Prepare for Round Three of the Plastic Waste Trade War

After China closed its doors to scrap plastic imports in 2017 and Westerners scrambled to find other export targets, diplomats chewed on a proposal to add mixed plastic waste to a list of materials that require the receipt of a country’s informed acceptance of this type of trade under the Basel Convention.

By Doug Woodring & Trish Hyde

The heady mix of plastic waste, global damage, and national interest has already sparked two sparring matches, and another is set to begin. At the heart of the issue is that much of the planet relies heavily on global trade—exporting and importing what we value. The trading of plastic waste can fit these criteria. However, the exported value often comes with a toxic cost. Finding the value in circular economy trading can help negate the need for some of these plastic waste trade wars.

The increased inability to easily move commodities, which properly processed plastic resources are, is part of the reason for the world’s plastic pollution problem. The other significant issue is the lack of local capacity for proper collection, sorting, and basic processing for material recovery, across communities of all levels of economic advancement, including both Hong Kong and Singapore, which are two of the wealthiest cities in the world.

In Round 1 of the plastic pollution fight, China announced its intention to cease the acceptance of scrap plastic imports in early 2017. Western industry insiders said it would never happen. They trusted market forces, expecting that such a ban would be viewed as an economic trade barrier.

This was a grave miscalculation. We now know China’s application to the World Trade Organization also opened the door to human and environmental damage. This created the need to manage and limit the importation of plastic waste, where up to 40 percent of a bale shipped to China was unrecoverable, due to contamination and poor material quality.

In 2018, China formalized its plan, and ceased importing a number of materials, for recycling, including all unprocessed plastic—leaving plastic exporting nations with enormous volumes of waste on their own front doors and declaring a plastic waste crisis. China's border closure was the modern day “shot heard around the world” in terms of Western countries and their abilities to easily offshore their domestic plastic waste liabilities. Lack of homegrown capacities and high labor costs helped to shut the door on value-adding opportunities for many developed markets, while “commodity traders” often grabbed the resources from domestic processors as the buyers in China paid more, for lower quality material.

With China's borders closed, Round 2 of the plastics challenge resulted in Western countries turning quickly to find new export markets. Malaysia, Thailand, Vietnam, and Indonesia became the targets. Joining legitimate and responsible processors of these resources was a groundswell of illegal and irresponsible businesses. Like China, these countries felt, and feared, the harsh impacts of poor quality, contaminated imported plastics which had nowhere to go except into the environment. Their relatively quick actions to slow plastic imports for recycling, following China’s lead, means most exporters did not find quick solutions for re-routing their previously China-bound exports.

Round 3 is on the way, as diplomats have been considering a proposal to add mixed plastic waste to a list of materials that require the receipt of a country’s informed acceptance of this type of trade under the Basel Convention. If successful, trading mixed plastic waste resources will
change from being business-led buying and selling to one of government determination. Plastic waste exporting countries will need the informed consent from recipient countries (like Malaysia, Thailand, Indonesia, or China) in order for importation to be approved.

A Shifting Problem: Sustainable Trade

These topics were among some of those addressed across the world both in Nairobi at the United Nations Environmental Assembly (UNEA) and at Plasticity Pacific in Fiji. Cutting across the localized need for solutions include the macro questions of whether recycling is really about sustainability, or if it’s a means for richer nations to shift a problem?

Today, the trade of plastic waste hides under the banner of doing environmental good at home without having to consider the impacts on recipient nations.

With the high publicity and visibility of plastic waste issues today, we all face much tougher questions than trying to decide which recycling bin to use for which type of material. We need plastic to maintain our modern lifestyles (think mobile phones, credit cards, auto parts, and medical equipment, among others), and the original concept behind recycling is still valid—-to continually reuse materials for the ongoing benefit of all. However, the mechanics of recycling are trapped in the Industrial Age where production was optimized with little thought for future consequence, while waste recovery facilities are frequently outdated and built for paper, glass, and metal.

Far from shunning the complexity of the issues, many businesses recognize the implications of pleading ignorance and instead have committed to being leaders in the solution, even if that solution has yet to be defined. Recycling for resource reuse is of paramount importance.

Given that no single company or nation can possibly reuse all consumed resources, trade is essential. Trade, however, needs to be responsible, and it needs to be the trading of resources that will be completely used and managed.

The challenge we face is not whether plastic waste resources should be moved between countries for economies of scale and reuse, but instead, it is the question of how do we shift from thought to action, from principle to practical, and from me to we?

From Me to We: Shifting the Focus

Over the past eight years we have held the Plasticity Forum around the world on the topic of plastic circular economies. We have engaged thousands of people from all parts of the value chain for industry-led, fit-for-purpose solutions. From this diverse and deep exploration, we offer some thoughts on solving the key question: How do we optimize value for plastic in its second life with localized processing while allowing the transfer of materials only if needed for creating
economies of scale from smaller markets to larger ones and transferring only value, instead of burden (waste).

1. **Continue the pressure:** With the disruptive forces already in play, countries that have been a dumping ground should continue putting pressure on waste-exporting nations so that only recovered plastic feedstock is exported. In other words, only high-quality, fit-for-purpose material that has a second life in the recipient country.

2. **Business focus on sustainable market opportunities:** One Plasticity alumnus recently said that, despite the fact that his business collects and processes used materials and then manufactures new goods for sale, his business is not that of a recycler. Rather, he says his business is a plastics engineering, design, and product manufacturer that happens to specialize in using recovered plastic.

   Like many entrepreneurs in this space, he starts with his customers, combining their needs with his strategic strengths to determine which profitable products to make and sell within the specialty market he serves (in this case, agricultural and aquaculture products where there is good market turnover and margin for profit).

   It is only after this analysis that he turns his mind to where he can source suitable waste plastic, its costs, and the processes needed to transform it. Interestingly, he found that his customers are a great source of the very waste plastic he needs.

3. **Collaborating for competitive advantage markets:** The market disruption currently being experienced globally is an opportunity for industries, countries, and regions to apply this thinking from above. Each group knows its manufacturing strengths and weaknesses and where it has strategic opportunity.

   The only part missing is determining where there are viable opportunities to replace virgin plastic with recovered plastic, in order to ensure clear pathways for plastic waste to be transformed into feedstock for reuse.

4. **Walking the talk:** Governments and businesses wield huge buying power through their own procurement. Adopting policies favouring recovered content, is a powerful demand catalyst to stimulate product development using recovered plastic.

5. **Extract value from all plastic:** There are some plastics (such as clean, clear PET) that are highly valuable as recovered plastic, yet there are many that, either through lack of volume or high contamination, are perceived as worthless.

   It is obvious that extracting valuable used plastic resources through collection, sorting, and processing should take priority over downcycling the materials.

Yet, the greater challenge is what to do with the rest—the dirty mixed plastics where it is hard to derive value. These materials can be converted from waste to energy, but increasingly entrepreneurs, scientists, and researchers are looking beyond the calorific value and using dirty plastic’s embedded characteristics; for example, extracting the aluminium from chip packets and using a processed form to create a higher-performing building aggregate. Chemical recycling is also a new opportunity which can yield a pure, high-quality polymer as a byproduct, without the contamination burdens with which some mechanical recycling processes contend.

6. **Innovative substitutes for non-recoverable hazardous plastics:** There are more than 43,000 types and combinations of plastics. While all are technically recoverable and reusable, it is simply not viable to do so for many of them with today’s technologies and economies of scale in sorting and collection. Where there is no value, and not even energy, the innovation challenge should be set globally to identify substitutes or recovery solutions. Over time, the “too-hard basket” of plastics will diminish.

7. **Engage in the conversation:** It is easy to want to blame others for the global plastic waste problem—should governments have done more, are community attitudes the cause, or are corporates ones at fault? The problem with the blame game is that, once started, the finger pointing rarely ends.

   Above all else, new collaborations and shared responsibility created across business sectors can help shift thought to action, embed principle to practice, and help change the focus from me to we.

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### ABOUT THE AUTHORS

Douglas Woodring is founder of Plasticity Forum (the global forum bringing about applied plastic circular economies) and founder of Ocean Recovery Alliance (a solutions-focused non-governmental organization dedicated to better oceans). He is a sustainability economist with more than 20 years of experience in business, finance, and circular economy across the globe but with deep roots in Asia where he is based.

Trish Hyde is founder of The Plastics Circle (a circular economy innovation and application firm) and founder of PlastX (a tech startup for businesses to buy the specific recovered plastics they need, direct from a community of paid collectors). She is an accomplished business leader and adviser with global knowledge and expertise in circular economies and operational performance.

Douglas and Trish invite readers to join industry leaders and influencers at the next world-leading action-based plastic circular economy forum—Plasticity Amsterdam, on June 19, 2019, in The Netherlands (www.plasticityforum.com).
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