





## In the Absence of Circularity, the Dustbins of the Global North Spill Over into the South

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From the United States to Europe, the ban on waste imports by Asian countries since 2018 has revealed a severe lack of recycling capacities in the exporting countries, as well as the dependence of industries on the inputs of materials to be recycled coming from abroad. Meanwhile, the countries of the North have found new drop points at which to dispose of the waste they produce. The closure of Asia's borders to imports has increased the illegal waste trade and uncontrolled exports. Nevertheless, importing countries are turning back from the bans in the face of pressure from industries in the sector wishing to capitalise on new markets for recyclable materials.



## Since implementation of the National Sword Policy, the countries of the North are looking for new outlets for their waste

After several years of increasingly restrictive policies against the movement of uncontrolled trans-border waste, the Chinese government took repressive action by announcing the implementation of the National Sword Policy (NSP) in February 2017, in order to completely halt the import of 24 types of recyclable solid waste, inclluding non-industrial plastics, mixed papers, textiles, and slag from vanadium, a rare metal used in steelmaking.<sup>1</sup> Prior to the implementation of this policy, China and Hong Kong alone imported 72% of global plastic waste produced between 1992 and 2016, much of it through illegal channels.<sup>2</sup> Due to fairly low standards for the quality of waste accepted, recyclable and non-recyclable waste often ended up mixed.<sup>a</sup> So it was left up to the Chinese treatment facilities to manage all this unusable waste. By January 2019, following the NSP, Chinese imports of plastic waste had fallen by 99% (**fig. 1**), and those of paper by more than a third.<sup>3</sup>

Destabilised by these restrictions, the countries of the North have tried to direct their exports to other destinations. Since 2018, Malaysia, the Philippines, Vietnam and Thailand have become the new outlets for plastic waste from the United States, Japan and Germany.<sup>4</sup> But these new destinations have in turn passed their own legislation to limit the waste entering their territory,<sup>5</sup> and have quickly begun to return to the senders' entire containers of waste that do not comply with contamination rules. By lowering the authorised waste contamination thresholds to near-unattainable levels, these countries have made export impossible for the countries of the North.

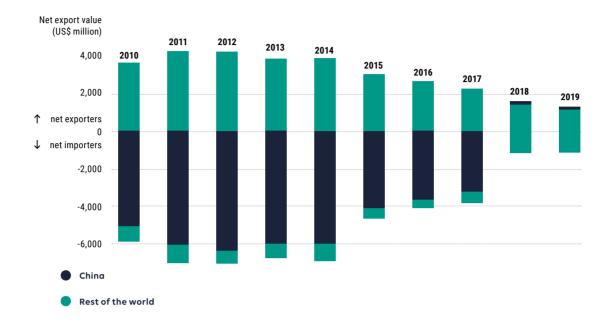
a This is what is called "contamination", implying recyclable waste is contaminated with non-recyclable waste





FIGURE 1 WORLD PLASTICS TRADE

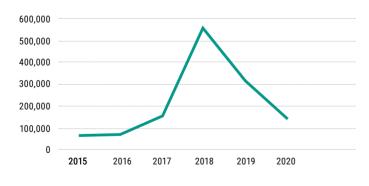
Source: Secretariats of the Basel, Rotterdam, Stockholm (BRS) Conventions, 2021



In Thailand, for example, after a sharp increase and a peak in plastic waste imports in 2018 (550,000 tonnes), the volumes entering the territory fell by more than 70% between 2018 and 2020 (**fig. 2**) as an immediate consequence of the ban on plastic and electronic waste imports introduced in June 2018.<sup>6</sup> Vietnam has followed pretty much the same path: while it imported around 20,000 tonnes of plastic waste in 2016, a peak in imports in the country was reached in November 2017 (100,000 t). Then, when several Vietnamese ports were banned from accepting foreign plastic waste,<sup>5</sup> imports dropped sharply to 7,000 tonnes in mid-2018.<sup>7</sup>

#### FIGURE 2

QUANTITY OF PLASTIC WASTE IMPORTED BY THAILAND (IN TONNES) Source: Break free from plastic, 2021



In this context of restrictions, the pandemic has set waste exports climbing again. In Europe, exports of waste outside the European Union have exploded since 2004 (up 75%), although Regulation (EC) No 1013/2006<sup>8</sup> on trans-border waste shipments was supposed to restrict shipments of hazardous waste to non-OECD states. After a period of relative stability between 2017 and 2019, they started to rise again in 2020.<sup>9</sup>

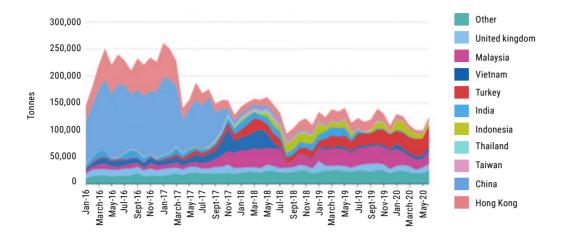
While exports to China plummeted from 10.1 to 0.6 Mt between 2009 and 2020 (including a more recent drop in the amount of plastics and paper), Turkey has emerged as the top market for European waste: in 2020, of the 33 million tonnes of waste exported to non-European countries, Turkey received 13.7 Mt (20% more than in 2019<sup>10</sup>), a long way ahead of India (2.9 Mt).<sup>11</sup> In particular, imports of plastic waste by Turkey have multiplied 200 times since 2004, especially since China implemented the National Sword Policy. Malaysia, Indonesia and India have also increased their imports of European waste (**fig. 3**).

While exports of plastic waste from the United States have been on a downward trend since 2018, they increased again by 7% in the first quarter of 2021, reaching 333 million pounds (over 150,000 tonnes) exported.<sup>12</sup> The United States continues to send a large amount of its plastic waste to Southeast Asia, and Malaysia remains the number one destination in Asia, with 263 million pounds (or about 120,000 tonnes) exported in 2020 (fig. 4). In 2020, although Canada remains the top destination with 349 million pounds of plastic imported (i.e., more than 158,300 tonnes),<sup>13</sup> the United States sent 137 million pounds (or about 62,000 tonnes) of their plastic waste to Mexico (fig. 4). Thus, Latin America and the Caribbean have joined Asia as emerging destinations for plastic waste from the United States. Between January and August 2020, 44,173 tonnes of plastic waste arrived from the United States in fifteen Latin American countries, and exports of plastic waste to Mexico increased by 135%, while those to Ecuador increased by 137%.14



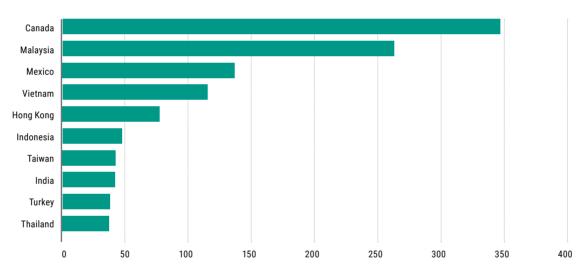


EXPORTS OF PLASTIC WASTE FOR RECYCLING FROM THE EU TO IMPORTING COUNTRIES, JANUARY 2016 TO JUNE 2020 Source: Eurostat, 2020



#### FIGURE 4

THE UNITED STATES' PLASTIC WASTE EXPORTS IN 2020, IN MILLIONS OF POUNDS Source: <u>Statista</u>, 2021



Japan, for its part, has exported less and less plastic waste over the past four years, but the quantities remain enormous: in 2020, Japan exported some 821,000 tonnes of plastic waste, and Malaysia remained its top importer. Moreover, Vietnam is becoming a destination of choice for Japan, having increased its imports by 160% between 2016 and 2020, reaching 174,000 tonnes of plastic waste imported in 2020.<sup>15</sup>

## > THE OBSERVATORY'S LENS

# The slow transformation of local recycling capacities has not curbed the illegal waste trade

## In the North, industries and governments are trying to adapt their local recycling capacities

The waste crisis has revealed the structural weakness of collection and sorting capabilities, obsolete recycling infrastructure and a lack of awareness, which prevent countries like the United States from effectively managing their waste at the domestic level.<sup>16</sup> This is why governments and companies have stepped up their investments to modernise their domestic recycling capacities and make them more efficient.



In 2019, the International Energy Agency (IEA) estimated that \$332 million was invested in plastic recycling worldwide, almost seven times more than in 2018.<sup>17</sup> This trend has been confirmed over the last two years.

In Great Britain, UK Research and Innovation (UKRI), a public entity, invested £20 mn (\$25.8 mn) at the end of 2020 in four plants to increase the UK's recycling capability and expand the range of recycled plastics. Carried out within the framework of the Industrial Strategy Challenge Fund, to which more than £65 mn (\$84 mn) in private investment has been added, this is the largest investment the UK has ever made in the recycling of plastic packaging.<sup>18</sup> In Sweden, Swedish Plastic Recycling (SPR) is an organisation that manages the collection and recycling of plastics for companies subject to extended producer responsibility (EPR). In August 2021 SPR announced an investment of one billion Swedish kronor (~€100 mn) in the Motala recycling centre, to double the centre's recycling capability for plastic packaging collected from households and to supply it with renewable energies to achieve "carbon neutrality".19

In Japan, the multinational PureCycle Technologies announced the signing of a memorandum of understanding with the trading house (sōgō-shōsha) Mitsui & Co., the first step in the development and operation of a recycling centre to transform waste polypropylene (PP) into ultra-pure recycled polypropylene (UPRP).<sup>20</sup> During the seventh environmental policy dialogue held by the Japanese Environment Ministry and the Asian Development Bank, the bill on promoting the recycling of plastics-related resources in Japan was presented, and the importance of the transition towards a circular economy was stressed.<sup>21</sup> At the same time, the Japanese government has set itself the goal of reducing single-use plastics by 25% by 2030. It is also seeking to make the reuse and recycling of all plastic containers and packaging mandatory by 2025, to achieve a 40% recycling rate for these items by 2030, and to achieve "100% effective utilization of used plastics by 2035".<sup>22</sup>

The Canadian government is stepping up funding to improve the infrastructure and methods used for recycling. In September 2020, the government announced it was investing CA\$225,000 (US\$180,000) in Evergreen Recycling, a local recycling company, to improve the speed and efficiency of container sorting.  $^{\rm 23}$  Then in early 2021, the Canadian Plastics Innovation Challenges, a competition to stimulate technological innovation in recycling, awarded CA\$150,000 (US\$120,000) to four companies for their projects in the recycling, packaging and textile sectors.<sup>24</sup> Finally in October, 70 non-state actors, including NGOs, public organisations and members of the plastics industry published a "Roadmap to 2025", an action plan aimed at building a circular economy for plastics packaging. These stakeholders are members of the Canada Plastics Pact, the Canadian version of the Ellen MacArthur Foundation's Plastics Pact Network.<sup>25</sup>

In July 2020, in the United States, a group of major consumer brands and corporate foundations committed more than \$54 million to support additional recycling infrastructure.<sup>26</sup> They include Keurig Dr Pepper, PepsiCo, the Walmart Foundation,Colgate-Palmolive and Coca-Cola,<sup>b</sup> identified by the NGO Break Free from Plastics as among the ten biggest polluters in the world.<sup>27</sup> A year later, the national network Recycling Partnership called for a public-private investment of \$17 billion over five years, in order "to completely transform the U.S. residential recycling system, maximize its potential and make it as accessible to all households as trash service".<sup>28</sup>

In addition to these investments in waste treatment, new anti-plastics policies and laws are attempting to prevent the over-consumption of plastics. Canada intends to ban singleuse plastics by the end of 2021 by amending the Canadian Environmental Protection Act.<sup>29</sup> Following a meeting of environment ministers from different jurisdictions in April 2021, Australia presented a plan to ban eight single-use plastic items by 2025. Six of Australia's eight states are already in the process of phasing out certain single-use plastics.<sup>30</sup>

In April 2021, the United States Environmental Protection Agency (EPA) unveiled its first-ever national recycling targets (50% by 2030<sup>31</sup>). Based on the work of the NGO Break Free from Plastic and drawing on local legislation, two elected officials submitted a new federal bill, the Break Free From Plastic Pollution Act of 2021 which aims to phase out plastic and make producers more responsible in the design, collection and recycling of packaging.<sup>32</sup> It succeeds a similar bill submitted in 2020. At the same time, the U.S. Plastic Waste Reduction and Recycling Act was presented to Congress in 2021.<sup>33</sup> This bipartisan bill proposed in June 2020 aims to increase research and development and to plan the strengthening of plastic waste treatment capabilities on American soil.

Building on the 2018 European strategy for plastics, the European Green Deal and the Circular Economy Action Plan, the revisions of the Packaging and Packaging Waste Directive (PPWD) aim to promote the reuse, recycling and other forms of recovery of packaging waste in the European market by 2030.<sup>34</sup> At the same time, PlasticsEurope, the European association of plastics producers, supports the European Commission's proposal for a mandatory European target of recycled content for plastic packaging, of 30%, by 2030.<sup>35</sup>

While Asian restrictions have led the countries of the North to process larger quantities of different types of plastic at home,<sup>36</sup> recycling rates nevertheless remain low: in 2020, the EU had still not reached the 50% recycling rate target it had set itself,<sup>37</sup> and only 12% of plastics was recycled in the United States.<sup>38</sup> Consequently, waste from the countries of the Global North is still massively exported to developing countries, legally or illegally.

b Since the fund was set up, Amazon, Danone North America, Danone Waters of America, Nestlé Waters North America and Starbucks have also joined.





KEYS TO UNDERSTANDING

## THE "PLASTIC AMENDMENTS" TO THE BASEL CONVENTION

The Basel Convention is an international treaty signed in 1989 which came into force on 5 May 1992, aiming to protect human health and the environment from the harmful effects of hazardous waste. The Parties to the Convention are bound to observe fundamental principles such as proximity of waste disposal, priority for waste recovery, and prior informed consent to the import of potentially hazardous substances. On 10 May 2019, the 187 countries party to the Convention decided to amend the treaty to impose greater transparency on waste exports, and to allow countries to refuse imports if they are toxic or non-recyclable. Exporting countries will therefore have to secure the agreement of the host countries before sending them their waste. Since 1 January 2021, the prior agreement procedure provided for hazardous plastic waste (Annex VIII) has been extended to household plastics requiring special consideration (Annex II): thus, any cargo of this type will now have to wait for an authorisation from the country of the receiving port. Hong Kong has transcribed the amendment into national law, as has the European Commission in a new regulation stipulating that only non-hazardous and easily recyclable plastic waste can be exported to countries outside the OECD. The new rule has been transcribed and harmonised in the OECD Control System for waste bound for recovery, which means that even the United States, not party to the Basel Convention, is now subject to this rule.

Sources: French Ministry of the Ecological Transition, 24/02/2021; AIDF, 07/12/2020

## While awaiting more efficient recycling systems, waste traffic continues relentlessly

In a report released in August 2020, Interpol analysed emerging criminal trends in the global plastic waste market since China began to implement its policy in January 2018. Based on data and intelligence from 40 countries, Interpol identifies a number of widespread illegal practices: transfers of illegal waste shipments to other destinations, illegal dumps, illegal incinerations, and administrative fraud are some of the alternative channels that have opened up in the absence of domestic recycling capacities in countries hitherto dependent on China.<sup>39</sup> In 2020, port and air cargo control units intercepted 630 tonnes of illegal waste.<sup>40</sup> Thirteen of the 24 countries that were destinations for illegal exports were located on the Asian continent. Many countries on all five continents have also seen illegal waste management increase on their territory.<sup>c</sup>

The reclassification, since 1 January 2021, of certain types of household plastics as "hazardous plastics" within the framework of the amendments to the Basel Convention has helped remove many waste shipments from legal export frameworks, without prior authorisation from the importing country (**see Keys to Understanding**).

In the United States, customs records show that U.S. exports of plastic waste to developing countries totalled some 25,000 tonnes and 4,700 containers of plastic waste for the month of January 2021 alone, roughly at the same level as in January 2020, before the amendments to the Basel Convention entered into force.<sup>41</sup> Malaysia tops the list of destinations, followed by Vietnam and Indonesia.<sup>42</sup> In April 2021, Malaysia reported it had returned 267 containers of illegal plastic waste to their country of origin since 2019.43 In theory, imports have been banned since October 2018, but the government has failed to stop trafficking: smuggling involves many different players, some of whom are part of organised crime and specialise in the false declaration of transported waste and its destination.<sup>44</sup> While Senegal is still trying to improve the management of its annual plastic waste production, estimated at 200,000 tonnes,<sup>45</sup> in May 2021 customs seized a container of 25 tonnes of plastic waste coming in from Germany.<sup>d</sup> Having become a destination of choice for toxic or unusable waste, Romania received 3,700 tonnes of waste in August 2021. On its control at the border, toxic waste was declared as plastic waste, like these 70 containers exported from Belgium, when it actually contained wood, metal waste, or other materials considered hazardous.<sup>46</sup>

Thus, civil society continues to rally to attract governments' attention and see stricter measures put on waste imports. In February 2021, the Consumers' Association of Penang (CAP) and the Eco Waste Coalition called on the countries of the ASEAN to implement a more robust regional policy against the illegal import of waste and thus protect the health of the public and ecosystems.<sup>47</sup> In its report "Waste Trade in Southeast Asia: Legal Justifications for Regional Action", published in August 2021, the Eco Waste Coalition, in collaboration with the International Network for the Elimination of Pollutants (IPEN),<sup>e</sup> denounces the inadequacy of the current legal and political responses of ASEAN member states to stop the entry of illegal waste. The report stresses that the international waste trade is exacerbating existing waste management problems, and that a response from the ASEAN to this crisis would help countries to protect the region's ecosystems and biodiversity.48

c These include France, Italy, Spain, Sweden, the Czech Republic, Ireland, Romania, Thailand, Malaysia, Australia, Chile and Malawi.

d In addition to re-exporting the shippent, the shipping company Hapag-Lloyd will have to pay a fine of 2 billion CFA ( $\leq$ 305 mn).

e A network of public utility organisations, non-governmental organisations and associations.



In an attempt to curb the increase in illegal shipments of plastics and hazardous waste, the World Customs Organization (WCO) and the United Nations Office on Drugs and Crime (UNODC) have launched a new project within the framework of the container control program (CCP), on "the fight against the illegal trafficking of hazardous waste", within which framework port control and specialised air cargo units have been set up and trained in major airports and seaports. Partly funded by the Norwegian Agency for Development Cooperation (Norad), the project aims to improve the capacities of organisations working to tackle illegal shipments of plastic and hazardous waste in the international goods trade.<sup>49</sup>

For their part, European countries are trying to step up the fight against illegal waste trafficking, but victory is still far off: between 1 and 31 March 2021, Europol and Frontex coordinated an operation bringing together 300 agencies from 67 countries to fight marine pollution and illegal waste trafficking. In March alone, 130 cases of waste trafficking were recorded in ports.<sup>50</sup> Thus, trans-border movements of waste still largely pass through the legal frameworks in force, endangering the health of populations and ecosystems.

#### At the same time, importers do an about-face

As environmental groups call on governments to demand tougher laws and limit the importing of waste, some importing countries are doing just the reverse. Indeed, some countries are now relaxing their regulations to facilitate the supply of "secondary raw materials" essential for their industries to operate.

This is true of Turkey, for example. At the beginning of May 2021, a Greenpeace investigation<sup>51</sup> revealed that significant quantities of plastic waste from European countries were not being recycled but were ending up being incinerated or placed in Turkish landfills instead.<sup>6</sup> Britain was singled out for exporting 209,000 tonnes of waste to Turkey in 2020, 17 times more than in 2016. The Turkish Ministry of Commerce therefore announced a ban on all imports of plastic waste<sup>9</sup> as of July 2, 2021.<sup>52</sup> Just days after the ban was applied, the government lifted this restriction on PET plastics: this type of waste now falls into the "controlled waste", rather than prohibited waste<sup>53</sup> category, which is what the plastics industry wanted.<sup>54</sup>

Thailand also went back on its decision and postponed the ban on plastic waste for another five years: for the year 2021, the country still authorises the import of 250,000 tonnes of plastic. A network of 107 civil society environmental groups called on the Thai government to ban imports and prioritise domestic plastic waste for recycling. In early August, the network issued a joint statement calling on agencies to officially announce a policy to ban imports of plastic waste within the year, as well as amend laws and regulations to fill loopholes that allow the use of plastic waste imported into the plastics recycling industry. This move has as yet proved fruitless.<sup>55</sup> In South Africa, which recycles only 14% of its plastic waste, the Department of Forestry, Fisheries and the Environment is issuing new import requests to meet the needs of the plastics industry,<sup>56</sup> in accordance with the Basel Convention. This decision is part of the South African government's broader policy on plastic waste management: leaked Environment Department documents reveal that the government will not back the new UN treaty to fight plastic.<sup>57</sup> As for Indonesia, which in 2019 had announced a maximum contamination rate of 0.5% for the import of "recovered fibre", the government reversed its decision by setting a contamination rate four times higher than that initially set, in particular to allow the import of British waste paper.<sup>58</sup>

In China, while the Ministry of the Environment and that of Trade had stated that "any import of solid waste, by whatever means, will now be prohibited"<sup>h</sup> from 1 January 2021,<sup>59</sup> the government has given the go-ahead for the import of high-quality scrap metal that meets new standards, and which has been reclassified as "resources". Similarly, in February, the China Nonferrous Metals Industry Association (CMRA) published a second list of 26 companies authorised to export copper and aluminium waste to China.<sup>60</sup> China is thus permitting the import of aluminium and copper waste from European, Asian and American companies. The governments of importing countries, which up to then seemed determined not to become the waste bins of the world, are doing u-turns and relaxing their regulations to meet industries' demands, revealing their domestic industries' dependence on the input of materials for recycling from abroad.



While the countries of Southeast Asia are gradually closing their borders to new waste, the exporting countries have found themselves caught between their massive consumption of waste and their inability to recycle it on their own territory. While the amendments to the Basel Convention were aimed at limiting the export of difficult-to-recycle plastic waste to developing countries, the governments of the Global South, giving in to the needs of industry, have begun to relax the laws to once again allow waste to be imported more freely into their countries. In Europe, the United States, Canada and Japan, efforts to invest in new local recycling capabilities and the tightening up of recycling standards and targets are part of a long-term strategy that does not eliminate the short-term need to export waste, sometimes in defiance of international rules.

f The Microplastic Research Group, a team of Turkish academics, also indicated in a study that in the first half of 2021, at least 68 waste fires were reported in Turkish plants, as against just eight in 2016.

g This specifically includes polyethylene plastics; PET water bottles, plastic caps, polypropylene (PP) pots and tubes are not covered by the ban.

h With the exception of ferrous waste (including cast iron or steel).



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