



Two people walk on plastic waste piled outside an illegal recycling factory in Jenjarom, Kuala Langat, Malaysia. REUTERS/Lai Seng Sin

CHINA'S WASTE BAN

Tracking the trash

BY DAVID STANWAY, A. ANANTHALAKSHMI AND EMILY CHOW

JANUARY 24 – OCTOBER 25 TAICANG/GUIYU/PULAU INDAH

China trash town's cleanup bolstered by import ban

BY DAVID STANWAY

JANUARY 24 GUIYU, CHINA

The dizzying stench of burning plastic still drifts through the alleys, workshops and warehouses of Guiyu, the southern Chinese town that has long symbolised China's role as the main recycler of the world's waste.

But residents say the air isn't half as

noxious as it was five years ago, when authorities launched a drive to industrialise the town's recycling operations – and address the chronic health problems that came from dismantling things like old computers and mobile phones by hand.

The acrid black smoke that once billowed from the backstreets has gone, and the rivers that wind their way through the town of about 100,000 people, though still cluttered with trash, are much cleaner, residents say.

Now, the residents of Guiyu – located in the economic powerhouse province of Guangdong, about 175 miles from Hong Kong – are

Workers dismantle electronic waste at the government-sponsored recycling park in the township of Guiyu, Guangdong Province, China.
REUTERS/Aly Song



grappling with a new cleanup of the recycling industry that remains a mainstay of the town's economy.

In an effort to deal with its fast-growing domestic waste problem, the Chinese government has blocked all imports of 24 types of foreign trash.

The ban, which took effect on Jan 1, has left countries like Britain and the United States reeling, with few alternative destinations for mountains of old mobile phones, paper, textiles and plastics once treated in backyard operations along China's eastern coast.

It has also forced recycling centres like Guiyu to step up their efforts to transform informal, backstreet industries into fully

more," she said. "The ban has made it harder to make money."

These backyard facilities still receive local trash, but are mostly limited to handling lower-end plastics. Higher-end electronic and metal waste is limited to those companies that move into a new recycling park set up by the local government that has facilities to deal with the pollution risks.

The new regulations come as China struggles to tackle the country's soaring domestic waste problem. Beijing has said it plans to invest nearly 200 billion yuan (\$31.07 billion) in household waste treatment alone over 2016-2020 and has vowed to stop being a receptacle for the world's junk.

"The fundamental purpose was to solve the problem of pollution," said Wang Jingwei, a professor at Shanghai Polytechnic University who runs an experimental recycling facility and advises governments on waste treatment.

"Some big cities, and even some remote rural areas, are besieged with trash," he said. "The dependence on foreign waste meant no one was dealing with domestic garbage."

In the 2000s, Guiyu became a symbol of the environmental devastation caused by recycling hazardous waste with little regulation after being singled out by groups like Greenpeace and featuring in a string of international media reports.

Trash is still the mainstay of Guiyu's economy, but hundreds of recycling businesses have been consolidated or shut completely in recent years and authorities are now cracking down on smuggled waste, further starving small and polluting businesses of supplies.

"Although the dismantling of old electronics is the leading industry in Guiyu, we should say it was more a profession than an industry," said Zheng Jinxiong, vice chairman of a government commission tasked with running the recycling industry park, set up on the edge of town.

"The local government had an obligation as well as an ability to lead, standardise, make it scientific," he said.

Zheng said the government had tried



We stopped doing it because it was bad for our health.

A woman surnamed Su, who said she used to recycle electronic waste to help supplement the family income

regulated, more technologically advanced and environmentally friendly ones.

The effort in Guiyu also underlines the ability of the Chinese government to address the country's chronic pollution issues when it has the political will – and offers the right incentives – to do so.

While residents in Guiyu generally welcome the cleaner environment, the ban on foreign waste – which is usually better sorted than domestic trash and therefore more lucrative to handle – has been a damaging blow for many recyclers.

The boss of one recycling facility, who requested anonymity, said she was "close to bankruptcy".

"We don't have any foreign trash any

to make the changes easier for residents, funding land purchases and renting them new buildings at low cost, as well as providing discounts on environmental protection equipment.

UPGRADING WASTE

Five years ago, sacks of trash provided a decent living for thousands of farmers and labourers in Guiyu. Much of that involved dismantling modems, mainframes and mobile phones in homes or backstreet workshops.

Workers would rip out the innards of electronic products with their hands, applying acid and melting down casings with cigarette lighters, extracting metals like copper and

been consolidated into 29 larger enterprises and relocated to the park. As many as 3,245 makeshift chimneys built to expel toxic recycling fumes from residential buildings have been removed.

However, almost 1,500 households are still recycling plastic in Guiyu's old town, a warren of cluttered backstreets, where sacks packed with waste – keyboards, cigarette lighters, toys, old tyres – spill out of shops and warehouses.

A woman who would only provide her surname, Su, said she used to recycle small amounts of electronic waste to help supplement the family income.

“We stopped doing it because it was bad for our health,” she said.

Su said she and her husband got involved in the business to pay their youngest child's school fees. Middlemen would visit their home every week and pay them for the recycled materials, with no questions asked.

“We didn't know where it came from,” she said. “We know some people actually went overseas directly and shipped it back in containers.”

SMUGGLING TRASH

In addition to the ban on waste imports, China is also targeting smugglers who bring in trash from abroad.

Last year, China's customs authorities vowed to “unflinchingly crack down” on waste smuggling, and 421 suspects were arrested over the course of the year, including 127 caught in December, accused of bringing in 323,000 tonnes of plastics and mine slag.

According to court documents, some gangs were involved in schemes to launder imported cargoes of scrap mobile phones and computers by shipping them from Hong Kong to the North Korean port of Nampo.

There, they would be dismantled, stripped of identifying features and smuggled to the Chinese border port of Dandong, from where they were sent to Guiyu, classified as domestic waste.

Wang, the Shanghai waste expert, said

shredding plastic into reusable pellets.

With backyard operators banned from handling electronic waste, truckloads of broken computers and circuit boards are now delivered to the sprawling industrial park, where authorities can monitor environmental, health and safety standards.

Some big recycling companies have been encouraged to invest in the park, including TCL, whose local branch, TCL Deqing, invested 50 million yuan in a production line for dismantling household appliances.

A subsidiary of China Energy Conservation and Environmental Protection Equipment Group also invested 100 million yuan in a circuit board recycling facility.

The government said 1,243 businesses have



I dare not say there is no smuggling at all.

Zheng Jinxiong

Vice chairman of a government commission tasked with running a recycling industry park in Guiyu



Workers climb over monitors slated to be recycled in a warehouse at the government-sponsored recycling park in the township of Guiyu, Guangdong Province, China.
REUTERS/Aly Song

Chinese ships delivering goods to Europe and elsewhere had an incentive to bring waste into China: whatever the price, it would be preferable to returning home with empty holds.

Guiyu's industrial park said it had tightened procedures to stop smuggled waste from entering its gates, and was cooperating with police, customs and environmental authorities.

"I dare not say there is no smuggling at all, but right now we can say that it is harder to come across, and fundamentally it isn't happening anymore," said Zheng.

He also said that Guiyu had been struggling to handle waste from the surrounding province of Guangdong, as well as China and the rest of the world.

"If we can handle all the various waste in our province and still have capacity, then we can also do more from the rest of the country," he said. 

Additional Reporting by Anita Li and Aly Song in Guiyu and the Shanghai newsroom; Editing by Philip McClellan

China's plastic recyclers go abroad as import ban bites

BY DAVID STANWAY

JUNE 26 TAICANG, CHINA

In a smoke-filled plant about 50 miles northwest of Shanghai, masked workers feed sacks of plastic scrap into shuddering old machines that transform them into pellets used to make a range of manufactured goods.

But while the factory, operated by Taicang Jinhui Recycling Co, remains a hive of

activity, the company has been moving much of its capacity to Malaysia following Chinese restrictions on recycled plastic imports that came into effect this year.

The curbs on imported trash have deprived recyclers of about half of what they need to produce the plastic pellets they sell to

manufacturers of products ranging from office furniture to sheaths for fibre-optic cables. And with domestic supply hard to come by, many have had little choice but to move abroad to stay alive.

"Here in our industrial park we are the only company still producing – another 22 enterprises have stopped operations and just

Employees work at Taicang Jinhui Recycling Co., in Taicang, Jiangsu Province, China.
REUTERS/Aly Song





Plastic scrap is seen at Taicang Jinhui Recycling Co., in Taicang, Jiangsu Province, China. REUTERS/Aly Song

do warehousing or whatever, and all their staff have disappeared,” said Jinhui’s chairman, Thomas He.

Jinhui has laid off 250 workers from its workforce of around 400 people since the restrictions came into force, though it has hired another 600 in Malaysia. The Malaysia plant was set up almost entirely with Chinese equipment and technology.

The company is one of more than 1,000 recycling enterprises – a third of China’s total – to relocate its expertise, equipment and waste supply chains to Southeast Asia, according to the China Scrap Plastic Association (CSPA), with total investment so far estimated at around 10 billion yuan (\$1.54 billion). The association did not provide a breakdown.

China’s decision last July to stop importing 24 kinds of foreign waste, including plastic, was part of an effort to upgrade its economy and tackle the growing volumes of domestic trash clogging its rivers or sitting untreated in sprawling landfills that encircle major cities.

Now, countries in Southeast Asia, already struggling with their own domestic waste problems, will have to grapple with the same issues as trash imports increase.

The Chinese ban disrupted a global supply chain that saw more than 7 million tonnes of scrap plastic, mainly from Europe and the

United States, delivered into Chinese ports every year.

As that supply dries up for Chinese recyclers, they have created 4 million tonnes of new capacity outside China in operations that can receive imports from countries like the United States and the United Kingdom, said Wang Wang, CSPA’s chairman. But it is not yet enough to offset a supply shortfall of about 6-8 million tonnes of recycled plastic.

“As far as our companies are concerned, they just don’t have enough raw materials,” Wang said.

DOMESTIC WASTE

Efforts to have recyclers take on more domestic waste have been progressing slowly; only 5 percent of domestic recycling firms have so far been able to switch to local sources of scrap, according to CSPA figures.

“Handling imports and handling domestic material are two very different channels and it will take time to switch,” said Jinhui’s He.

Recyclers said the government’s abrupt ban gave the sector no time to adjust, and crucially, China has not devised policies required to scale up and standardise treatment of domestic waste, which is usually handled by small backstreet operators.

With foreign material still the best option, companies hoped moving to countries like Malaysia and Thailand would enable them to deliver processed foreign scrap to China in a higher-grade form, but their shipments have faced delays.

Customs are under pressure to ensure not only that imported pellets meet exacting standards, but also that containers are not being used to smuggle illegal low-grade waste, and cargoes are under far greater scrutiny, He said.

MORE RESTRICTIONS?

The shift to Southeast Asia has alleviated some of the disruptions caused by the ban for companies in Europe.

“We are continuing to export significant volumes, but to different destinations,” said Roger Baynham, head of the recycling division



Employees work at Taicang Jinhui Recycling Co., in Taicang, Jiangsu Province, China. REUTERS/Aly Song

of the British Plastics Federation.

But as foreign trash piles up in countries like Thailand and Vietnam, China's recyclers face more risks.

"No one wants this trash and the industry is worried these other countries will impose their own restrictions," said a China-based executive with an overseas recycling firm who did not want to give his name.

CSPA said Thailand was tightening regulations and raising import taxes, with one China-invested importer already forced to close. Malaysia also temporarily suspended new import permit applications in mid-May.

Jinhui's He said he was worried that importing rules were likely to get tougher across the region amid environmental concerns.

"There's no way China will import this sort

of stuff again," he said. And Southeast Asia "will become more standardised and regulate more stringently".

Ultimately, bans in China and restrictions elsewhere could force the countries of origin to step up their own recycling efforts, said the British Plastics Federation's Baynham.

"The irony here is that the impetus for this has come from China, as opposed to economies such as the United Kingdom, which has been happy to accept a get-out-of-jail card in terms of its recycling strategy," he said.

"Now is the time for the developed world, and the United Kingdom in particular, to step up." 

Editing by Philip McClellan

Swamped with plastic waste: Malaysia struggles as global scrap piles up

BY A. ANANTHALAKSHMI AND EMILY CHOW

OCTOBER 25 PULAU INDAH, MALAYSIA

Hundreds of sacks filled with plastic waste from the United States, Britain, South Korea and Spain spill onto the streets of an industrial zone in Pulau Indah, an island town just an hour's drive from Kuala Lumpur and home to Malaysia's biggest port.

The stench of burning plastic and fumes from nearly a dozen recycling factories wafts through the neighbourhood, even as more container-loads of plastic waste are unloaded.

Pulau Indah – ironically, the name means “beautiful island” in Malay – is one of many towns in Malaysia where illegal plastic recycling factories have popped up in recent months as the Southeast Asian nation became the top choice for plastic waste exporters from around the world.

The trigger for this dumping deluge was a Chinese ban on waste imports from the beginning of this year, which disrupted the flow of more than 7 million tonnes of plastic scrap a year.

Malaysia quickly became the leading alternative destination, importing nearly half a million tonnes of plastic waste between January and July from just its top 10 source-countries.

Dozens of factories have opened up in



Every night they burn. I see black smoke at night, so I go over and ask him ‘why are you trying to kill me?’ They ignore me.

Worker in industrial zone in Malaysia



Malaysia to handle that waste, many without an operating licence, using low-end technology and environmentally harmful methods of disposal.

“The situation is getting worse, especially with more and more illegal plastic recycling factories,” Yeo Bee Yin, Malaysia's minister of energy, technology, science, climate change and environment, told parliament last week.

Used plastic is recycled into pellets, which are then used to manufacture other plastic products, but the process comes with pollution risks. Plastic unsuitable for recycling is burnt, which releases toxic chemicals into the atmosphere. Or it ends up in landfill, potentially contaminating soil and water sources.

Yeo said she does not want Malaysia to be the “trash can” for developed nations, but Housing Minister Zuraida Kamaruddin, who



Plastic waste is seen piled outside an illegal recycling factory in Jenjarom, Kuala Langat, Malaysia. REUTERS/Lai Seng Sin

oversees the waste management department, told Reuters that the government also does not want to miss out on a business that could be worth billions.

Both ministers are members of a government committee studying its options for dealing with the growing pile of plastic waste.

BURNING PLASTIC

In the Pulau Indah industrial zone, Reuters reporters saw nearly a dozen recycling plants, many of them without signboards or company names, though government data shows only two factories in that area have a licence to import plastic waste.

One of the bigger ones, Jingye Manufacturing Sdn Bhd, was shut down in August for not having a licence, according to an official notice seen by Reuters.

But workers in the factory and others nearby say it reopened within weeks, and when Reuters reporters visited earlier this month, it was operating. Plastic waste was stacked up within the premises and all along the road.

The factory supervisor declined to comment.

Company records show Jingye was set up in Malaysia in October 2017, three months after China said it would ban imports of foreign waste from 2018. Reuters could not reach the



Burnt plastic waste from open burning is pictured on the roadside in Pulau Indah, Malaysia. REUTERS/Lai Seng Sin

owners of the factory and no contact details were listed in records.

One worker in the industrial zone, who did not want to be identified, said there were as many as eight illegal factories in the zone and many openly burned plastic that cannot be recycled.

“Every night they burn. I see black smoke at night, so I go over and ask him ‘why are you trying to kill me?’ They ignore me,” he said.

In the nearby district of Kuala Langat, authorities found 41 factories operating illegally, many of them run by Chinese companies, according to Housing Minister Zuraida. Around 30 were shut down by authorities in the last three months after residents complained of open burning of plastic and health complications.

STRICTER RULES

It is unclear how the illegal factories are sourcing plastic waste. Zuraida said some of the 95 companies that have a permit to import and recycle such waste are subcontracting to illegal factories as they lack the capacity to handle such volumes.

Malaysia’s imports of plastic waste from its 10 biggest source-countries jumped to 456,000

tonnes between January and July, versus 316,600 tonnes purchased in all of 2017 and 168,500 tonnes in 2016.

The United States, the world’s top exporter of plastic waste, sent 178,238 tonnes of such waste to Malaysia between January and July, nearly twice as much as it sent to second top destination, Thailand, according to the United Nations’ trade database and the Institute of Scrap Recycling Industries.

Britain, another big plastic waste exporter, sends a quarter of its waste to Malaysia, also more than any other country.

Environment Minister Yeo estimated that the plastic recycling industry would earn Malaysia 3.5 billion ringgit (\$841.95 million) this year.

Zuraida said she planned to introduce new rules soon that will make it harder for factories to qualify for an import licence.

“I understand plastic recycling is quite lucrative. So I am also thinking should we miss this economic opportunity? This is something the committee will study,” Zuraida told Reuters.

If such an option is pursued, Malaysia would do so on strict terms, require high-end, green technology and allow factories to operate only in heavy industrial areas, she said.

The factories are currently located haphazardly, including near or within residential areas. In Kuala Langat, southwest of Kuala Lumpur, a massive recycling factory nestled between palm plantations was shut down three months ago.

But 10-foot (3 metre) tall towers of plastic waste – mostly consumer packaging material from the United States, Britain, France, Netherlands, Germany and Australia – were still piled in the front yard. A large plot of land next to the factory has been turned into a dumping site for scrap. 

Additional Reporting by Joseph Sipalan in Kuala Lumpur, John Geddie in Singapore and David Stanway in Shanghai; Editing by John Chalmers and Alex Richardson