### (https://connect.plasticpollutioncoalition.org/stop-plastic-polluters)



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Photo: Plastic sent to Malaysia for recycling is collected in an open landfill.

By Jan Dell

2019 Update: 225 Containers Shipped Per Day to Countries with Poor Waste Management and 120 Million Kg of Carbon Emissions

In just two short years, the world has awoken to the hidden, harsh realities of the plastic waste trade that is called "recycling." More than 100 investigations and reports (https://www.lastbeachcleanup.org/plastic-waste-exports) have shown serious environmental and social harms in receiving countries. In the recent "Plastic Wars (https://www.kpbs.org/news/2020/mar/30/frontline-plastic-wars/)," FRONTLINE and NPR showed plastic waste from the United States (U.S.) dumped and burned in Indonesian communities in 2019. Making climate change worse, millions of tons of carbon have been emitted in shipping U.S. plastic waste to far frontiers where the reports show that the plastic waste may not have actually been recycled.

Now, a new reason to end export of post-consumer plastic waste has appeared: coronavirus COVID-19. The virus is spread from human contact and was found alive on "a variety of surfaces (https://www.cdc.gov/mmwr/volumes/69/wr /mm6912e3.htm?s\_cid=mm6912e3\_w)" of the Diamond Princess cruise ship after 17 days, according to the U.S. Centers for Disease Control and Prevention (CDC). Since transit times of sea freight shipments (https://www.advancedontrade.com/2014/11/what-is-transit-time-between-hong-kong-port-los-angeles-port.html?m=1) can be less than 17 days and the investigations and reports (https://www.lastbeachcleanup.org/plastic-waste-exports) clearly show that exported post-consumer plastic waste is often manually sorted by poor workers of all ages in unsafe conditions, there is the potential for people in receiving countries to be exposed.

Circulating post-consumer plastic waste around the world doesn't create the clean economy we need to protect human health and ecosystems. There were more than enough valid reasons to stop the plastic waste trade before the outbreak of the global pandemic in 2020. It is clear now more than ever: the harms and risks far outweigh the perceived benefits of avoiding plastic waste disposal to U.S. landfills. Actions to find markets for discarded plastic materials collected in U.S. communities should not negatively impact communities in other countries.

#### A Brief Recap

Back in 2017, there was little public understanding of what happens to plastic waste that consumers in industrialized countries put in bins for recycling. Outside of the waste and recycling industry, the U.S. public assumed that safe, clean U.S. factories ground up the plastic and American workers made it into new products. With credit to the *New York Times* Opinion video (https://www.nytimes.com/2019/12/09/opinion/recycling-myths.html) "The Great Recycling Con," (https://www.nytimes.com/video/opinion/100000006841131 /packaging-recycling-myths.html) some of us thought it was like a scene from Toy Story. The public didn't know that the U.S. exported 276,200 shipping containers (1.5 million metric tons) (https://usatrade.census.gov/index.php?do=login) of plastic waste to countries with poor waste management in 2017. As shown in the documentary "Plastic China (https://www.plasticchina.org/)," it turns out that our plastic waste was not cleanly or

efficiently processed into new plastic products that Americans bought. It was sometimes crudely sorted, shredded and melted by impoverished families in unsafe, unhealthy conditions into low quality plastic that never returned to the U.S. in new products. A waste and recycling expert now states (https://www.scrap.org/home/all-scrap-articles/what-s-recyclable#.XmU2BqhKg2y) that even before China's policy changes, "a lot of areas fooled themselves into thinking they were recycling when they were really not."

Two years ago in 2018, China enacted the National Sword policy restricting plastic waste imports to protect their environment and develop their own domestic recycling capacity. In response, many recyclers moved their operations from China to other countries in Asia, leading to the rise of over two hundred illegal operations in Malaysia. (https://news.sky.com /story/malaysia-sends-plastic-waste-back-to-uk-insisting-it-is-not-worlds-rubbishdump-11913156) Since exporting plastic waste is a convenient way for the U.S. and other industrialized countries to count plastic waste as "recycled" and avoid disposal costs and impacts at home, there was a significant increase of plastic waste shipments to other countries instead of China. As Malaysia's Environment Minister stated (https://recyclinginternational.com/business/plastic-waste-ban/?utm\_source=nieuwsbrief& utm\_medium=email&utm\_campaign=05/29/2019&goal=0\_978429473f-6b13e26c27-222393577): "Garbage is traded under the pretext of recycling." The executive director of the New Haven Solid Waste and Recycling Authority agreed (https://ctmirror.org/2020/03/08/new-haven-searching-for-a-fix-to-its-broken-recyclingprogram/): "Ninety percent of our stuff was going over to China. They were taking all of our plastics, cardboard, paper, you name it. We were in essence shipping them our garbage."

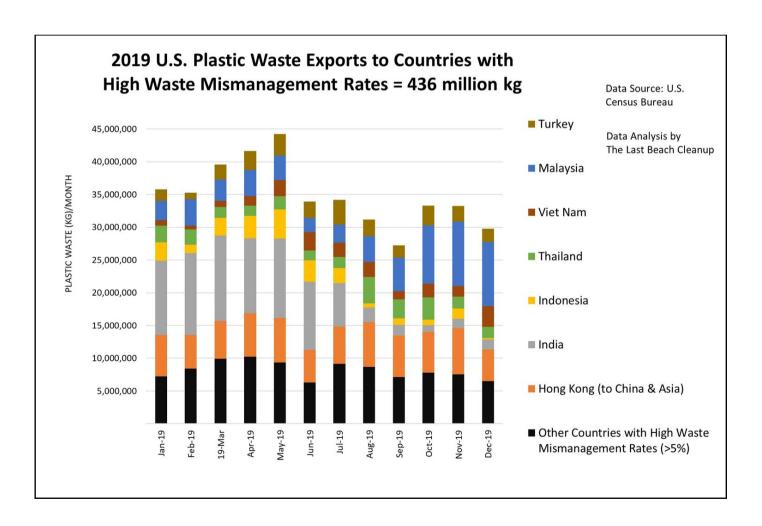
One year ago, we published "157,000 Shipping Containers of U.S. Plastic Waste Exported to Countries with Poor Waste Management in 2018 (https://www.plasticpollutioncoalition.org /blog/2019/3/6/157000-shipping-containers-of-us-plastic-waste-exported-to-countries-with-poor-waste-management-in-2018)" to quantify the amount of U.S. plastic waste exports and document the harms that were being caused in other countries. Over the past year, we called for an end to this irresponsible method of handling of our nation's plastic waste and asked U.S. waste companies and cities to stop exporting it.

Now we report that progress was made in 2019 in reducing U.S. plastic waste exports down to 88,000 shipping containers to countries with poor waste management. Much of the reduction was due to the effective enactment of a plastic waste import ban by India in August 2019. Another positive trend has been an increase in public awareness and opposition to this irresponsible practice and commitments from some waste/recycling companies and communities to stop exporting. But we've also learned that the social, environmental and economic harms caused by plastic waste exports in developing countries are even worse than we knew a year ago. In addition, the significant carbon emissions from the sea freight of exporting all U.S. plastic waste around the world have been overlooked while contributing to climate change.

As we started 2020, several nations continued to be flooded with U.S. plastic waste and we had hit a plateau in reducing plastic waste exports. Figure 1 shows that the U.S. exported 436 million kg in 2019 and is still exporting over 5,600 shipping containers (30 million kg) of plastic waste every month to countries with high waste mismanagement. That means about 225 large 20-ft (TEU (https://www.flexport.com/glossary/twenty-foot-equivalent-unit)) shipping containers per day landed in countries without adequate environmental, health, safety and labor laws to be processed by "recyclers" who provide no proof of what happens to the imported plastic waste.

The actual amount of U.S. plastic waste that ends in countries with high waste mismanagement may be even higher because the U.S. exports millions of kgs of plastic waste to countries like Canada and South Korea who may re-export U.S. plastic waste to other countries. Figure 1 shows that as plastic waste exports to India declined, exports to Malaysia dramatically increased, more than tripling from 3 million kg/month in January 2019 to 9.8 million kg/month in December 2019.

Figure 1 – 2019 U.S. Plastic Waste Exports to Countries with High Waste Mismanagement Rates



#### **Data Sources:**

- 1. U.S. Plastic Waste Exports (U.S. Census Bureau data (https://usatrade.census.gov/))
- 2. Country Waste Mismanagement Rates (Jambeck et. al, 2015)

(https://jambeck.engr.uga.edu/landplasticinput)). In this assessment, high waste mismanagement rates are considered 5% and larger.

#### **More Harms and New Concerns Exposed**

In the past year, <u>investigations and reports</u> (https://www.lastbeachcleanup.org/plastic-waste-exports) have exposed more harms and new concerns:

- 1. Food chain contamination: As the BBC reported in November 2019 (https://www-bbc-co-uk.cdn.ampproject.org/c/s/www.bbc.co.uk/news/amp/science-environment-50392807): "the burning of plastic waste in Indonesia, much of which has been sent there by the West, is poisoning the food chain. Environmental group IPEN found (https://ipen.org/documents/plastic-waste-poisons-indonesia-food-chain), in one East Java village, toxic dioxins in chicken eggs 70 times the level allowed by European safety standards."
- Harm to domestic waste collection and recycling system development in countries that need it most. In June 2019, the Guardian USA reported (https://www.theguardian.com/us-news/2019/jun/17/recycled-plastic-america-globalcrisis?CMP=Share\_iOSApp\_Other) that "a surge in foreign waste shipments is disrupting efforts to handle locally generated plastics" in Turkey, a country with a 16% waste mismanagement and less than 1% recycling rate (https://science.sciencemag.org/content /347/6223/768). As an Istanbul recycler stated: "I want to tell people in U.S. this: recycle in your own yard. Don't bring down our income and put us all in danger of hunger." As Malaysia's Prime Minister stated (https://www.washingtonpost.com/world/asia pacific /malaysias-mahathir-tells-rich-nations-to-stop-dumping-their-plastic-on-poor-countries /2019/05/30/29b99a32-82b5-11e9-95a9-e2c830afe24f story.html): "We don't need your waste because our own waste is enough to give us problems." The mayor of a Philippine town (https://www.theguardian.com/global-development/2019/jul/08/waste-recyclingsmell-pollution-philippines-plastic-city) flooded with plastic waste imports said: "I think we have enough waste in the country to process, reuse and recycle. We don't need waste from abroad." In Indonesia, recycling businesses prefer to process imported plastic waste (https://www.channelnewsasia.com/news/cnainsider/indonesia-stands-crossroads-wastecrisis-plastics-problem-12564234) instead of investing in collection of domestic plastic waste. Proving the point, industrialized South Korea recently restricted import of PET bottle plastic waste (https://resource-recycling.com/recycling/2020/03/10/south-korea-to-enactimport-restrictions/) in order to promote collection and recycling of domestic PET in their own country.
- 3. Health and safety impacts to workers and communities: The Center for Public Integrity showed evidence (https://publicintegrity.org/environment/pollution/pushing-plastic/americas-grungy-recycled-plastic-is-creating-wastelands-in-asia/) of plastic packaging labeled "Made in USA" being burned and dumped in Malaysia. Burning of plastic is causing breathing problems (https://pulitzercenter.org/reporting/plastic-travels-8000-miles-global-crisis-recycling) in residents who live nearby facilities in Malaysia. A village in

Indonesia is being buried (https://www.channelnewsasia.com/news/asia/plastic-waste-recycling-indonesia-bangun-environment-11688000) by plastic waste imports. The Guardian reports (https://www.theguardian.com/global-development/2019/jul/08/waste-recycling-smell-pollution-philippines-plastic-city) that in Valenzuela City, Philippines residents blame recycling plants for pungent smells and respiratory illnesses.

- **Global plastic waste shell game:** As some countries restrict imports, there are reports of exporters and brokers mislabeling waste (https://resource-recycling.com /recycling/2018/12/04/traders-fudge-paperwork-to-skirt-import-limits/) and routing it through Hong Kong to avoid traceability. The Malaysian government found that brokers (https://www.thestar.com.my/news/nation/2019/05/29/cap-ban-all-plastic-waste-imports/) have been falsifying declaration forms by using other Harmonized System (HS) codes to bring in plastic scraps. As the South China Morning Post reported (https://www.scmp.com /news/hong-kong/health-environment/article/3047231/hong-kong-green-groups-demandaction-after) in January 2020, "Hong Kong is one of biggest re-exporters of waste after mainland China stopped importing it." While Hong Kong itself has very limited plastic recycling capacity, it has become an intermediate port that enables more shipments into Asia, both legal and illegally. The re-export step creates confusion in the traceability of plastic waste. Environmental groups in Hong Kong (https://www.scmp.com/news/hongkong/health-environment/article/3047231/hong-kong-green-groups-demand-action-after) are calling on authorities to not accept plastic waste that is not destined for reprocessing there. Even when illegal waste is found, returning the waste to the country of origin is problematic. In October 2019, the Basel Action Network reported (https://www.ban.org /news/2019/10/28/global-waste-shell-game-returned-illegal-waste-shipments-from-usdiverted-from-indonesia-to-other-asian-countries) that illegal U.S. waste shipments that were supposed to be returned to their U.S. senders were instead shipped to India, Thailand, South Korea, and Vietnam. Inspection of paper imports identified illegal plastic waste hidden in the bales (https://www.breakfreefromplastic.org/wp-content/uploads /2019/04/Discarded-Report-April-22-pages.pdf).
- **5. Potential transmission from post-consumer plastic waste:** Stored piles of plastic waste and manual sorting of post-consumer waste are creating risks for disease and virus transmission:
  - a. Plastic waste piles: The Tamil Nadu (India) Health Secretary said that plastic waste (https://www.thenewsminute.com/article/plastic-waste-helps-dengue-mosquito-breed-says-tn-health-secy-70349) is one of the reasons for mosquito breeding that is causing an increasing number of dengue fever cases. The city of Laredo, Texas sent collected recyclable materials directly to landfill (https://www.lmtonline.com/local/article/Laredo-s-recyclables-went-to-landfill-in-January-15134368.php?utm\_campaign=CMS%20Sharing%20Tools%20(Desktop)& utm\_source=t.co&utm\_medium=referral) over concerns that storage of materials at the recycling center posed a risk to community health.

Manual sorting: The CDC advises (https://www.cdc.gov/coronavirus/2019ncov/hcp/guidance-prevent-spread.html) that people with the coronavirus should not share dishes and drinking glasses and their waste products should be disposed. But the WHO states that "Some people become infected but don't develop any symptoms and don't feel unwell (https://www.who.int/news-room/g-a-detail/g-a-coronaviruses)." The WHO also states that coronavirus can live on plastic surfaces for "up to several days. (https://www.who.int/news-room/g-a-detail/g-a-coronaviruses)" While a direct link has not yet been proven, it is logical to reason that post-consumer waste may pose a potential health risk to both U.S. and foreign workers that manually sort collected materials from people who are unaware that they have the virus. The risk is particularly acute in poor countries where workers lack health and safety equipment. At the time of this update in early April, concern over coronavirus spread has led to the closure (https://resource-recycling.com/recycling/2020/03/24/virusleads-to-program-changes-across-north-america/?utm\_medium=email& utm\_source=internal&utm\_campaign=March+24+RR) of some municipal recycling curbside and community collection programs to protect workers, including throughout Orange County, California (https://www.latimes.com/socal/dailypilot/news/story/2020-04-03/recyclables-picked-up-but-take-to-dump-as-wastehaulers-enact-coronavirus-restrictions). The situation is still unfolding and the latest news is being reported by Waste Dive (https://www.wastedive.com/news/coronavirusus-waste-recycling-disruption-tracker/574324/).

#### Tracing the Paths of U.S. Plastic Waste Flows

Figure 2 shows the 2019 exports of plastic waste by origination and destination for the fifteen states with largest amount of plastic waste exports.

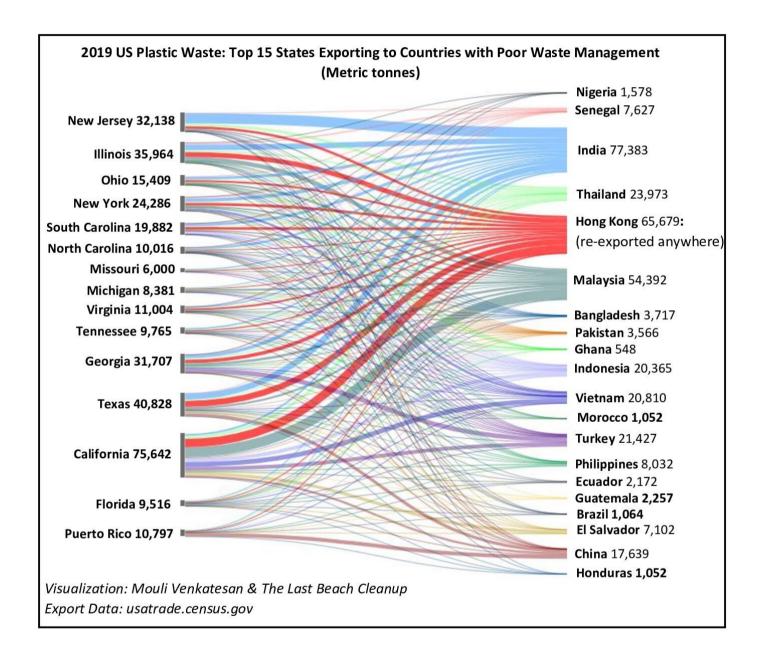
**California**: With ports on the West Coast and a large population, California shipped the most plastic waste to countries with high waste mismanagement: 78 million kg (14,675 TEU shipping containers). This included 6.6 million kg (1233 TEU shipping containers) to Turkey – a nautical distance of 11,301 miles away (http://ports.com/sea-route/port-of-los-angeles,united-states/port-of-istanbul,turkey/). The carbon emissions of sea freight of California's plastic waste exports to Turkey alone are equal to the annual carbon emissions of 364 <u>U.S. cars</u> (https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle). (See carbon emissions estimation below).

**Northeast States**: Prior to the enactment of India's ban on plastic waste imports on August 30, 2019, states in the Northeast U.S. were shipping millions of kg each month to the country. At the peak in May 2019, New Jersey shipped 3 million kg to India in one month. By December 2019, this declined 87% to 382,000 kg.

**Southeast States**: While <u>Southeast U.S. states are cited as a top location for U.S. domestic</u>

<u>plastic recycling</u> (https://www.serdc.org/), the U.S. Census Bureau data shows that these states are major exporters of plastic waste to countries with high waste mismanagement rates. Georgia, South Carolina, North Carolina, Alabama and Tennessee exported 80 million kg of plastic waste to countries with poor waste management in 2019 and did not recycle that plastic waste in their states.

Figure 2: Top 15 U.S. States Exporting Plastic Waste to Countries with Poor Waste Management in 2019

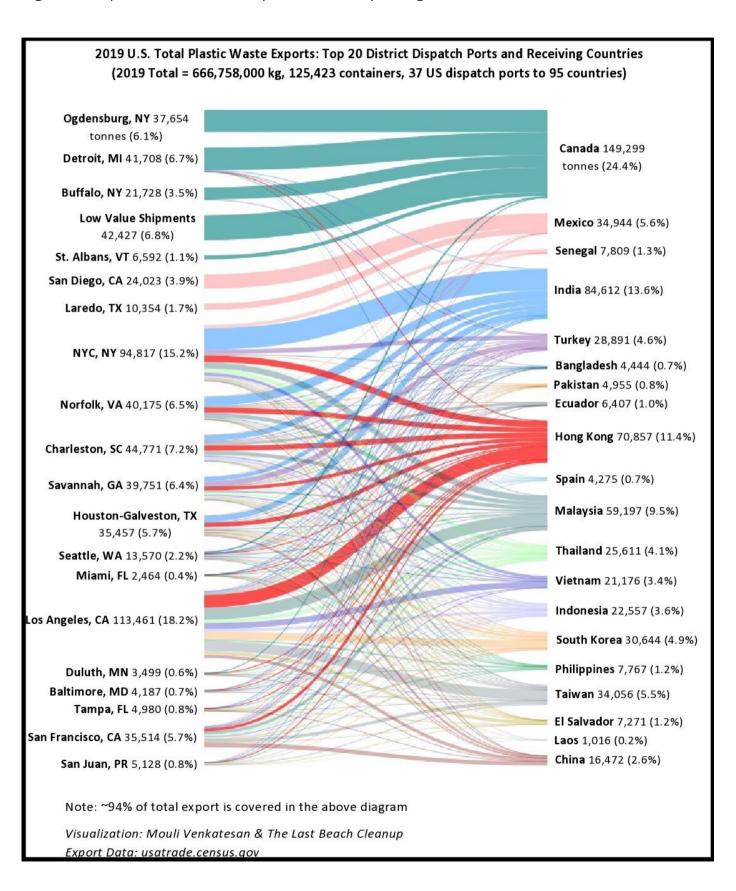


# The Forgotten Carbon Footprint of Plastic Recycling: Sea Freight and Long-Distance Trucking Emissions

Commonly cited metrics for carbon emission savings from recycling post-consumer plastic compared to using other materials or new plastic overlook two major sources of carbon emissions: sea freight and long-distance trucking. The <u>Association of Plastic Recycler's Life Cycle Impacts of Postconsumer Recycled Resins</u> (https://plasticsrecycling.org/images /apr/2018-APR-Recycled-Resin-Report.pdf) study is based on trucking and rail distances less than 500 miles for moving bales to processors.

Figure 3 shows the top 20 U.S. district dispatch ports exporting plastic waste in 2019. The carbon emissions from the sea freight can be credibly estimated through use of an existing sea freight carbon emissions calculator. While long distance trucking of the plastic waste from inland states to dispatch ports also creates carbon emissions, it is not possible to estimate those emissions due to lack of land logistics and route data.

Figure 3: Top 20 U.S. District Dispatch Ports Exporting Plastic Waste in 2019



**Sea Freight Emissions**: Employing the <u>Kuehne and Nagel Sea Freight Carbon Calculator</u> (https://www.kn-portal.com/seafreight/seafreight\_overview/environment /seafreight\_carbon\_calculator/), the carbon emissions of dispatch port-to-receiving country port were made for the 451 shipping routes in 2019. For example, the carbon emissions of shipping 4,030 shipping containers from Los Angeles to Hong Kong was 3.45 million kg which is equal to the emissions from 750 cars for an entire year (based on the <u>U.S. EPA's estimate of 4600 kg of CO2/car/year</u> (https://www.epa.gov/greenvehicles/greenhouse-gasemissions-typical-passenger-vehicle)). Overland transport to Canada and Mexico from nearby states and shipments less than 1 full TEU shipping container were excluded from the carbon emissions analysis.

The total sea freight carbon emissions from 2019 U.S. plastic waste exports is estimated to be 120 million kg which is equal to the emissions from 26,000 cars per year. It should be noted that while import trade from Asia enables low cost return shipping via empty containers, the "carbon cost" of adding freight weight to ships is not free or low carbon. Added tonnage requires additional fuel for transporting the freight weight.

#### **Diversion Goals Are Pushing Plastic Waste Exports and Freight Carbon Emissions**

U.S. states and the Federal Government (https://www.epa.gov/greeningepa/waste-diversion-epa) have been promoting "diversion" of waste from landfills for decades. The pressure to "divert" plastic waste appears to be a driver for exporting plastic waste since the U.S. lacks domestic plastic reprocessing capacity. Even in states where secure landfills are available with long term capacity at low cost, plastic waste is being trucked long distances to ports and shipped to countries with poor waste management to meet diversion goals. Too often, the media supports (https://phys.org/news/2020-03-recycling-broken.html) the myth that "diversion" is an admirable goal and achievement without evaluating the final fate and destination of the collected waste.

For example, the state of <u>California's previous 50% waste diversion goal</u> (https://www.calrecycle.ca.gov/stateagency/requirements/lawsregs) and new "<u>75 Percent Initiative</u> (https://www.calrecycle.ca.gov/75Percent/)" put pressure on cities to divert waste from landfills and continue exporting plastic waste because California is <u>not equipped to reprocess</u> (http://www.plasticsmarkets.org/jsfcode/srvyfiles/wd\_151/pru0818\_datasort\_at-stake-beyond-pet-hdpe-bottles\_1.pdf) its own plastic waste. Instead of safely disposing of waste in the <u>nearby Buckeye landfill with a 100+ year capacity</u>, (https://www.azmag.gov/Portals/0/Documents/MagContent/SWAC\_2017\_Solid-Waste-Management-Facilities-Summary.pdf?ver=2019-03-14-164324-820) the City of Phoenix, Arizona <u>exported waste to Indonesia</u> (https://kjzz.org/content/1438396/after-raising-water-rates-phoenix-raises-trash-recycling-fees) to meet the <u>city's diversion goal of 40%</u>. (https://www.wastedive.com/news/phoenix-rate-hike-cut-composting-recycling/567139/)

It is time for every state and community to examine the unintended, harmful consequences

of their diversion goals and revise legislation to ensure responsible management of each state's waste. Actions to find markets for discarded plastic materials collected in U.S. communities should not negatively impact communities in other countries. The carbon emissions of waste thousands of miles around the world also cannot be overlooked.

#### **Public Sentiment to Stop Plastic Waste Exports Grows**

There has been good news over the past year as some U.S. waste collection companies and communities have ended plastic waste exports to countries with high waste mismanagement. In 2019, Waste Management adopted a corporate policy (http://rorr.btownwebclients.com/wp-content/uploads/2019/09/wm\_01080-Plastic-Export-Policy\_r1.pdf) to ship post-consumer plastics to only North American plastic recyclers/processors. Casella Waste Systems, the nation's fifth largest waste collection and sortation company, no longer exports residential plastics (https://www.wastedive.com/news/cfo-large-us-recyclers-export-plastic/554857/).

As investigations and reports showed that plastic waste exports were dumped or burned after being shipped thousands of miles, the awareness has led to growing public and professional sentiment against the offshoring practice. As the <u>Cape May Herald reported</u> (https://www.capemaycountyherald.com/news/environment/article\_bc091ff4-4216-11ea-a802-4b162aca0ddd.html?utm\_source=Sailthru&utm\_medium=email& utm\_campaign=Issue:%202020-01-29%20Waste%20Dive:%20Recycling %20%5Bissue:25389%5D&utm\_term=Waste%20Dive:%20Recycling), "Even staunch advocates of recycling began to question how this made any environmental or economic sense."

According to chemical industry experts (https://s3-eu-west-1.amazonaws.com/cjp-rbi-icis/wp-content/uploads/sites/7/2019/11/28132354/Japan-Conference-NEW.pdf) at Independent Commodity Intelligence Services (ICIS), "China is no longer a route for recycling and the expectation is that countries now deal with their own waste." A representative of the Solid Waste Association of North America (SWANA) stated (https://www.theatlantic.com/technology/archive/2019/03/china-has-stopped-accepting-our-trash/584131/): "We're producing a lot of waste ourselves, and we should take care of it ourselves."

#### "We Cannot Turn a Blind Eye to the Hard Truths Being Uncovered"

Faced with the knowledge that their plastic waste could harm communities in other countries, responsible U.S. communities are choosing to stop exports:

Cordova, Alaska: The Copper River Watershed Project has stopped collecting plastic waste (https://www.thecordovatimes.com/2020/03/09/commentary-crwp-plastic-recycling-program-in-jeopardy/) because "we cannot turn a blind eye to the hard truths being uncovered. By continuing to recycle plastic, evidence strongly suggests

we as a nation may actually do more harm than good because we are simply passing the problem onto countries less fortunate than ours and we are avoiding the inevitable changes society will need to make if we really want to do what is best for the environment."

- Erie, Pennsylvania: The city now instructs residents to only recycle #1 and #2 plastic bottles and jugs, stating (https://cityof.erie.pa.us/government/department-of-public-works/refuse/): "We cannot collect an item for recycling, unless we have an end user who is willing to purchase and recycle that item. China used to accept most of the #3, 4, 5, and 7 plastics, but it turns out that most of these plastics were not actually being recycled. They were mostly being burned for fuel."
- San Carlos, California: ReThink Waste, a public agency that operates the Shoreway Material Recovery Facility (MRF) in San Carlos, California, <u>publishes a traceable account</u> (https://rethinkwaste.org/wp-content/uploads/2019/10/The-Hard-Facts-About-Plastic.pdf) of the destination of collected plastics and does not export to countries with poor waste management and states that collected plastics #3-7 material is sent to landfill.

#### Plastic Waste Trade Lacks Transparency and Accountability

But not all waste/recycling companies and communities have stopped exporting plastic waste to countries with poor waste management. Some companies and communities are aware that their waste is being shipped to poor countries and others employ brokers as middlemen in the process. Use of brokers presents a challenge to reducing plastic waste exports to countries with poor waste management because brokers are financially incentivized to maximize shipments and the original waste generators can claim that they don't know where their waste is going and tell residents that it is "recycled." **Use of brokers to trade waste means that contracts can change hands several times between the source and the destination without accountability** (https://www.cbc.ca/news/canada/waste-recyclables-malaysia-philippines-cbc-explains-1.5153399). States and cities do not require that brokers or MRFs report the final destination or fate of collected materials, including final destination countries for plastic waste exports.

As a representative from <u>a major waste company stated</u> (https://www.wpr.org/recycling-more-complicated-it-used-be), "Plastics that are sold to brokers have the potential to be sent overseas, as well as to Canada, as the broker has the ability to do what they see fit with the material." While some brokers may operate legitimate export businesses, the lack of transparency and accountability creates an open playing field for unethical business practices.

In the comprehensive survey of the 367 MRFs in the U.S. performed for <u>Greenpeace's Circular Claims Fall Flat</u> (https://www.greenpeace.org/usa/research/report-circular-claims-fall-flat/) report, some MRFs stated that materials collected in their communities are

shipped to countries with poor waste management or to brokers. For example:

- Albuquerque, New Mexico: Friedman Recycling is exporting collected materials to <u>Vietnam, India, Indonesia, and Malaysia</u> (https://www.durangotelegraph.com/news/top-stories/sword-fight/).
- San Diego, California: <u>City representative states about local recycler</u> (https://www.lajollalight.com/news/story/2019-08-22/la-jolla-has-bin-why-recycling-may-be-headed-for-the-scrap-heap): "If they can't find a domestic buyer for a bale of cardboard or plastic bottles, they're going look anywhere else in the world Vietnam, Indonesia, other parts of Asia."
- Sacramento, California: Cal-Waste Recovery Systems "has brokers looking for new markets, like Mexico, Vietnam and wherever it can ship (https://www.waste360.com/recycling/what-s-california-s-true-recycling-story)."
- Rochester, Massachusetts: The material collected at Zero Waste Solutions new MRF will reportedly be sold to domestic markets as well as to Canada, Thailand, Pakistan, India, Vietnam, Indonesia, Turkey and China (https://www.wastedive.com/news/zero-waste-solutions-mrf-opening-massachusetts-disposal-crisis/545996/).
- **Newton, Connecticut**: City representative stated that collected materials "goes to whichever markets will take it. (https://www.newtownbee.com/05132019/publicworks-boss-pledges-recycling-not-being-incinerated/)"
- Charlotte, North Carolina: The <a href="local newspaper reports">local newspaper reports</a>
  (https://www.charlotteobserver.com/news/politics-government
  /article213849124.html) that "the county and its contractor, Republic Services,
  sometimes give away bales of plastic and mixed paper or even pay countries to take
  them." The county's solid waste director states: "I have no guarantee what someone
  will do with it once they get it. Where it goes is a bit out of our control sometimes. If it
  stays in this country, we know it will be taken care of. When it goes to a different
  country, they aren't as environmentally safe. Whether they recycle it or landfill it or
  burn it, we don't know."

#### **Illegal Plastic Waste Trade Grows**

Reports of illegal plastic waste trade and unethical business practices grew in 2019. By January 2020, Malaysia announced that it had closed more than 200 illegal recycling factories (https://news.sky.com/story/malaysia-sends-plastic-waste-back-to-uk-insisting-it-is-not-worlds-rubbish-dump-11913156). Flooded with plastic waste exports for more than a year, countries increased inspection and returned more plastic waste to exporting countries. But the lack of traceability made this difficult to do (https://timesofindia.indiatimes.com/city/kolkata/indonesia-rejects-india-gets-38-loads-of-hazardous-waste/articleshow/72340312.cms). Throughout Asia, there are many ports of

<u>entry</u> (https://time.com/5598032/southeast-asia-plastic-waste-malaysia-philippines/) that make it difficult for countries to monitor what is actually in shipping containers.

Examples of illegal trade activity and return of plastic waste:

- Philippines: Local authorities discovered illegal mixed plastic waste shipped from Hong Kong (https://news.mb.com.ph/2019/05/24/ecowaste-slams-attempt-to-dump-hong-kong-waste-to-ph/) and export it back to Hong Kong (May 2019). Sixty-nine containers of plastic waste were sent back to Canada (https://www.bbc.com/news/world-asia-48455440), after more than five years of debate (May 2019). The Department of Environment and Natural Resources reports (https://ph.news.yahoo.com/unwilling-dumpsite-not-just-canada-062807477.html) that Japan, South Korea, and Australia have also dumped illegal trash in the Philippines. In August 2019, illegal plastic waste that was to be returned to South Korea caught fire in an open dump (https://www.sunstar.com.ph/article/1818559).
- Malaysia: In May 2019, Malaysia announced that they are returning 3,000 tonnes of plastic waste to the countries of origin that shipped it (https://www.reuters.com/article/us-malaysia-waste/malaysia-to-send-3000-tonnes-of-plastic-waste-back-to-countries-of-origin-idUSKCN1SY0M7). Since the third quarter of 2019, Malaysia sent back 150 containers of plastic waste (https://news.sky.com/story/malaysia-sends-plastic-waste-back-to-uk-insisting-it-is-not-worlds-rubbish-dump-11913156). Greenpeace Italy found that 43 of 65 shipments (https://www.greenpeace.org/italy/storia/6874/traffico-illecito-di-rifiuti-tra-italia-e-malesia-ecco-cosa-abbiamo-scoperto/) were destined for Malaysia plants without permits to import and recycle foreign waste in 2019.
- Indonesia: In June 2019, Indonesia announced the return of plastic waste (https://en.antaranews.com/news/126845/indonesia-to-re-export-illegal-plastic-waste#.XP-5Fngf2GY.twitter). In September 2019, Indonesia announced the return of 547 shipping containers (https://www.brusselstimes.com/all-news/belgium-all-news/68834/indonesia-to-ship-hazardous-or-improperly-sorted-waste-back-to-belgium-europe/) to European countries. Civil society groups in East Java, Indonesia have called on five countries (https://www.thejakartapost.com/news/2019/04/09 /developed-countries-urged-to-pick-up-brantas-river-trash.html) (including the U.S.) to pick up the trash illegally dumped along the Brantas River. In October 2019, 87 containers of plastic waste were illegally exported (https://mothership.sg/2019/10 /news-indonesia-singaporeans-illegal-plastic-waste-import/) from Hong Kong and other countries into Indonesia.
- **Thailand**: Government inspectors found poor grade (https://www.bangkokpost.com/thailand/general/1477693/fears-grow-over-waste-imports), non-recyclable plastic waste sent from 35 countries.

- **Cambodia:** Seventy containers of illegal plastic waste (https://www.cbc.ca/news/politics/cambodia-canada-plastic-waste-1.5215358) from the U.S. were discovered in Cambodia in July 2019.
- **Europe:** In Bulgaria and Romania, there are <u>reports of imported waste being illegally burned</u> (https://www.intellinews.com/balkan-blog-a-poor-solution-to-waste-disposal-178597/). 220 tons of 'recycled' waste from Britain (https://infosurhoy.com/top-stories /220-tons-of-recycled-waste-from-britain-is-found-dumped-in-a-warehouse-in-poland/) was found dumped in a warehouse in Poland.

#### "It's Our Waste": Other Countries Take Responsibility

There are compelling reasons for the U.S. and other countries to stop exporting plastic to countries with poor waste management, including reducing plastic pollution to the ocean and freight carbon emissions, increasing the focus on development of domestic waste management and recycling systems in developing countries and spurring domestic innovations to responsibly address plastic use and waste.

Other industrialized countries faced with similar plastic waste and export challenges are moving to take responsibility for their plastic waste:

- Australia: In August 2019, Australia was the first country to commit to ending plastics waste exports. Australia's Prime Minister stated: "It's our waste, and it's our responsibility (https://www.abc.net.au/news/2019-08-09/coag-meeting-prime-minister-premiers-plastic-waste-export-ban/11399402)." The Australian Government says (https://www.news.com.au/national/government-says-australia-will-no-longer-export-plastic-waste-from-july-1/video/58385223d506070fb4dbf117ebda27c8) it will no longer export plastic waste from July 1, 2020.
- **United Kingdom (UK)**: The <u>Environmental Bill 2020</u> (https://www.theguardian.com/environment/2020/jan/30/plastic-waste-exports-targeted-in-new-environment-bill) would restrict exports of plastic waste to non-OECD countries for recycling.
- European Union (EU) Circular Economy Plan: Announced on March 11, 2020, <a href="mailto:the-number to">the-number to</a> (https://ec.europa.eu/commission/presscorner/detail/en/QANDA\_20\_419) "restrict exports of waste that cause negative environmental and health impacts in third countries by focusing on countries of destination, problematic waste streams and operations."
- Basel Amendment agreed to by 184 countries: In May 2019, the Parties (countries) to the United Nations Basel Convention adopted the Plastics Waste Amendment (http://www.basel.int/Portals/4/download.aspx?d=UNEP-CHW-PUB-Factsheets-Actions-PlasticWaste-2020.English.pdf) to "to specifically include plastic waste in a legally-binding framework which will make global trade in plastic waste more transparent and better regulated." According to the head of the UN organization

(https://www.plasticsnews.com/news/un-exec-basel-treaty-bigger-deal-plastics-china-ban?utm\_source=pn-sustainability-report&utm\_medium=email&utm\_campaign=20200220&utm\_content=article1-headline) that administers the Basel Convention, the Basel Amendment is intended to keep more recycling of plastic scrap in the countries where it is created.

• Canada: In February 2020, a bill was introduced to the House of Commons (https://www.bradfordtoday.ca/local-news/davidsons-private-member-bill-seeks-to-ban-export-of-non-recyclable-plastics-to-foreign-countries-2077530) to prohibit the export of non-recyclable plastic waste from Canada to foreign countries. The Member of Parliament introducing the bill stated: "We have the means and capability to ensure the proper disposal of plastic waste right here in our own country, and we shouldn't be exporting it for someone else to deal with." But while Canada is a signatory to the Basel Convention, the country recently requested extra time to comply with the treaty (https://www.cbc.ca/news/politics/plastic-waste-basel-convention-canada-1.5495920), which will be enforced starting 2021.

#### The Responsible Response is to Stop Offshoring Plastic Waste

Now that the curtain has been pulled back and the harms of plastic waste exports have been exposed, the responsible response is to stop. While exporting may help U.S. communities meet "diversion goals" and avoid the problem and cost of disposing their plastic waste to landfill or incineration, there's no denying that we're offshoring the problem, harming other countries and making a carbon intensive, long distance contribution to the plastic pollution in the ocean we share.

Firm and effective bans are <u>not yet in place in many countries</u> (https://www.bangkokpost.com/thailand/general/1846429/waste-plastic-imports-to-bebanned) and the end of harmful plastic waste imports is not certain as illegal trade flourishes. We cannot expect other countries to restrict and inspect our harmful plastic waste exports or expect them to stop the illegal waste trade at the receiving end. After conducting an investigation of exports to Malaysia, <u>Greenpeace Italy stated</u> (https://www.theguardian.com/world/2020/feb/10/italy-told-to-stop-using-malaysia-asplastics-dumping-ground-greenpeace-landfill): "We know that only a small number of containers leaving Italian ports are properly checked. A civilised country cannot close its eyes and dump the problem on a less developed nation." In the Philippines, <u>Greenpeace and EcoWaste Coalition</u> (https://www.philstar.com/headlines/2020/03/04/1998151/policygaps-leave-philippines-wide-open-foreign-trash-report) identified policy loopholes in Philippine laws as an enabler of illegal and 'legitimized' waste trade.

The most effective way to stop the harmful and illegal plastic waste trade is to stop loading U.S. plastic waste onto ships for export.

While the U.S. and other countries have been exporting plastic waste to countries which are

ill-equipped to manage it, those same countries are being blamed as the leading polluters of plastics to the ocean. The <u>Save Our Seas 2.0 Bill largely blames Asian countries</u> (https://www.plasticsnews.com/news/sos-marine-plastic-bill-moves-even-key-critic-calls-it-inadequate) for plastic pollution to the ocean and does nothing to stop plastic waste exports to those countries. The recent addition of some types of plastic waste to the Basel Convention will not stop the flow of U.S. plastic waste to countries who are not equipped to safely and securely manage it due to illegal waste trade and non-ratification and <u>opposition by the current U.S. Federal Administration</u> (https://www.wastedive.com/news/scrap-collector-us-opposes-basel-plastic-amendment-oecd/559106/). <u>As the *Guardian* reported</u> (https://www.theguardian.com/environment/2019/may/10/nearly-all-the-worlds-countries-sign-plastic-waste-deal-except-us) in May 2019, "The US is not a party to the convention so it did not have a vote, but attendees at the meeting said the country argued against the change, saying officials didn't understand the repercussions it would have on the plastic waste trade."

#### The Right SOS: Stop Our Ships

There now is proposed legislation in the U.S. Congress (https://www.ecowatch.com /break-free-from-plastic-pollution-act-2645123417.html?rebelltitem=4#rebelltitem4) to stop plastic waste exports to countries with poor waste management. The plastic waste export restrictions in the "Break Free From Plastic Pollution Act of 2020 (https://www.congress.gov/bill/116th-congress/house-bill/5845)," championed by Senator Udall and Representative Lowenthal, are a major step towards taking responsibility for our plastic waste and reducing long-distance plastic pollution to the ocean, as well as here at home. Representative Lowenthal stated (https://en.brinkwire.com/science/new-bill-would-require-producers-to-collect-and-recycle-their-own-plastic-waste/) that "he was especially proud the bill would prevent plastic waste being exported to less developed countries where it ends up in landfills and waterways, harming human health and endangering wildlife."

The harms of plastic waste exports to other countries and sea freight carbon emissions are proven. Our response is a measure of our integrity in dealing other countries and our true concern for the ocean and climate. At the federal, state and local levels, we must bring an end to irresponsible, damaging plastic waste exports.

More Facts & Figures: U.S. Plastic Waste Exports from 2010 to 2019

Table 1 summarizes the latest trends in the U.S. plastic waste export and recent news related to plastic waste import bans.

**Table 1 – Trends in U.S. Plastic Waste Exports and Latest News (citations here** (/s/Why-is-the-US-Still-Offshoring-Post-Consumer-Plastic-Waste-Around-the-World\_.pdf))

Country: (Waste Mismanagement Rate)	U.S. Plastic Waste Exports (million kg)		2019 Trends and Latest News	
Nate	2010 – 2018	2019		
Bangladesh (87%)	4	4.5	Increase from 2018. Decline at end of year. No import ban or restrictions announced.	
China (74%)	7,678	16.9	Overall decline. Plastic waste import ban continues. Potential new ban on imported recycled pellets on the horizon.	
Hong Kong (74%) (Re-exports to Asia)	4,606	72.7	Increase: Plastic waste is re-exported throughout Asia without traceability	
India (85%)	892	85.5	Significant monthly decline from 12.5 to 1.5 million kg/month.  Due to enactment & enforcement of import ban.	
Indonesia (81%)	370	24.3	Major decline at end of year. May be due to new import restrictions. Customs inspections have been tightened; and hundreds of containers carrying contaminated scrap have been denied entry.	
Malaysia (55%)	535	60.6	Major increase throughout 2019 to 9.8 mil kg in December 2019. Import bans have not been effective.	
Pakistan (86%)	4.0	5.0	Increase from 2018. Lack of import restrictions and local regulations for safe recycling indicate that imports and harms could increase.	
Philippines (81%)	15	7.9	Continued high import level from 2018. EcoWaste Coalition calls on government to ban importation of plastic waste.	
Senegal (82%)	0	7.8	Huge increase in styrene plastic waste exports with unknown destination or use. Senegal has a significant plastic pollution crisis.	
Thailand (73%)	178	27.2	Higher import levels from 2018. Current import ban on plastic waste not effective. 2021 import ban announced.	
Turkey (16%)	51	29.2	Higher import levels from 2018. No import ban on the horizon. Turkey processes imported plastic waste instead of domestic recycling.	
Vietnam (86%)	447	3.2	Continued high level of plastic waste imports. Plastic waste import ban will not be implemented until 2025.	

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