Most communities have decided that the right thing to do is to not stop recycling, but to renew their commitment to recycling by focusing on education and outreach. Casella is doing its part by investing in processing and finding new markets. Now citizens must do their part by learning to Recycle Better™.

1

Myth: Recycling doesn't work anymore. There is no point in continuing to recycle.

Fact: Recycling still works. Despite the decline in commodity values driven by China's National Sword policy, recycling still conserves natural resources, prevents pollution, saves energy and reduces waste sent to disposal facilities. Recycling happens when someone buys recycled materials and turns them into new products. This still occurs today.

Beyond China, resourceful recyclers like Casella have found other outlets to buy materials to be transformed into new products. And there is a silver lining resulting from the Chinese ban, and that is that new capacity to recycle materials (fiber mills) will be coming online in the Northeast over the next 18-24 months. This new capacity will improve commodity values and create new jobs locally. The time is now to continue to support and improve existing recycling programs.

2

Myth: Recycling is just getting thrown away due to contamination. Today recyclable materials are being discarded in landfills and incinerators.

Fact: This is not true. The average contamination rate of incoming single stream material (such as Zero-Sort® Recycling) is 20%. Your program may be higher or lower depending upon how educated and compliant your community is with what it places in the recycling bins. Casella commits that 100% of non-contaminated recyclables that it receives and processes are sold to end markets to be made into new products or put to beneficial use. Single stream recycling remains as today's most convenient and advanced technology for collecting, processing and transforming recyclables into new products. In fact, each year Casella's recycling facilities yield over 500,000 tons (one billion pounds!!) of materials such as paper, cardboard, plastic and metal that are transformed into new products or put to beneficial use.

3

Myth: In light of the decline in commodity values, single stream recycling is no longer effective. We should consider going back to dual stream or source separated recycling.

Fact: Single stream recycling remains as the most effective approach for capturing the greatest amount of recycling; it has more than doubled and even tripled recycling rates in towns across the country since its advent in the 1990s. It is embraced by consumers because it is the most convenient method for discarding recyclables. In light of the commodity value decline the onus is on all of us as recyclers to educate our consumers how to Recycle Better to make the recycling streams cleaner and more valuable.





Please call us at 800-CASELLA to discuss how your community can Recycle Better!

ZERO-SORT® RECYCLING

TOSS ALL CLEAN & EMPTY RECYCLABLES INTO THIS CONTAINER



Corrugated Cardboard (Wavy center layer)



Boxboard (Dry-food boxes, egg cartons, & rolls)



Junk Mail, Periodicals, & Office Paper (Paper bags, envelopes, & catalogs)

-----GLASS-----





Plastic Bottles, Jugs, Tubs, & Lids (Empty kitchen, laundry, & bath containers)



Aluminum & Steel Cans (Foil & empty food & beverage cans)



Glass Bottles & Jars (Empty food & beverage bottles & jars)

NOT ACCEPTED

Plastic bags, bagged recyclables, clothing/textiles, food waste/liquids, tanglers such as rope or hoses, scrap metal, batteries of any kind, electronics, wood, medical waste, hazardous materials, explosives, toys, hangers, shoes, waxy cups or plates, food bags or wrappers, plastic wrap or film, shrink wrap, tarps, diapers, human/pet or yard waste, tires or rubber, Styrofoam™, napkins, paper towels, tissues, plastic utensils, register tape, condiment packets, straws, stirrers, coffee pods, ceramics, or baking glass







Q. Where do the plastics go? What do the plastics become?

A. All of the residential plastics we pick up goes to North American buyers. For example:

- Water and soda bottles (PET) go to American and Canadian buyers who process it into things like rugs, fleece, t-shirts, and insulation for jackets and sleeping bags. We are working with another buyer in PA who will be making recycled PET back into new bottles.
- Milk jugs and detergent bottles (HDPE) go to the southeastern and midwestern US as well as Canada to be made into new containers, plastic lumber, playground equipment, fleece products, and recycling bins.
- Yogurt cups and other "tubs and lids" (PP) go to the same mills as HDPE, and very often are processed into paint buckets.

Q. Where does the cardboard and paper go? What does it become?

A. Cardboard goes to mostly North American markets to be made into new liner board and then into new boxes. Paper we process mostly into a "mixed paper" grade, which is going to increasingly domestic markets to be used as a percentage blend in new boxes as well as into brown paper towels. Several of our MRFs have been recently retrofitted to produce a "residential newspaper" grade that mills can use for making new newspapers and linerboard for boxes.

Q. Where does the metal go? What does it become?

A. Aluminum we send to a primary smelter in Kentucky to be made into new aluminum cans. Tin gets made into things like new cans, auto parts, bike parts, appliances, and rebar.

Q. Where does the glass go? What does it become?

A. Glass is highly recyclable, and we can clean it up to meet many different market specifications, but it's heavy, which means that you need your buyers to be within a small radius because shipping costs add up so fast. We previously sent most of our glass to MA to be made into new bottles, but that plant shut down. The next best option is to use recycled glass as a replacement for sand or gravel in construction projects. By using recycled glass in construction, you're reducing the need for sand mining. In our Rutland market we are able to ship our glass by rail to a bottle-to-bottle facility. In other markets, we're sending our clean glass to construction applications.

Q. Shouldn't we go back to dual-stream recycling? Aren't the materials coming out of those MRFs cleaner and more marketable?

A. We have operated both single stream and dual-stream MRFs, and we know that both systems are equally capable of producing quality outbound product. At the end of the day, these are manufacturing facilities, and they require expertise to design and operate. We have that expertise and we know how to produce a quality product. In fact, we have the same mills buying cardboard from both our single-stream and dual-stream MRFs. Same for mixed paper, same for plastics, same for glass, etc. There's no sense throwing out the convenience and efficiencies of single stream, because the idea that dual-stream MRFs will yield a higher quality product is a myth.

Q. So why is my neighbor telling me that he saw on Facebook that only a fraction of the recycling stream actually gets recycled?

A. Bottom line, fake news. If an item is listed on our posters as acceptable, it's because we have a good market for it, and it's going to get recycled. What we do send to disposal is the non-acceptable stuff that people put in their bins. If you talk to someone who's worried about their recycling going to the landfill, just send them to our Recycle Better™ page. Put the right stuff in your bin and we'll recycle it.

RECYCLING COMMODITY UPDATE

- AUGUST 2020 -

Looking ahead, the recycling market will still be supply-driven with all eyes on COVID-19 and its impacts on the economy.

Price volatility and supply chain uncertainty, combined with challenging economic conditions, are keeping most major mill expansions on hold during the pandemic.

FIBER



Mixed paper continues to be available both domestically and overseas as values are expected to remain flat with

historically low pricing. Movement of the material is challenging, but not stagnant. Most paper recovered from households is made into mixed paper bales. Approximately 35 percent of single stream material is made up of mixed paper which consists of junk mail, newspaper, magazines, paperboard packaging—such as cereal boxes—and office paper.



Currently, there is an excess of cardboard as mills overpurchased, fearing loss of supply during the pandemic. This market anxiety resulted in a brief spike in

cardboard pricing in May of 2020. As new finished product demand decreased, many mills were left with a surplus of inventory causing a very short-lived uptick in the OCC market. Prices fell by 50 percent per ton in June and another 50 percent in July.

The circumstances surrounding export movement is continuing to evolve. Many countries that currently purchase US secondary fiber are also facing the prospect of imposed lockdowns amid second waves of infection. To complicate matters, there are new inspection requirements, potential container shortages, and challenging global conditions that make the overseas market volatile.

On a positive note, we continue to see greater potential to develop long-term partnerships with domestic mills that are coming back online, which could serve as an outlet for some of our fiber.

PLASTIC & METAL & GLASS



Casella continues to make good on our pledge to market all residential plastic domestically. In line with the entire industry, we have seen some volatility in the PET &

HDPE grades. With virgin resin prices decreasing, the value of HDPE natural was reduced by 30 percent, while PET's commodity prices also dipped by 20 percent from quarter to quarter.

The Carbon-lite PET facility has announced its plans for opening in September 2020, increasing demand in the Northeast for post-consumer plastic.



Domestic aluminum and steel producers have become increasingly dependent on recycled metal as their main raw material input due in part to the large energy and cost

savings associated with consuming secondary scrap over primary. The COVID-19 disruption throughout the world has left the metal market volatile with little activity in countries that consume scrap metal. In turn, the overall price of these grades has decreased from January 2020 pricing. Most notably, the aluminum market is down 10 percent compared to last quarter. Some national tin recyclers shut down temporarily, forcing the northeast recycling facilities to sell to local dealers which depressed pricing.



Glass continues to be problematic with insufficient demand from end sites. Beneficial use and aggregate mix continue to be our main resolution.

- Bob Cappadona

Vice President - Casella Resource Solutions





$\underline{https://www.casella.com/services/recycling/recycle-better?tab=Videos\#tabs}$

- 1. Material Recovery Facility Tour
- 2. Recycle Better The impact of China's National Sword Program
- 3. 5 Tips to Recycle Better