

Waste & Env. Services Market Update

Industry Consulting Team | Q4 2022

Prachi Wagner

Waste & Env Services
Industry Manager

Prachi.Wagner@Truist.com

(704) 620-0708

Aashish Shah

Waste & Env Services
Associate

Aashish.Shah@Truist.com

(704) 953-1713

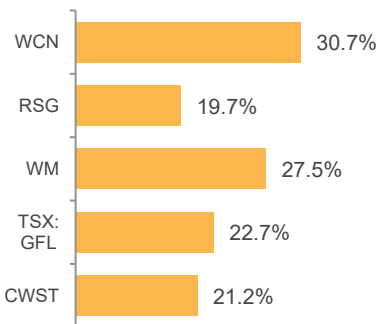
Carlos Yopez

Waste & Env Services
Analyst

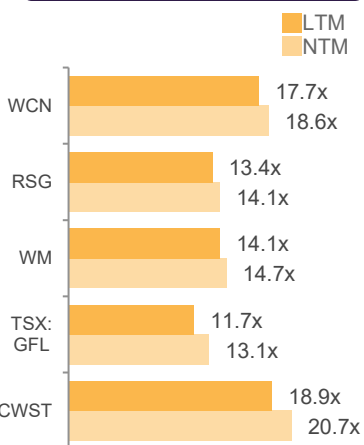
Carlos.Yopez@Truist.com

(786) 318-9315

Public Comps EBITDA Margin



Public Comps EV/EBITDA



Solid Waste Public Companies

WCN – Waste Connections; RSG – Republic Services;
WM – Waste Management; GFL – GFL Environmental;
CWST – Casella Waste Services

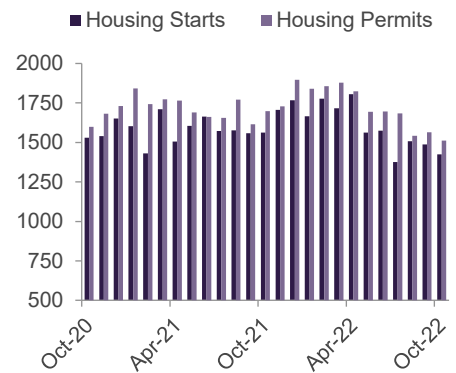
Highlights – Waste Sector

- Acquisition spending has been a continued focus for waste companies in 2022. Following up on record levels from 2021, the larger companies in the industry have focused on buying smaller companies challenged by the inflationary environment
- Environmental, Social and Governance (“ESG”) has become a renewed emphasis in the investor market. More companies are financing sorting equipment and materials recovery facilities to increase landfill diversion rates. Domestic partnerships between the waste industry and manufacturing sectors that utilize waste stream are becoming more prominent

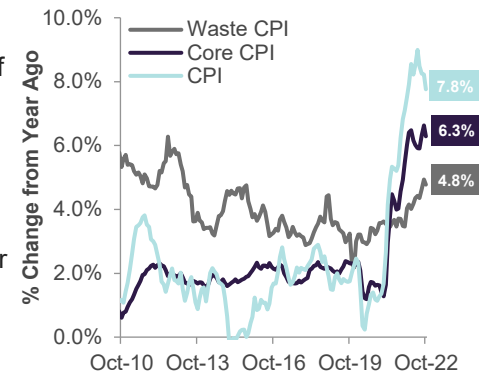
Waste and Environmental Services Industry Trends

- **Economic:** Residential and commercial waste volumes have historically been driven by housing construction but with a lag. Despite the recent slowdowns, the record setting growth in housing during the second half of 2021 and first half of 2022 is expected to translate in a stable outlook for the waste sector in 2023. October 2022 annual seasonally-adjusted housing permits were 1.526 million, 10.1% below October 2021. Permits in the South and Midwest were up nominally. Housing completions in October were 6.6% above October 2021. In October, the U.S. industrial production index decreased 0.1% from the prior month and was up 3.3% from September 2021.
- **Waste Pricing:** Most waste contracts in the U.S have a price escalation clause tied to the Consumer Price Index (“CPI”) and surcharges tied to fuel prices and environmental fees. Inflation hit a 41-year high of 8.5% in March 2022, but it has started to decline in the second half of this year and is now at 7.8% (October 2022). The average core waste pricing for the same period sits at 6.3% for the top public companies. Newer contracts are being bid at historically higher margin levels and existing contracts are being negotiated to consider the unexpected rise in labor and costs. This trend is expected to remain for the first three months of 2023. With room for pricing to outpace inflationary pressures, the sector is positioned for margin expansion in the first half of next year.
- **Waste Volumes:** Waste volumes for the top five public companies (WM, RSG, GFL, WCN and CWST) increased on an average of 1.0% for the third quarter 2022. With more housing completions occurring in late 2022 and 2023 from the 2021 backlog, residential and commercial volumes are expected to grow in 2023. Special waste volumes from the aftermath of Hurricane Ian will provide additional lift to the southern and eastern part of the U.S. Capacity utilization rates in industrial production have slowed in recent months and registered at 79.9% in October, which is still above the 30-year average. Industrial waste volumes will remain steady in first half of 2023 as the inventory surplus during COVID-19 has to be processed.
- **M&A Activity:** As the Waste & Environmental Services industry continues to expand and offer a wider range of services, there has been a continued emphasis on inorganic growth. The top five public companies (WM, RSG, GFL, WCN and CWST) spent over \$5 billion in M&A through the third quarter and have given indications of further spending next year. As expected during downturns, traditional “mom and pops” are looking to sell their businesses, and the more established, diversified waste companies are using the opportunity to expand their market share.

Housing Starts



Consumer Price Index



Waste & Env. Services Market Update

Industry Consulting Team | Q4 2022

M&A Activity

With the renewed global focus from investors to deploy capital in ESG-related industries, the Waste and Environmental Services sector is poised for an influx of sponsor capital in the next three to five years. In the past 18-months, there has been strong activity within the financial sponsor sector to invest in the recession-resilient waste assets. Most of the transactions are being seen in the Northeast and Southeast regions of the U.S.

Acquiror(s)	Target	Details
		Macquarie Asset Management announced the acquisition of Washington-based DTG Recycle. The C&D recycler is considered one of the largest privately held vertically integrated non-MSW recycling business. The acquisition includes over 3,900 containers, 270 vehicles, 12 MRFs and one landfill
		Founded in 2017, Frontier is a leading, non-hazardous solid waste and recycling collection company serving numerous communities all throughout Texas. Summer Street partnered with Concentric Equity Partners in this transaction
	Harrisburg Waste Paper	Harrisburg Waste Paper has serviced the greater central Pennsylvania region for over 100 years. In October, Federal Recycling & Waste Solutions announced its acquisition of the company as the St. Louis-based company looked to expand its footprint further east
	Wastewater System of Butler Area Sewer Authority	Pennsylvania American Water has announced that it has purchased the wastewater system with the Butler Area Sewer Authority for \$231.5MM. The system serves almost 15,000 customers over 32.5 miles
		Waste Connections (WCN) has acquired Rogue Disposal, a vertically integrated solid waste management company based out of Oregon. Rogue currently services over 45,000 residential, commercial and industrial customer throughout the Pacific Northwest.
		Nonantum Capital Partners, a middle-market private equity firm, announced the acquisition of LJP Waste Solutions ("LJP") from Aperion Management. Founded in 1993, LJP specializes in zero landfill and waste-to-energy solutions.
		In early September, Waste Management announced the acquisition of Ray's Trash Service. Ray's is the largest privately-owned recycling operation in the state of Indiana. The acquisition includes more than 300 trucks, plus multiple transfer and recycling facilities
		Lakeshore Recycling Systems ("LRC") has acquired Lee's Trash Services out of Atkins, Arkansas to expand its LRS South territory. The acquisition includes a customer base with over 25,000 subscriptions and a company with a 30-year footprint
		Lone Star Disposal, a large, Texas-based C&D materials and solid waste services provider, was recently acquired by WCN. The company was bought from J.F. Lehman & Company, an active middle-market private equity firm after three years of ownership

Inflation Reduction Act of 2022: Sustainable Finance

- The Inflation Reduction Act of 2022 ("IR Act") contains several incentives and support towards energy transition efforts in the United States. As the country shifts to a more sustainability-focused future, the bill hopes to provide the initiative towards projects and companies that are trying to do the same
- The IR Act will appropriate around \$12 billion in total for the Loan Program Office (LPO) to support new loans that fit climate initiatives. This will be the largest investment in climate and energy in American history
- Tax credits for power production using biomass, geothermal, landfill gas, waste-to-energy, and other renewables will be extended through 2024
- A 10% tax credit is available for projects that source at least 40% of all steel, iron, and manufactured products in the United States, with the threshold expected to increase in the future
- Under Title 17 of the IR Act, the Innovative Clean Energy Loan Guarantee Program will provide an additional \$40 billion of loan authority for eligible projects

Waste & Env Services Market Update

Industry Consulting Team | Q4 2022

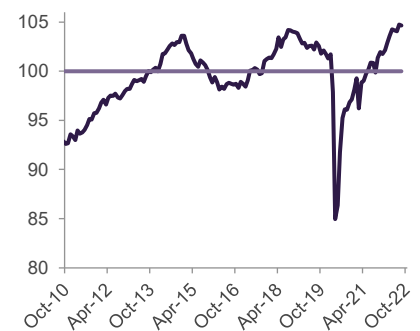
Highlights – Recycling Sector

- Commodity prices have recently faced downward pressures due to softening global demand and the inventory surplus that was built over the last two quarters. Prices are still well above pre-COVID levels; generating strong cash flows in the metals sector
- As steel mills integrate scrap supply, scrap companies are looking to invest in downstream systems to better compete around quality and volume
- Non-Ferrous metal market is seeing domestic joint ventures to reuse scrap in manufacturing as ESG becomes a focused area of growth in the domestic market

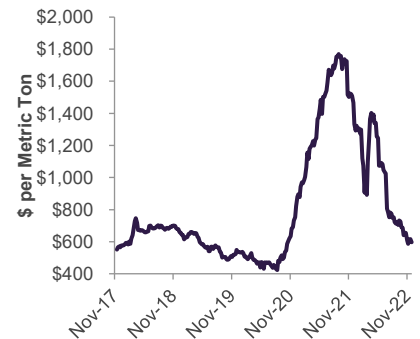
Recycling Industry Trends: Ferrous Scrap

- **Economic Update:** The U.S. economy has been resilient throughout 2022 despite headwinds across industrial sectors and manufacturing. Even though supply chain disruptions and high levels of inflation have persisted, the industrial production index, an aggregated measure of industrial output, was at 104.7 in October 2022 and 3.3% above the same period a year ago. Manufacturing output edged up 0.1 percent in October led by gains in durable manufacturing index, which rose 0.5 percent. Within durables, the increase was primarily driven by electrical, aerospace, and transportation equipment and parts. Capacity utilization, a measure of how producers are using their resources, decreased 0.2% in October to 79.9% (0.3% above long-run (1972–2021) average).
- **Domestic Steel Production:** Domestic steel demand is expected to face downward pressure due to lower economic activity next year. Despite the economic uncertainty, steel demand will be bolstered by the need for domestic metals to meet the requirements of federally-funded construction as per the Infrastructure Bill and the Inflation Reduction Act. Adjusted year- to- date mill capability utilization rate is at 72.8% in November 2022 compared to 82.8% in the same period last year. During the week of November 26th, domestic raw steel production was 1,625,000 compared to 1,828,000 tons last year. In the next six months, steel demand is projected to remain stable driven primarily by the backlog in construction and automotive sectors. Prices of domestic steel and steel scrap have seen declines in the last four months but are still above the historical prices that were seen pre-pandemic. With geo-political risk still playing out in Europe, prices are expected to remain elevated for at least two more quarters.
- **Domestic Steel Scrap:** The steel industry is looking to invest in new low-carbon facilities that can provide energy efficiency and lower environmental impact as ESG becomes a bigger factor in ratings and investor sentiment. It is expected that ~65% of steel production will come from plants with electric arc furnaces by 2050 (McKinsey study). This bodes well for steel scrap demand as most of the raw materials for the new facilities will be scrap instead of iron ore. Steel mills are vertically integrating the scrap supply through acquisitions of metal recyclers over the last 18-months, and this trend will continue for the next three years. Metal recyclers are investing the cash in better downstream sorting equipment to compete in the market through higher quality scrap volumes. There is downward pressure on scrap prices due to lower demand from steel mills during the pandemic and softening of the markets going into 2023.
- **Global Steel Scrap:** For the first three quarters of 2022, U.S. exports of steel scrap were down 8.9% as weak demand from Taiwan, Vietnam, South Korea, Canada, and Malaysia more than offset gains to Turkey, Mexico, Bangladesh, India, and Peru.

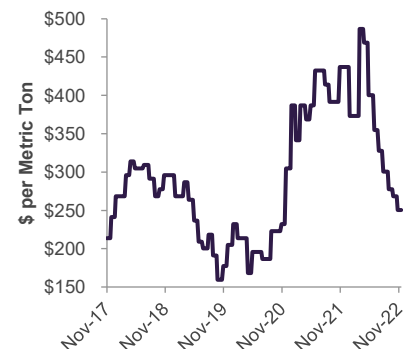
Industrial Production Index



Hot Rolled Coil Steel



Steel Scrap #1



Waste & Env Services Market Update

Industry Consulting Team | Q4 2022

Recycling Industry Trends: Non-Ferrous Scrap

- **Economic Update:** Building construction (building wiring, telecommunication, and electrical and electronic products) and electrical (power transmission and generation, electronics and electronic products) sectors are the main users of copper. Aluminum is primarily used in transportation (automobiles, airplanes, trucks, railcars, marine vessels, etc.), packaging (cans, foil, etc.) and construction (windows, doors, and siding) industries. In the U.S., the residential and commercial construction sectors are seeing pressures as interest rates rise and consumer affordability lessens. The backlog of construction will continue into 1Q 2023 and is projected to tighten through the rest of 2023. The Inflation Reduction Act of 2022 has incentives for companies looking to invest in climate related projects, like clean energy and recycling, that use aluminum and copper resulting in a rise in domestic demand for non-ferrous metals in the U.S. for 2023 and beyond.
- **Aluminum:** The average daily production in September 2022 was 2,020 tons, 16% less than same period last year. Of note, Steel Dynamics is planning to build a new flat rolling mill in Columbus, MS, with expected capacity of 650,000 metric tons per year (completion 2025). The additional capacity will increase demand of aluminum domestic scrap in the U.S. It's been noted that inventories for aluminum and aluminum scrap decreased nominally in September 2022 compared to the month before as companies work through the backlog of production that was pressured during 2022 from supply chain issues. The average price in September 2022 of primary aluminum on the London Metal Exchange (LME) was \$2,227 per metric ton, 8% less than that in August 2022.
- **Copper:** Copper should see long-term demand growth as more companies transition into green technologies like electric vehicles and new infrastructure construction. Lately, there hasn't been investments in new copper mine supply leading to lower global copper inventories and a higher demand for copper scrap. For 2023, the expectation is that copper pricing will face downward pressure in the second half due to weakening economic conditions in the U.S. The September LME Copper price was 1% lower than prior months but still fairly above the pre-COVID levels. With China accounting for almost 50% of global copper consumption, the Chinese economy and it's expected rebound will have a much larger impact on the price of copper and copper scrap in the next three years.

Aluminum



Copper



Special Mention: Recycled Paper

Old Corrugated Containers (“OCC”) prices dropped by \$45 per ton in many regions in October, primarily due to softening e-commerce demand and high paper mill inventories. The average OCC price in October was \$38 per ton compared to \$164 per ton in October 2021. The downward pressure in OCC demand will continue to reflect lower prices into 2023, driven by global economic slowdown and domestic investments by paper mills in new containerboard plant capacity. New capacity is projected to come online in 2023-2024.

Mixed Paper prices went down to \$0 per ton in October with most of the mixed paper being landfilled in the United States in the fourth quarter. This is reminiscent of 2019 when mixed paper pricing fell to -\$3 per ton in October 2019 and companies had to pay to get mixed paper out of their inventories. Municipal contracts with cities and governments, that required companies to divert mixed paper from landfills, also faced margin pressures.

Southeast Asian countries have a strong demand for OCC but can't shore up pricing. Major markets, like India and China, have seen lower demand due to domestic economic pressures. U.S. recycled paper exports to India and China have dropped by 6.4% and 13.3%, respectively, since December 2021. International supply chain issues have also resulted in slower deliveries of exports.



Sources: Bloomberg, WSJ, CapIQ, Waste350, Company Report, Federal Reserve Economic Data, WasteDive, Global Sustainability Alliance (GSIA), Refinitiv Lipper, Company Reports, CIBC World Markets, Department of Energy, McKinsey Insights, WhiteHouse.gov