

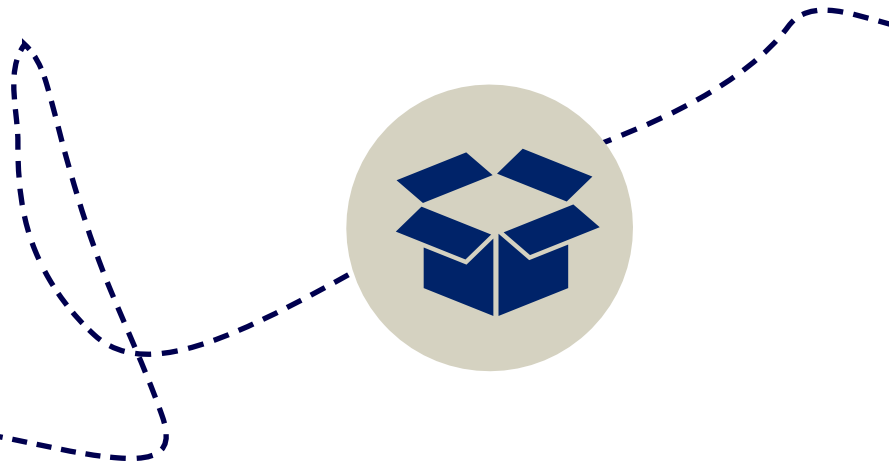


Industry Update:  
**The State of Recycling**



Throughout the years, recycling companies have planned for market highs and lows, and absorbed most of the shock of cyclical downturns. But over the past five years, the market has declined far beyond projections and beyond what companies can economically absorb. This means that across the industry, companies are forced to pass along some of the costs to their customers.

However, if we understand these changes and if municipalities, recycling companies, businesses and individuals work together, it is clear that there are new opportunities to achieve long-term environmental, economic and sustainability benefits.



## A little history

When it comes down to it, recycling is a commodities business—meaning that recycled goods being collected are competing with brand-new or “virgin” materials—and recycling businesses need to make money—or at a minimum, break even—by selling their commodities. Traditionally, recycling businesses hauled away recycled materials for free, sometimes even paying the municipality, because they were able to resell the materials at a profit after processing them.

Now, due to a variety of reasons stemming from changes in global markets, these commodities (recycled plastic, glass, paper, etc.) are worth much less. The revenue stream from these commodities has decreased so much that it is often the same as—or smaller than—the outlay of picking up and processing the materials. This is compounded by increasing costs over time associated with the technology, equipment and labor required to process the recycled materials and generate commodities that meet the quality requirements of the end users. The overall recycling industry is also impacted by the strengthening of the U.S. dollar.

“Paper, which represents a good chunk of the recycling market for the major waste haulers, is in a downturn that began almost five years ago. Aluminum, a raw material used in producing beverage cans, is at depressed prices and feeling the effects of a supply glut and slowing demand from China. And the decline in plastic scrap is due to oil prices and overcapacity in the polyethylene terephthalate, or PET, resin manufacturing industry.”<sup>1</sup>—CNBC

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<sup>1</sup> Daniels, Jeff. “Why recycling business is feeling so discarded these days.” CNBC, March 9, 2016. <http://www.cnbc.com/2016/03/09/why-recycling-business-is-feeling-so-discarded-these-days.html>.



This means that recycling now functions much more like a waste removal service—the recycling business is providing a service to the community, or to a private company, by removing their recycled goods, whether or not these goods are profitable on their own. In turn, recycling businesses have to charge for this service, since they see minimal revenue at the other end of the supply chain.

However, the price a municipality or company might pay for this recycling removal is often far less than it would pay for the goods to be disposed of in a landfill.

## The changing landscape of recycling

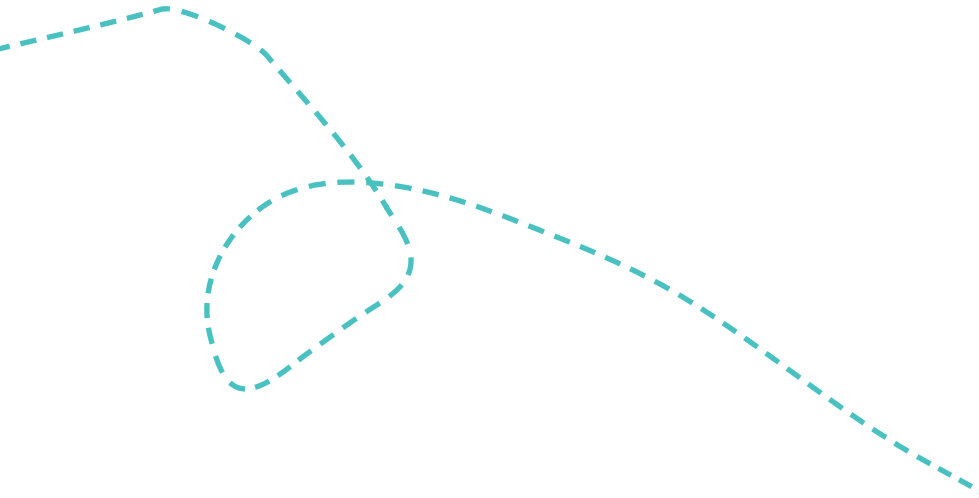
These changes don't just impact Sonoco—they've impacted recycling companies across the board. *The New York Times* recently reported that in Montgomery, Ala., a new \$35-million recycling center run by Infinitus Energy was shut down after hemorrhaging money, and a nearby, once-profitable recycling company filed for bankruptcy. Near New Orleans, Plaquemines Parish tried to end its municipal recycling program due to doubled fees from provider Republic Services, but "reversed course after a public outcry led by energetic seventh graders." Waste Management, one of the country's largest recycling businesses, recently closed 30 of its recycling centers (down to a new total of around 100) and laid off 900 workers.<sup>2</sup> The City of Houston recently approved a new agreement with Waste Management to continue providing a curbside recycling program that will cost between \$2.1 million and \$2.8 million per year, depending on whether residents continue putting glass in their green bins, throw it all in their black trash bins, or take it to city drop-off centers.<sup>3</sup>

**“Over the last three quarters, revenues from recycling operations are down 16 percent from the same time a year earlier, to \$878 million from just over \$1 billion.”**

**—The New York Times**

<sup>2</sup> Gelles, David. “Skid in Oil Prices Pulls the Recycling Industry Down With It.” *The New York Times*, Feb. 12, 2016. <http://www.nytimes.com/2016/02/13/business/energy-environment/skid-in-oil-prices-pulls-the-recycling-industry-down-with-it.html>.

<sup>3</sup> Elliott, Rebecca. “Council members express frustration with recycling deal.” *The Houston Chronicle*, March 23, 2016. <http://www.houstonchronicle.com/news/politics/houston/article/Council-members-express-frustration-with-7004253.php>



One key challenge is the recent drop in oil prices. Before, recycled plastic was a valuable commodity because it provided a sustainable and economic alternative to new (virgin) plastic. But now that oil prices are so low, petroleum-based virgin plastic is relatively cheap to produce—sometimes even cheaper than using recycled plastic. All in all, the combined value of all the materials collected through a typical curbside recycling program have decreased by more than 50% since January 2011.

Another key challenge is the “evolving ton”—over the past decade or so, the materials in a ton of recycling have changed significantly. Commodities that are easy and efficient to recycle, like paper and paperboard, have dropped significantly (in the case of paper and paperboard, 22% between 2000 and 2013).<sup>4</sup> Meanwhile, less lucrative plastics have increased significantly—and because bottles are made lighter now, they are more complicated to sort and take up more space.

Additionally, many recycling companies have stopped offering glass recycling services. There are several reasons for this shift: shards of glass damage other recyclable goods (like paper and cardboard); they get mixed in with other recyclable materials, making the goods harder to sort; they pose a safety risk for MRF employees; they’re likely to damage recycling equipment; and frankly, they just aren’t very profitable.<sup>5</sup> As a result, this is forcing a discussion between municipalities, residents and recycling operators to fully understand the total cost of including glass in a curbside single stream recycling program and ultimately determine if this service is worth paying for. This total cost has always exceeded the value of recycled glass, when used instead of sand and other raw materials. Historically, the revenue from other collected and processed commodities made up for this loss, but as the value of these other commodities has dropped, the underlying costs associated with including glass in single-stream recycling have become more transparent for all parties.



**“These changing material ratios—what the industry calls an “evolving ton”—have led to higher processing costs for recyclers, as they have to push much larger volumes of waste through their facilities to yield each one-ton bale of raw material.”—*Fortune***

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<sup>4</sup> Groden, Claire. “The American recycling business is a mess: Can Big Waste fix it?” *Fortune*, Sept. 3, 2015. <http://fortune.com/2015/09/03/waste-management-recycling-business/>.

<sup>5</sup> Niese, Mark. “Metro Atlanta recyclers reject glass, ship it to landfills.” *The Atlanta Journal-Constitution*, Dec. 26, 2015. <http://www.myajc.com/news/news/local-govt-politics/metro-atlanta-recyclers-reject-glass-ship-it-to-la/nprDq/>.

**“Now, an average of one in six items dumped in blue bins is not recyclable, gumming up processing facilities and jacking up costs. Some recycling facilities have to shut down once an hour so that workers can cut layers of plastic bags off the machinery.”—*Fortune***

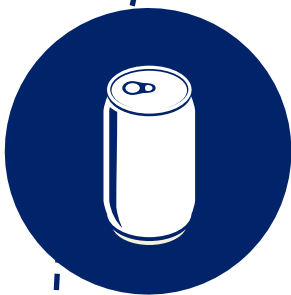
Another important challenge has to do with the behavior of consumers themselves. Sometimes due to laziness, and often due to good intentions, people try to recycle goods that are not recyclable. This is called inbound contamination, because the recycled goods are contaminated with common—and sometimes even hazardous—trash. One of the largest recycling companies, Waste Management, reports that its inbound contamination has doubled in the past 10 years.<sup>6</sup> This overall rise in inbound contamination is partly attributed to the increased popularity of single-stream recycling programs, whose convenience tends to greatly increase the quantity of a community’s recycling, but tends to degrade the quality of the recycled goods collected.

## Where does this leave us?

This paints a grim picture, but there is great hope for the recycling industry, and there are great reasons to maintain its momentum. Citizens, municipalities and companies—and recycling companies—aren’t just recycling for the money. Other important reasons include:


- Focusing on long-term sustainability, to better the planet and meet sustainability goals/targets
- Prolonging the lifespan of landfills by diverting less waste
- Saving money by putting less resources toward recycling than toward landfill usage

The National Recycling Coalition says, “Given the reduction of recycled commodity values, we have to believe that customers also want to take the long view and will be willing to earn less—or even pay more—to divert more waste to more sustainable uses. The industry needs contracts that steer both customers and processors toward a fair and happy medium, allowing everybody to share in the long-term benefits and long-term success of recycling.”<sup>7</sup>



<sup>6</sup> Groden

<sup>7</sup> Hildebrand, Brent and Will Sagar. “Notes From the NRC: Long view of recycling will satisfy all parties.” March 8, 2016. <http://resource-recycling.com/node/7155>.



As a business, Sonoco is committed to recycling. It's a program we've invested in since the 1920s, and it's essential to our business and fundamental to our sustainability commitments. We work with each customer, whether company or municipality, to find the "sweet spot" that benefits our partner as much as possible, while remaining viable for our business.



## About Sonoco Recycling

A recycling leader with locations and expertise worldwide, Sonoco Recycling annually collects more than 3 million tons of old corrugated containers, various grades of paper, metals and plastics. In addition, the Company has experts who provide secure, reliable and innovative recycling solutions to residential and commercial customers. Currently, Sonoco Recycling operates four material recovery facilities (MRFs) serving more than 125 communities in which curbside-collected residential as well as commercial materials are processed. The Company also operates recycling programs, which identify waste reduction opportunities that reduce operating expenses for many of the largest consumer product companies in the United States.

For more information on Sonoco Recycling, visit our website at <http://www.sonocorecycling.com/>.

## About Sonoco

Founded in 1899, Sonoco is a global provider of a variety of consumer packaging, industrial products, protective packaging, and displays and packaging supply chain services. With annualized net sales of approximately \$5.0 billion, the Company has 20,800 employees working in more than 330 operations in 34 countries, serving some of the world's best known brands in some 85 nations. Sonoco is a proud member of the 2015/2016 Dow Jones Sustainability World Index.

For more information on the Company, visit our website at [www.sonoco.com](http://www.sonoco.com).

