

# TRASHED

HOW THE UK IS STILL DUMPING  
PLASTIC WASTE ON THE REST  
OF THE WORLD

GREENPEACE



Plastic waste dumps in Malaysia.





# INTRODUCTION

The UK is a major contributor to the world's plastic crisis, generating more plastic waste per person than any other country except the USA.<sup>1</sup> Our recycling system is already overwhelmed by plastic waste. Now our waste is overwhelming other countries' recycling systems too, causing serious harm to their citizens and environment, particularly in Malaysia. Our latest investigation in Turkey provides further evidence.

The UK government needs to take urgent action to tackle this plastic crisis. It can start by banning exports to other countries, including to members of the OECD, to end the dumping of plastic waste that passes for

recycling. Some new recycling infrastructure may also be needed so the UK can deal with its own plastic waste.

Most importantly, the UK needs to drastically cut the amount of plastic produced in the first place. Reducing single-use plastic by 50% would not only allow the UK to end waste exports, but would also mean less plastic going into incineration and landfill. The government must mandate a 50% reduction in single-use plastic by 2025 – and supermarkets and major brands must deliver it.





# PART 1: THE UK'S PLASTIC PROBLEM

**'According to a recent study, the US and UK produce more plastic waste per person than any other major country.'**<sup>2</sup>  
Science Advances (2020)



**IN 2018, THE UK GENERATED AN ESTIMATED 5.2 MILLION TONNES OF PLASTIC WASTE – ENOUGH PLASTIC TO FILL WEMBLEY STADIUM SIX TIMES OVER**

A familiar sight - vegetables wrapped in plastic packaging at a UK supermarket.

## **WE ARE DROWNING IN THROWAWAY PLASTIC**

Companies are still producing far more plastic than our world can cope with. Globally, almost 370 million tonnes of plastic are created every year.<sup>3</sup> **By 2015, approximately 6.3 billion tonnes of virgin plastic had been produced, of which only 9% had been recycled;** the rest was burned in incinerators or dumped, either in landfill or in the environment.<sup>4</sup> Plastic waste leaches hazardous chemicals into the soil or is blown into rivers and oceans. Each year, at least 8 million tonnes of plastic end up in our oceans, and plastic makes up 80% of all marine debris.<sup>5</sup> Plastic is lethal to marine life, killing an estimated one million seabirds and 100,000 marine mammals and turtles every year.<sup>6</sup> Plastic bags and flexible packaging are the deadliest plastic items in the sea.<sup>7</sup>

The UK is a major contributor to the global plastic crisis. UK companies, especially in the grocery retail sector, are highly dependent on plastic packaging designed to be used once and thrown away. The UK generates more plastic waste per person than almost any other country in the world, second only to the USA.<sup>8</sup> In 2018, the UK generated an estimated 5.2 million tonnes of plastic waste<sup>9</sup> – enough plastic to fill Wembley Stadium six times over.<sup>10</sup>

## **THERE IS RISING PUBLIC PRESSURE TO CUT PLASTIC PACKAGING**

Public concern about the plastic pollution crisis has risen sharply in recent years. 'Too much plastic' consistently ranks as one of the most pressing environmental issues in opinion polls.<sup>11</sup> **A recent poll found that 85% of people in the UK want the government to make retailers cut the amount of plastic packaging.**<sup>12</sup>

Supermarkets and major consumer goods brands, which are the largest sources of plastic packaging,<sup>13</sup> have responded with high-profile initiatives designed to show that they take plastic pollution seriously. These range from individual actions, such as using recycled plastic (or even reclaimed ocean plastic) in products,<sup>14</sup> to collective actions such as the UK Plastics Pact, which 'brings together businesses from across the entire plastics value chain with UK governments and NGOs to tackle the scourge of plastic waste'.<sup>15</sup>



## TACKLING THE PROBLEM... OR CLUTCHING AT STRAWS?

While these initiatives have been successful at generating positive media coverage, they have done little to address the root cause of the plastic crisis: the overproduction of plastic. In fact, analysis by Greenpeace and the Environmental Investigation Agency (EIA) found that **the top 10 UK supermarkets actually increased their plastic footprints by 1.2% between 2017 and 2019**, from 886,000 tonnes to nearly 897,000 tonnes.<sup>16</sup>

Plastic waste dumps in Malaysia.



The UK's governments have also made gestures towards stemming the plastic tide. In October 2019, the Scottish government banned plastic cotton bud sticks. A year later, a ban on plastic cotton bud sticks, stirrers and straws came into force in England. Further initiatives on plastic cutlery or fast food packaging are planned in Northern Ireland, Scotland and Wales.<sup>17</sup> However, these have only a minor impact. Meanwhile, more significant reforms have been repeatedly delayed. For example, plans for a deposit return scheme for England, Northern Ireland and Wales – first promised in 2017 – have now been pushed back to 2024 'at the earliest'.<sup>18</sup>

**'The UK is recycling more than ever, achieving a 46% plastic packaging recycling rate in 2017.'**<sup>19</sup>

**FALSE**

Rebecca Pow, UK Environment Minister, response to a Parliamentary Question, 12 November 2020

**'[The UK's recycling system] appears to have evolved into a comfortable way for government to meet targets without facing up to the underlying recycling issues. The government has no evidence that the system has encouraged companies to minimise packaging or make it easy to recycle. And it relies on exporting materials to other parts of the world without adequate checks to ensure this material is actually recycled, and without consideration of whether other countries will continue to accept it in the long term.'**<sup>20</sup>

National Audit Office, July 2018

## **LESS THAN 10% OF HOUSEHOLD PLASTIC PACKAGING GETS RECYCLED IN THE UK**

The sheer volume of plastic waste generated each year vastly exceeds the UK's capacity to recycle it. **The British Plastics Federation (BPF) estimates that 46% of the UK's plastic waste is incinerated, 19% is exported and 17% goes to landfill.**<sup>21</sup> Yet the government and companies continue to emphasise recycling as the way to deal with plastic waste.<sup>22</sup>

The situation is particularly serious when it comes to household plastic packaging. Local authorities collect an estimated 2.3 to 2.4 million tonnes of plastic packaging every year, largely from households.<sup>23</sup> Yet analysis by RECOUP, an industry body established to promote recycling, indicates that the UK recycles just 230,000 tonnes of household plastic packaging waste each year.<sup>24</sup> This suggests that less than 10% of household plastic packaging is actually recycled in the UK.<sup>25</sup>





Mixed plastic waste that has been dumped in Adana, Turkey.

## THE UK IS DUMPING ITS WASTE ON OTHER COUNTRIES

Well over half of the plastic waste that the UK government counts as 'recycled' is actually sent overseas for other countries to deal with. The Environment Agency's National Packaging Waste Database shows that in 2020, 688,000 tonnes of plastic packaging waste were exported – a daily average of 1.8 million kilos – while only 486,000 tonnes were recycled in the UK.<sup>27</sup>

Analysis of official government trade data shows that the top three export countries for the UK's plastic waste in 2020 were Turkey (209,642 tonnes – 39%), Malaysia (65,000 tonnes – 12%) and Poland (38,000 tonnes – 7%).<sup>28</sup> Almost half of the UK's plastic waste exports are either mixed plastic, styrene or polyvinyl chloride (PVC) – materials that are not easily or widely recycled.

**'The increase in [the UK's] overall packaging recycling rates has mostly been due to a growth in exports: since 2002 the total amount of packaging waste exported abroad has increased sixfold while the total amount recycled in the UK has remained steady.'**<sup>26</sup>

National Audit Office, July 2018

**THE ENVIRONMENT AGENCY'S NATIONAL PACKAGING WASTE DATABASE SHOWS THAT IN 2020, 688,000 TONNES OF PLASTIC PACKAGING WASTE WERE EXPORTED FROM THE UK**



Campaigners find UK packaging in piles of dumped and burned plastic in Adana, Turkey.

## GOING UP IN SMOKE? WHAT REALLY HAPPENS TO UK PLASTIC WASTE EXPORTS

It is illegal to export plastic waste from the UK unless it is destined to be recycled or incinerated in an energy-from-waste plant,<sup>29</sup> and the government optimistically counts all exported plastic waste as recycled. However, investigations by the media and environmental organisations reveal major problems in the countries to which the UK exports most of its plastic waste:

- £ **Turkey:** In June 2020, the BBC discovered British plastic waste dumped by the roadside and burned near the city of Adana in southeast Turkey.<sup>30</sup> In March 2021, Greenpeace investigations uncovered further significant evidence of British plastic waste being dumped and burned at illegal rubbish tips all across Adana Province.
- £ **Malaysia:** Throughout 2018, Greenpeace investigations discovered British waste dumped and burned in illegal rubbish dumps across Malaysia.<sup>31</sup> This included local authority recycling bags from London and Essex, as well as packaging for Fairy dishwasher tablets, Flora butter and Heinz baked beans. In January 2020, the Malaysian government announced that it had sent 42 containers of illegally imported plastic waste back to the UK.<sup>32</sup>

- £ **Poland:** According to INTERPOL, 2,600 tonnes of UK waste were illegally sent to an illegal dump in Poland.<sup>33</sup> In 2018, a fire broke out at the dump before the waste could be repatriated. According to the Environment Agency, 'This was one of some 80 waste fires in Poland in 2018 most of which are suspected to have been deliberate in an effort to destroy evidence.'<sup>34</sup> Most of the illegal waste reportedly comprised non-segregated plastics from UK households and supermarkets.





Greenpeace Malaysia discovers UK plastic waste at dump site.

## **BUSINESS AS USUAL IS NO LONGER AN OPTION**

It is unclear how long the UK will be able to rely on exporting its plastic waste. Many governments have begun restricting the type and volume of plastic waste they are prepared to take in. China's decision to ban most plastic waste imports in 2017 was by far the most significant,<sup>36</sup> but other countries, including India, Malaysia, Sri Lanka, Thailand, Turkey and Vietnam, have also moved to protect themselves from imported plastic waste. Reforms to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal<sup>37</sup> have further restricted the plastic waste trade – at least in theory.

So far, these waste import bans have had no obvious effect on the UK's waste industry. Although the UK's waste exports fell slightly in 2018 (the first year of the Chinese government's plastic waste import ban), 2019 saw the largest volume of waste exports ever recorded.<sup>38</sup> Analysis of customs data shows that UK companies have responded to the growing number of waste import bans by sending more and more of our plastic waste to Turkey. This is overwhelming the country's recycling system and fuelling waste crime – with serious consequences for local people and the environment.

**'If people want to see us as the rubbish  
dump of the world, you dream on.'**<sup>35</sup>

Yeo Bee Yin, Malaysian Environment  
Minister, January 2020





Plastic crisis in Bangun Village, Indonesia.

## PLASTIC WASTE ISN'T JUST CAUSING PROBLEMS FOR OCEANS AND WILDLIFE, BUT PEOPLE TOO

Dumping and burning plastic waste poses a serious threat to people's health. People living near dump sites in Malaysia and other countries say that plastic pollution and burning plastic are causing them respiratory issues such as coughing and difficulty breathing, headaches and itchy, irritated eyes, and are concerned that exposure to these toxic fumes may also be causing problems with menstruation or higher rates of cancer.<sup>39</sup>

Until the introduction of China's 'National Sword' policy, UK plastic waste was primarily exported to countries in the Global South. Since the ban, the consequences of these imports on human health and the environment are still disproportionately felt by communities of colour. These communities have fewer political, economic and legal means to mount effective opposition to potentially environmentally hazardous sites



Plastic waste found burning in Adana, Turkey.

and practices, meaning companies can find the path of least resistance to build them.<sup>40</sup>

As such, the UK's current approach to plastic waste exports is part of a legacy of environmental racism carried out through dumping toxic or hazardous pollutants.<sup>41</sup> As long as the UK avoids properly managing and reducing its own waste, it will be upholding this structural inequality.



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## PART 2: TURKEY, THE TOP DESTINATION FOR UK PLASTIC WASTE

In just five years, Turkey has gone from being a minor player in the global waste trade to effectively becoming the new China. Exports of plastic waste from the UK to Turkey increased by a factor of 18 between 2016 and 2020, from just 12,000 tonnes in 2016 to 210,000 tonnes in 2020,<sup>42</sup> when Turkey received almost 40% of the UK's plastic waste exports. Nearly half of this was mixed plastic, which is extremely difficult to recycle.

Although the UK is by far the largest exporter of plastic waste to Turkey,<sup>43</sup> it has not been the only country to take advantage

of Turkey's open attitude to plastic waste. EU member states exported 20 times more plastic waste to Turkey in 2020 than they did in 2016, with the volume increasing from 22,000 tonnes to 447,000 tonnes.<sup>44</sup>

The UK and members of the EU have rules that are meant to prevent the export of plastic waste unless it is destined to be recycled. Yet Turkey's official recovery rate for municipal waste – just 12% in 2018 – is the lowest of any Organisation for Economic Co-operation and Development (OECD) member country.<sup>45</sup> A

2015 study published in *Science* magazine ranked Turkey the 14th worst country in the world for mismanagement of plastic waste.<sup>46</sup> WWF has calculated that 0.8 million tonnes of plastic waste are 'open dumped' (ie, dumped at illegal, unregulated sites) each year in Turkey.<sup>47</sup> Almost 20% of the plastic waste entering the Mediterranean Sea each year – an estimated 110,000 tonnes – comes from Turkey, with only Egypt contributing more.<sup>48</sup> Plastic pollution is already affecting sea life in the region: in 2019, Greenpeace Mediterranean tested fish in Turkish waters and found that almost half contained microplastics.<sup>49</sup>

The UK's reckless decision to send more and more of its plastic waste to a country that lacks the infrastructure to cope with it has triggered a crisis with lasting environmental and social consequences. The Turkish Street Waste Collectors Association, SATDER, reportedly claimed that imported waste has wiped out the market for the domestic waste collected by its members,<sup>50</sup> and that refuse companies were being paid to take imported containers of contaminated waste.<sup>51</sup> In August 2020, INTERPOL noted that the influx of European plastic waste to Turkey had contributed to an explosion of waste crime, with imported plastic waste dumped illegally and then burned.<sup>52</sup>



A Tesco yoghurt pot from the UK found in piles of dumped plastic in Adana, Turkey.



Pieces of UK packaging pulled from burning piles of plastic in Adana, Turkey.

**WWF HAS CALCULATED THAT 0.8 MILLION TONNES OF PLASTIC WASTE ARE 'OPEN DUMPED' (IE, DUMPED AT ILLEGAL, UNREGULATED SITES) EACH YEAR IN TURKEY**

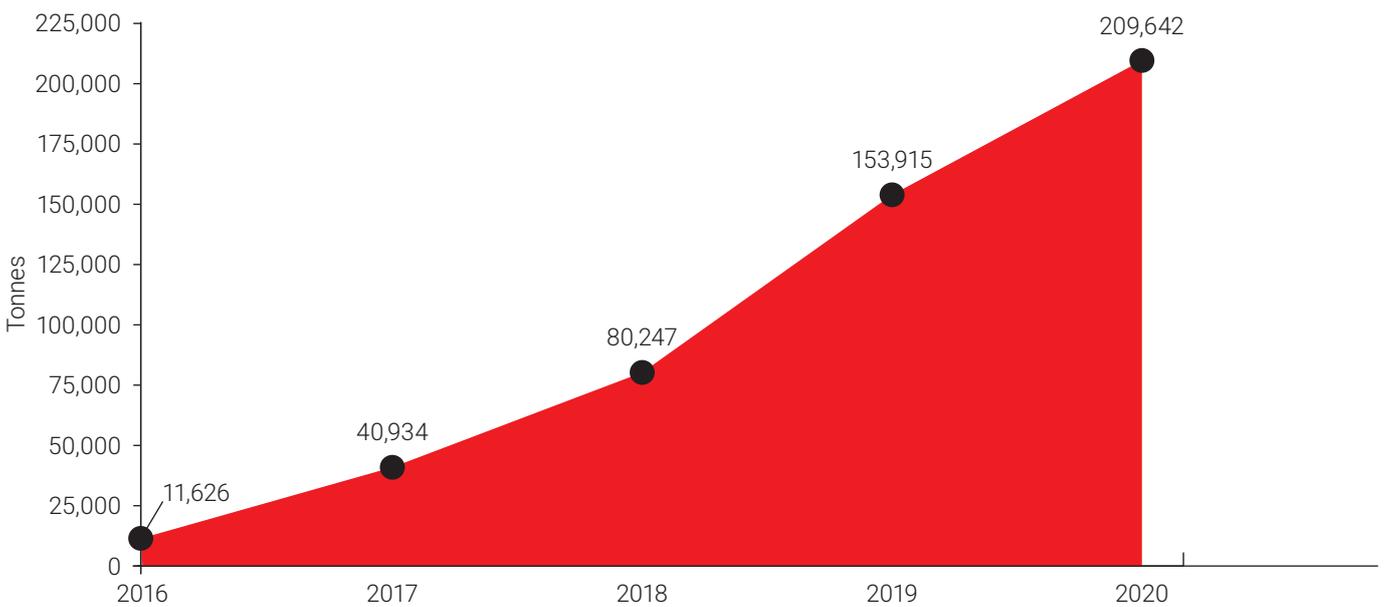


Figure 1: The exponential growth of plastic waste exports from the UK to Turkey (UK Trade Info)<sup>53</sup>

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© Caner Özkan / Greenpeace

36°57'30"N 35°15'46"E



Dumped plastic spills down a riverbank in Adana, Turkey.

## BRITISH PLASTIC IS POLLUTING THE MEDITERRANEAN

Many of the Turkish importers that handle plastic waste from the UK are located in Adana in Cilicia region, which runs along the Mediterranean coast to the border with Syria. Adana is less than 100 km from Mersin, Turkey's largest port and a convenient stopping point for container vessels travelling to East Asia via the Suez Canal.

The region has been particularly blighted by plastic. A recent study for WWF found that the Cilician coastline suffers more plastic pollution than any other stretch of the Mediterranean.<sup>54</sup> The River Seyhan, which runs through the centre of Adana, and the River Ceyhan, which runs to its southeast, are collectively responsible for 9% of the plastic pollution entering the Mediterranean each year – second only to the Nile.<sup>55</sup>

A Greenpeace UK investigation in March 2021 uncovered new evidence on what is happening to British plastic waste sent to Turkey. At ten sites dotted around the outskirts of Adana, investigators documented piles of plastic waste dumped illegally in fields, near rivers, on train tracks and by the roadside. In many

cases, the plastic was on fire or had been burned. Plastic from the UK was evident at all of these sites. It included packaging and plastic bags from high street retailers such as Tesco, Asda, the Co-op, Aldi, Sainsbury's, Lidl and Marks & Spencer, as well as Lucozade and Fanta bottles and a car number plate.

The waste, much of it shredded, was often found in large off-white bags – these same bags were visible outside recycling factories throughout Adana. Many had been ripped open, seemingly deliberately, allowing the plastic to escape. In some cases, layers of plastic waste had been covered in soil before more plastic waste was dumped on top, creating artificial hills several feet high. Other plastic waste was spilling into waterways and floating downstream. On the Mediterranean coast, investigators found more British plastic strewn across the beach, including the wrapping from a pack of Andrex toilet paper.

At least some of the plastic waste had been dumped recently. At one site, packaging for a coronavirus antigen test was found amongst bags of British plastic, indicating that the waste was less than a year old. At another site, British waste was found alongside a Polish cereal packet with a use-by date of August 2021.

**Evidence of UK plastic found dumped in Adana, Turkey.**



**KARAHAN**  
37°03'04"N 35°11'15"E



**KARAHAN**  
37°03'55"N 35°11'13"E



**KARAHAN**  
37°02'55"N 35°12'41"E



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0-50

**KUYUMCULAR**  
37°01'58"N 35°09'41"E



**YENIDAM**  
36°57'34"N 35°15'49"E



Yenidam

**YENIDAM**  
36°57'30"N 35°15'46"E



**Greenpeace UK investigation uncovers new evidence of UK plastic waste dumped in Adana Province, Turkey.**



**DEDEPINARI**  
**36°58'20"N 35°26'46"E**

## THE TURKISH GOVERNMENT'S PLASTIC CRACKDOWN

In recent months, following the lead of China and other countries, the Turkish government has moved to restrict the amount of plastic waste it takes in. In September 2020, the Turkish Ministry of Environment and Urban Planning announced that recycling facilities could only use half of their capacity to process imported plastic, down from a previous limit of 80%.<sup>56</sup> Then, in late 2020, the Turkish government announced that a ban on importing many types of plastic waste would come into effect from 1 January 2021. This included a ban on mixed plastics, as well as any plastics that had undergone 'mechanical treatment'.<sup>57</sup>

The ban has met with opposition from companies in Turkey, with one Turkish recycler telling journalists that the industry was now 'desperate for plastic scrap'.<sup>58</sup> Within the UK, exporters reportedly stoked fears of poor-quality waste being stockpiled.<sup>59</sup> However, so far the ban appears to have had minimal impact: in January 2021, the UK actually sent more plastic waste to Turkey than it did the previous January, up from 12,400 tonnes to 14,500 tonnes.<sup>60</sup> In February 2021, the UK's plastic waste exports to Turkey were more than double the previous February's, up from 14,000 tonnes to 30,300 tonnes.<sup>61</sup> The volume of mixed plastic waste did fall very slightly, with the UK exporting 14,000 tonnes to Turkey in the first two months of the 2020 and 13,400 tonnes in the same period in 2021.<sup>62</sup> However, at this stage it is unclear if there has been a genuine reduction in mixed plastic exported to Turkey or if companies are circumventing the ban by mislabelling their waste.

Either way, this is yet another reminder that the UK's strategy of exporting its plastic waste depends on other countries remaining willing to carry the environmental and societal costs of plastic pollution.



Turkish world record–holding free diver observing the plastic waste in Ortakoy coastline, Turkey.





# PART 3: TACKLING THE UK'S PLASTIC CRISIS

**'We will continue to lead the world in tackling plastics pollution, both in the UK and internationally.'**<sup>63</sup>

Boris Johnson, UK Prime Minister





Greenpeace activists deliver a giant plastic bottle to Michael Gove in London.

## THE GOVERNMENT IS FAILING TO ADDRESS PLASTIC POLLUTION

In its 2019 manifesto, the UK government committed to introduce a ban on plastic waste exports to non-OECD countries,<sup>64</sup> such as Indonesia and Malaysia. This is in addition to its existing commitments to introduce a deposit return scheme (DRS)<sup>65</sup> in England, Wales and Northern Ireland;<sup>66</sup> to change how domestic recycling is funded, through an Extended Producer Responsibility (EPR) scheme;<sup>67</sup> and to introduce a tax on plastic packaging that contains less than 30% recycled content.<sup>68</sup>

The ban on exports to non-OECD countries is to be enacted through new powers contained within the 'landmark' Environment Bill introduced in 2019,<sup>69</sup> and the government has committed to consult on introducing the ban by the end of 2022.<sup>70</sup> However, protracted consultations over other plastic waste initiatives, including recent delays to the flagship DRS,<sup>71</sup> suggest that the status quo will continue for at least the lifetime of the current Parliament.

## A PARTIAL EXPORT BAN JUST MOVES THE PROBLEM ELSEWHERE

Instead of reducing the amount of British plastic waste that gets exported, a ban that only applies to non-OECD members will simply drive more of our plastic waste to OECD members. In 2020, only 20% of the UK's plastic waste was exported to non-OECD countries, while 80% went to countries like Turkey that are members of the OECD.<sup>72</sup> As such, the government's proposals will do little to curb the UK's contribution to the global plastic pollution crisis.

In January 2021, the first month of the new Basel Convention regulations, the UK's overall waste exports fell by 30% compared to the previous year – but this was predominantly due to a decline in exports to non-OECD countries.<sup>73</sup> As discussed in Part 2, exports to Turkey actually increased, despite new regulations from the Turkish government supposedly prohibiting almost all plastic waste imports.<sup>74</sup>

Our recycling system is already overwhelmed by plastic waste.<sup>75</sup> Without urgent government action to end exports of plastic waste and cut the amount of plastic being produced in the UK, our plastic will continue to overwhelm other countries' recycling systems as well, causing ever more serious harm to their citizens and environment.



## HOW MUCH NEW INFRASTRUCTURE IS NEEDED TO END THE UK'S PLASTIC WASTE EXPORTS?

Ending waste exports would require some investment in new recycling infrastructure in the UK. However, there is significant underutilised capacity at present, and more coming on stream over the next few years. Reforming the UK's recycling system – at the same time as cutting single-use plastic – would minimise the amount of new infrastructure needed.

The UK's domestic recycling process involves numerous steps and facilities. First, locally collected waste and recycling is taken to transfer stations, where it is stockpiled before being transported to 'materials recovery facilities' (MRFs). These take in mixed recyclables and sort them into different material types (eg, different types of plastic) for reprocessing. The separated recyclable materials are then sent to recycling facilities which convert them into raw materials for future manufacturing.<sup>76</sup>

At present, there is limited data on the total capacity of recycling infrastructure in the UK. According to RECOUP, the UK has 16 plastic recycling facilities that handle packaging waste. These have a total estimated processing capacity of 440,000 tonnes but an output of just 230,000 tonnes – ie, a utilisation rate of just 52%.<sup>77</sup> RECOUP estimates that a further 260,000 tonnes of plastic packaging reprocessing capacity will be available in the future, with some of this expected to have become operational by the end of 2020.<sup>78</sup> This puts the UK's forecast domestic plastic packaging recycling capacity at 700,000 tonnes.

The construction of new recycling infrastructure takes anywhere from 12–24 months,<sup>79</sup> depending on the scale of the plant as well as factors such as land purchase, planning consensus and attaining operational licences, etc.<sup>80</sup> A ban on plastic waste exports would likely require legislation, so it is reasonable to assume that all planned facilities would be operational by the time any ban came into force.

Given the above, it is possible to estimate the additional capacity needed to recycle all the UK's plastic packaging waste within the UK. If none of the planned infrastructure were built but the full capacity of the existing infrastructure were used, then 482,000 tonnes of new capacity would be needed. If all 260,000 tonnes of expected additional capacity were built *and* the existing capacity were fully used, a further 222,000 tonnes of capacity would be needed to prevent plastic waste that is currently being exported from going to landfill or incineration.

Maximising the utilisation of the UK's recycling infrastructure is critical to reducing the amount of new infrastructure needed to accommodate the UK's exported plastic waste. While there will always be some underutilisation of recycling infrastructure caused by contamination and irregular input streams, the government has long promised to introduce measures to maximise the efficiency of the UK's recycling system. The upcoming reforms to the Extended Producer Responsibility scheme provide an opportunity to levy charges that discourage companies from producing non-recyclable packaging and incentivise them to switch to reusable, refillable or packaging-free options. A comprehensive, 'all in' deposit return scheme would create a new, higher-quality stream of plastic inputs and prevent plastic bottles from going to landfill or incineration. The government should also deliver on its promise to make local authority collections more consistent.

Even with these interventions, recycling alone is never going to be sufficient to tackle the volume of plastic that companies are producing. Unlike other materials, plastic degrades in quality each time it is recycled. It is therefore more accurate to speak of 'downcycling' plastic. Post-consumer packaging is particularly unsuited to recycling. Much of it is contaminated by food; many post-consumer plastics, such as film, are extremely difficult to recycle in practice; and there are insufficient commercial markets for the products it can be downcycled into. Thus it is most important for the UK to also cut the amount of plastic produced in the first place – especially unrecyclable or hard-to-recycle plastics.



Figure 2: Estimate of additional recycling capacity needed if waste exports are

## RECYCLING ISN'T THE ONLY SOLUTION – THE UK NEEDS TO CUT SINGLE-USE PLASTIC

Ultimately, our plastic waste exports and overwhelmed domestic recycling system are symptoms of the fact that British companies are producing far too much plastic. While it is imperative that we eliminate waste exports because of the health and environmental harm they cause, simply building enough infrastructure to handle our own waste isn't the answer. The only way to solve the plastic crisis is to permanently reduce the amount of plastic packaging in the market.

There is no data on how much single-use plastic is generated in the UK each year. However, because single-use plastic is used primarily for packaging,<sup>81</sup> which comprises more than two-thirds of all UK plastic waste,<sup>82</sup> cutting the use of single-use plastic would result in a significant drop in plastic waste.

**We estimate that reducing single-use plastic by 50% would allow the UK to end waste exports. It would also significantly reduce the amount of plastic going into incineration and landfill, as the following table illustrates.<sup>83</sup>**

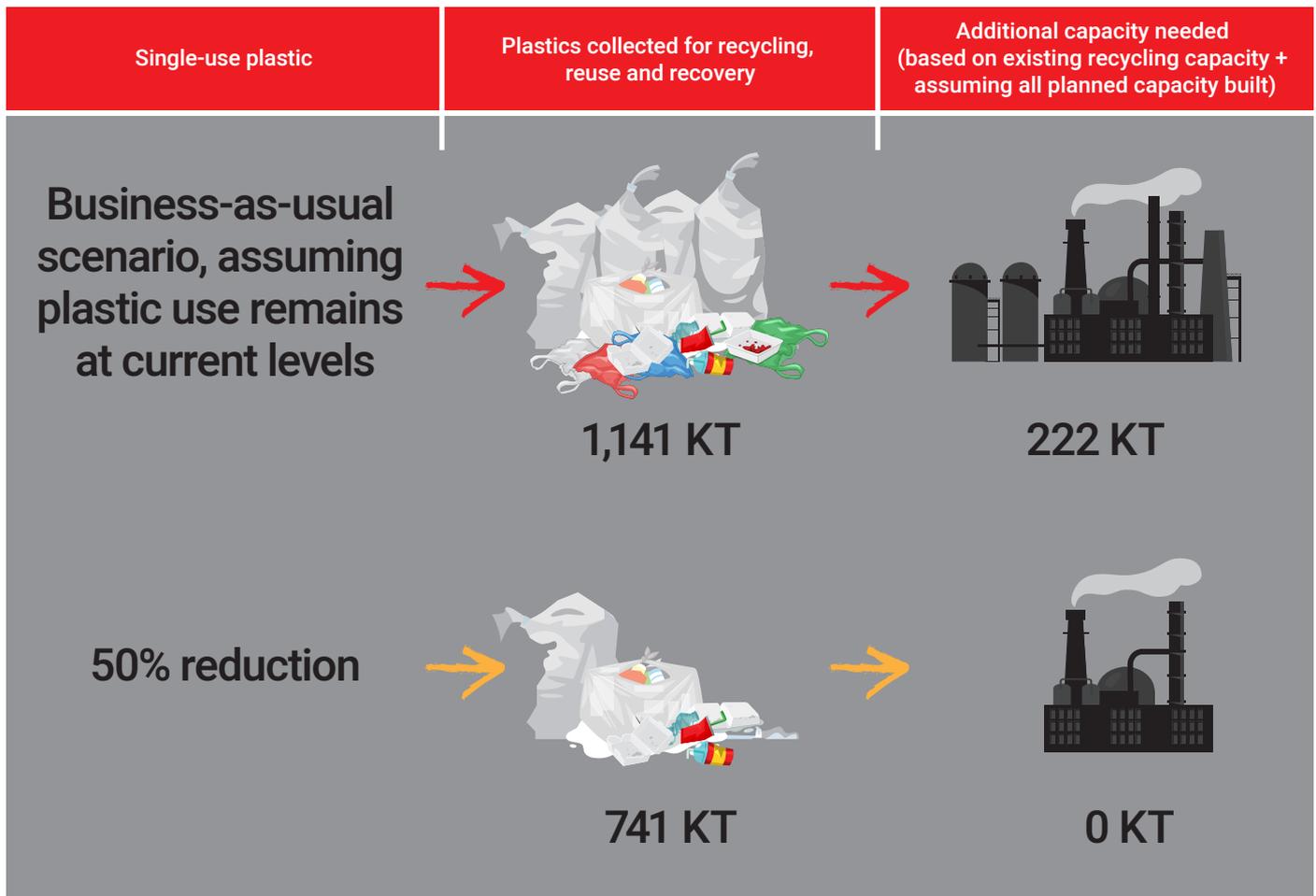


Figure 3: Our estimate shows that reducing single-use plastic by 50% would allow the UK to ban waste exports without needing significant further recycling capacity beyond what is already planned

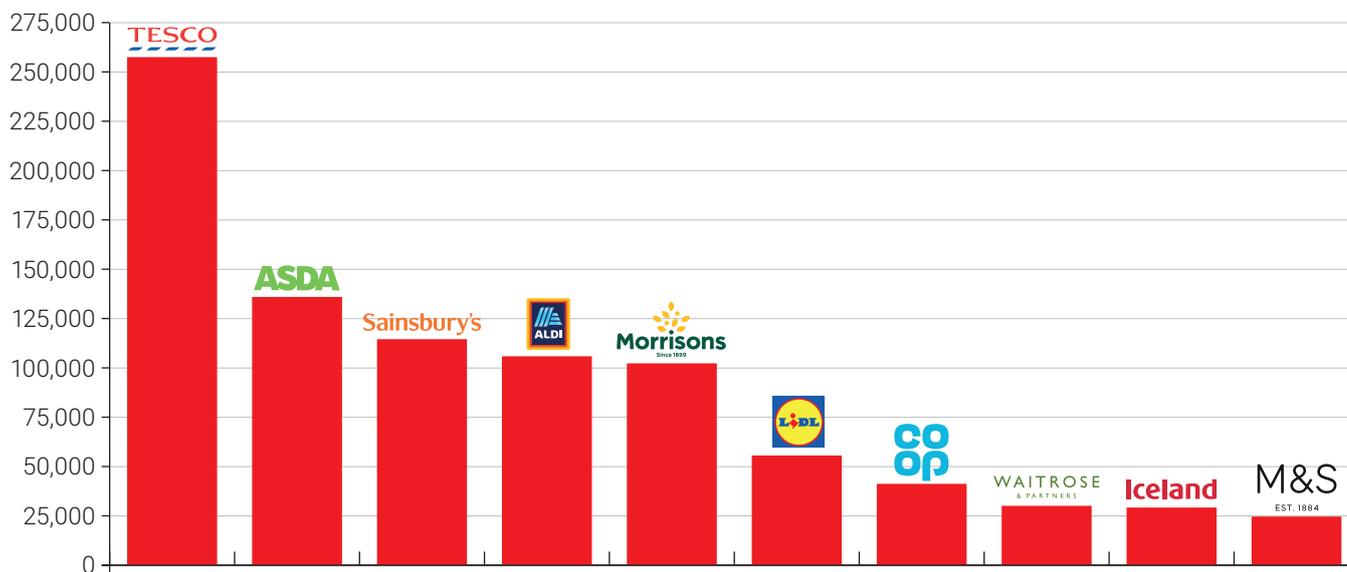


Figure 4: The amount of plastic packaging UK supermarkets produced in 2019 (in tonnes)

## COMPANIES NEED TO TAKE RESPONSIBILITY FOR THEIR PLASTIC POLLUTION

Halving single-use plastic over the next four years is entirely achievable, because a small number of companies are behind the vast majority of the UK's plastic packaging. The 68 companies that have signed the Plastics Pact – a voluntary commitment to 'take the first steps towards ensuring that our supermarket shelves are free of problematic and unnecessary plastics' – produce two-thirds of the UK's consumer plastic packaging.<sup>84</sup> The top 10 supermarkets between them generate around 900,000 tonnes of plastic packaging each year.<sup>85</sup> Meaningful action by the corporate sector is key to reducing the UK's plastic waste to a level where the UK can recycle all the plastic it produces. Sainsbury's<sup>86</sup> and Aldi<sup>87</sup> have already committed to a 50% reduction in single-use plastic by 2025, and others should follow suit.

A permanent reduction in plastic packaging requires a shift away from the current linear 'take, make, dispose' model and its environmental consequences, to a circular economy that keeps materials in a cycle for as long as possible. For retailers and fast-moving consumer goods (FMCG) companies, this means replacing single-use packaging with reusable containers, and providing a combination of in-store dispensers, home delivery systems and infrastructure to collect, wash and refill containers. Despite the initial investment needed, there are clear cost savings and supply chain benefits to be gained by switching to reusable packaging. The Ellen MacArthur Foundation (EMF) estimates that globally, replacing just 20% of single-use plastic packaging with reusable alternatives offers an opportunity worth at least US\$10 billion.<sup>88</sup>

The reuse economy is gathering pace, albeit from a very low starting point. Each of the UK's major supermarkets now has at



Waitrose refill station, Oxford, UK.

least one reuse trial underway, as do several FMCG companies. However, most companies have not set targets for reuse, either for consumer or transit packaging. Analysis by Greenpeace and Unpackaged Innovation Ltd recommends that if retailers are to reduce their plastic packaging by 50% by 2025, at least 25% of consumer packaging will need to be reusable.<sup>89</sup>

Government action is needed to encourage manufacturers, brands and retailers to find solutions to the plastic crisis. This includes setting legally binding plastic packaging reduction targets and reforming Extended Producer Responsibility requirements to make the whole supply chain responsible for the full environmental impact of the plastic it produces. These measures would drive retailers and producers to eliminate unrecyclable or hard-to-recycle plastics, invest in reuse solutions and – most importantly – reduce the amount of plastic packaging they produce.



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## PART 4: TIME FOR ACTION

The Rainbow Warrior on the Greek leg of the plastic-free Mediterranean tour.

### The UK government must:

1. Enact the Environment Bill, and use the powers within it to **ban plastic waste exports**. This should start with an immediate ban on all exports to non-OECD member countries and mixed plastic waste to OECD member countries. A complete ban on all plastic waste exports should be in place by **no later than 2025**.
2. Use the Environment Bill to set legally binding targets to **reduce single-use plastic by 50%** by 2025 and to introduce mandatory corporate reporting on plastic reduction, in order to create a level playing field for industry to transition to refill and reuse.
3. Design new **Extended Producer Responsibility (EPR)** requirements to increase reuse and reduction of packaging as well as recyclability. This should be achieved through a combination of reuse and reduction targets and modulation of fees to incentivise eco-design, reuse and reduction and penalise single-use packaging.
4. Implement an all-in **deposit return scheme (DRS)** for drinks containers whose scope of materials and deposit level is consistent across the UK – including plastic, aluminium and glass at a minimum, and containers of all sizes – as well as creating the system conditions for the introduction of reusable and refillable systems for beverage packaging.
5. Deliver the promised improvements to **consistency of household and business recycling collections** under the 2018 Waste and Resources Strategy.
6. Immediately **increase Environment Agency funding and personnel** to ensure better monitoring and enforcement of the waste export industry.
7. Introduce a **moratorium on the construction of new incineration capacity** in the UK.

## Endnotes

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- Assume there is a linear relationship between the amount of plastic waste produced and the amount of plastic waste collected for recovery (ie, if 10% less plastic waste is produced, then 10% less plastic waste will be collected). Single-use plastic (SUP) is mostly packaging, and packaging makes up around 70% of plastic waste, and for the purposes of this calculation we have assumed that there is a 1:1 relationship between single-use plastic and plastic packaging. Thus, we can work through the figures in the second line of the table as follows:
- A 10% reduction in SUP is estimated to produce a 7% reduction in plastic waste, or 80 kt. This means the forecast volume of plastic waste collected would be 1,061 kt.
  - 219 kt either is sent to incineration or is non-packaging plastic waste that is recycled separately (see Figure 1), and this figure is assumed to remain constant. Subtracting this from the forecast volume of plastic waste collected (1,061 kt) leaves 842 kt of plastic packaging waste to be recycled.
- There are then two scenarios, and again they can be illustrated by working through the numbers in the second row of the table. In the case of the UK's current processing capacity of 440 kt, the forecast shortfall would be 402 kt. If all the planned infrastructure gets built, the forecast shortfall would be just 142 kt.
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Back cover: UK plastic packaging found amongst piles of dumped plastic,

Adana, Turkey. © Caner Özkan / Greenpeace





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