



State of Recycling - July 2019

Recycling Update - Two Years After China's WTO Announcement

July marks two years since China announced to the World Trade Association (WTO) that it would ban imports of mixed paper and plastics beginning on January 1, 2018. While some industry leaders thought that it would be a fleeting action, others saw global change to recycling as imminent.

So – two years later, where are we?

Current Recycling Trends – a 2019 Snapshot

Not only did China implement its bans, they also announced a series of additional policy changes that have adversely affected market conditions for recycling.

- **Global market demand impacted by China's policy changes.** By banning materials, reducing import quotas and increasing quality specifications for all imports of recyclables, China's policies created a ripple effect, impacting global supply and demand for recyclables, and increasing material recovery facility (MRF) operating costs.
- **Commodity values are impacted.** Without China as an end market, global supply exceeds demand. As a result, commodity values are the lowest in over a decade, which has resulted in increases to the cost of recycling for our customers. While PET (#1) and HDPE (#2) plastics pricing have remained fairly stable, paper prices have fallen dramatically. Since paper makes up almost 60% of the material that we process at our single-stream MRFs, paper pricing plays an important role in the health of our programs. Mixed Paper has fallen from \$88/ton in 2017 to a charge of \$(5-20) ton today in many parts of the country. Even cardboard prices are the lowest that we've ever seen. At the extreme end of the scale, the value of cardboard in the Pacific Northwest was \$170/ton two years ago and is \$15/ton today. **The average commodity price for all recyclables sold from all our MRFs is roughly 70% less than the average two years ago.**

Impact on the Cost of Recycling

Recycling costs have increased across the globe for collectors, processors and recycling customers, driving long-term changes in the industry.

- **Reframing recycling contracts.** For years, recycling processors have carried the risk of commodity price swings and material stream changes. However, given the extreme and consistent downturn with current market conditions, new contract language ensures that processors are paid for the cost of processing first, **then** they share remaining commodity revenues.
- **Improving long-term sustainability of recycling.** While cost increases and contract changes are part of a difficult transition and transfer of risk, they improve the long-term sustainability of recycling.

Improving Recycling: We are increasing quality one customer at a time

Recyclables are commodities, and **recycling** is about creating a valuable feedstock to manufacture new products and goods with a reduced environmental impact. Recycling plays an important and fundamental role in the growth of thriving economies.

- **Reducing inbound contamination.** Current market conditions have created the necessity and opportunity to continually work with customers to help them recycle correctly. WM developed the **Recycle Often. Recycle Right.**SM program (www.rorr.com) to help customers know how to recycle.

- **Responsible Recycling.** We continue to move our recyclables to end markets for manufacture into new products and packaging.
- **Plastics to domestic markets.** We made a commitment to sell all of our residential plastics to domestic markets. We partner with sustainable domestic outlets that need recycled material to support their goals as well.
- **Recycling success.** Our education efforts are making a difference. They have helped reduce contamination levels at our MRFs from 25% to under 20% today.

Cities are continuing to recycle

While there has been quite a bit of news about cities ending programs, few cities have dropped their programs altogether – and most have been smaller communities. However, cities are carefully reviewing the economics of recycling as costs are increasing. Some are collecting less frequently or reducing the menu of recyclables they collect to reduce their costs.

Residents want to recycle! Cities are hearing from their residents that they want to recycle. Current conditions are creating an understanding of the value of recycling in communities across the country.

Opportunity from Crisis: We are investing in the future

WM is not waiting for markets to improve. We are investing in the future of recycling, and in new technologies:

- **Waste Management is investing in the future of recycling.** With over a billion dollars already invested in our recycling infrastructure, we invested over \$100M in 2018, will invest over \$100M this year, and expect to invest comparable amounts in the coming years. We are investing in our recycling infrastructure for the future.
- **WM has announced three new multi-million facilities so far this year.** We are not only building new facilities, we are also upgrading our existing facilities to handle more material, more efficiently.
- **We have over 100 installations of new technologies in process this year – from optical sorting to robotics to A-I technologies.** Our “recycling facility of the future” is under construction near Chicago and will open at the end of the year, paving the way for the next generation of recycling.

The recycling industry is resilient and adaptable. We believe the current market conditions for recyclables are temporary. Despite the ups and downs of commodities markets and the complexities of international trade, recycling is about commerce and long-term environmental stewardship. We expect recycling to thrive for generations to come.

Market changes that will last

Although the past two years have been difficult, they have led to a reevaluation of global recycling programs and an infusion of attention and focus on why we recycle, and what we need to do to ensure healthy recycling programs. Market demand dynamics are key – and several states are creating market development programs for recyclables.

Markets are adapting. Over a dozen new paper mills and mill expansions have been announced in the U.S. alone. Paper mills are increasing their use of recycled feedstock, and domestic markets for recycled plastics are developing. As government and private sector initiatives drive higher demand for recycled content use in products, we expect to see additional demand for feedstocks we can provide.

With careful investments in technologies, demand and contracts, the recycling industry will survive this global adjustment, and will be stronger than ever.