## 'Plastic recycling is a myth': what really happens to your rubbish? (Part 1)

You sort your recycling, leave it to be collected – and then what? From councils burning the lot to foreign landfill sites overflowing with British rubbish, Oliver Franklin-Wallis reports on a global waste crisis

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(...) You drink a Coca-Cola, throw the bottle into the recycling, put the bins out on collection day and forget about it. But it doesn't disappear. Everything you own will one day become the property of this, the waste industry, a £250bn global enterprise determined to extract every last penny of value from what remains. It starts with materials recovery facilities (MRFs), which sort waste into its constituent parts. From there, the materials enter a labyrinthine network of brokers and traders. Some of that happens in the UK, but much of it – about half of all paper and cardboard, and two-thirds of plastics will be loaded on to container ships to be sent to Europe or Asia for recycling. Paper and cardboard goes to mills; glass is washed and re-used or smashed and melted, like metal and plastic. Food, and anything else, is burned or sent to landfill.

Or, at least, that's how it used to work. Then, on the first day of 2018, China, the world's largest market for recycled waste, essentially shut its doors. Under its National Sword policy, China prohibited 24 types of waste from entering the country, arguing that what was coming in was too contaminated. Still, that waste has to go somewhere. The UK, like most developed nations, produces more waste than it can process at home: 230m tonnes a year – about 1.1kg per person per day. (The US, the world's most wasteful nation, produces 2kg per person per day.)

Quickly, the market began flooding any country that would take the trash: Thailand, Indonesia, Vietnam, countries with some of the world's highest rates of what researchers call "waste mismanagement" – rubbish left or burned in open landfills, illegal sites or facilities with inadequate reporting, making its final fate difficult to trace.

We want our waste hidden. But, all of a sudden, the industry is under intense scrutiny. In the UK, recycling rates have stagnated in recent years, while National Sword and funding cuts have led to more waste being burned in incinerators and energy-from-waste plants. (Incineration, while often criticised for being polluting and an inefficient source of energy, is today preferred to landfill, which emits methane and can leach toxic chemicals.) Some councils have debated giving up recycling altogether. And yet the UK is a successful recycling nation: 45.7% of all household waste is classed as recycled (although that number indicates only that it is sent for recycling, not where it ends up.) In the US, that figure is 25.8%.

If you look at plastics, the picture is even bleaker. Of the 8.3bn tonnes of virgin plastic produced worldwide, only 9% has been recycled, according to a 2017 Science Advances paper entitled Production, Use And Fate Of All Plastics Ever Made.

Source: the Guardian