plastics are burned, so waste-to-energy plants aren't the ideal solution.

To try to limit the staggering amount of plastic that gets tossed out, many communities are trying to cut back on waste. Most plastic that's thrown away is single-use, like plastic straws and plastic grocery bags—you use these one time and then toss them. Some places have banned certain kinds of single-use plastics. Other solutions aim to make

recycled plastic the norm. Great Britain and Norway are taxing companies that don't use recycled plastics in their products and those that don't make their products recyclable.

The global recycling crisis has been a wake-up call around the world. We've realized we can't ship our trash away and expect someone else to deal with it. Instead, we need to learn how to do it ourselves—and to change the way we think about recycling.

Tracy Vonder Brink recently went on a tour of her local recycling facility and was amazed by what she saw. Now she's very careful about what she recycles and how she recycles it.



"WISHFUL" RECYCLING

Not everything can be recycled, but people still want to help the planet. That can lead to what recycling companies call "wishful recycling"—people think every kind of plastic and metal must be recyclable, so they toss it all in the bin. Or they see a recycling symbol on something and assume if it has the symbol, it must be recyclable.

In fact, even if a bag or a plastic container has the recycling symbol, not every facility can accept it. That's especially true now that China and other countries have stopped buying recyclables. And putting the wrong items in recycling bins can cause huge problems.

Plastics that can't be recycled have to be separated at the recycling facility and thrown away. Most can't handle non-aluminum scrap metal, so that has to be taken out too. Plastic bags tangle up and choke equipment in facilities. Sometimes the machines break down because the wrong things have been sent there. Worse, improperly recycled batteries can cause fires.

How do you know what recycling to put in your bin? Visit the website of the recycling company that picks it up. They'll have a list—usually with pictures—of what they accept. And what they don't. Some facilities even give guided tours so you go can see exactly how it all works.