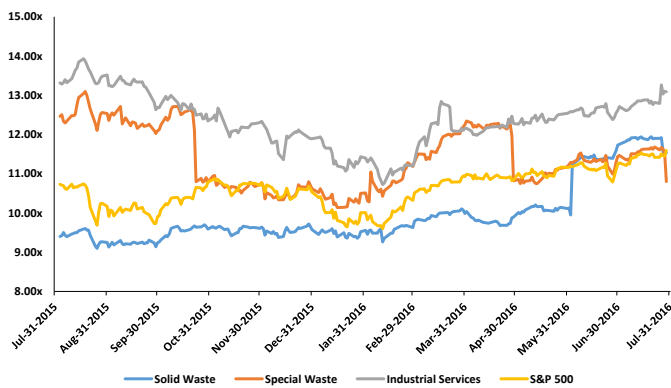


Trash Talk

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Environmental Services LTM TEV/EBITDA



Environmental Services LTM Share Price (Shown as % change)



Indices Performance (% change)

	<u>July 2016</u>	<u>LTM</u>		<u>July 2016</u>	<u>LTM</u>
S&P 500	3.4%	3.3%	Solid Waste	0.4%	26.5%
Dow Jones	2.7%	4.2%	Special Waste	(7.3%)	(20.2%)
NASDAQ	6.2%	0.7%	Industrial Services	(1.8%)	(3.6%)

(Source: CapitalIQ)

Largest Environmental Services Movers and Losers (largest % changes in the month of July)

Casella Waste Systems Inc.	18.6%	Stericycle, Inc.	(13.7%)
Cypress Energy Partners, L.P.	18.2%	Perma-Fix Environmental Services Inc.	(13.1%)
Sharps Compliance Corp.	14.1%	Fuel-Tech, Inc.	(8.1%)
Industrial Services of America, Inc.	6.0%	Covanta Holding Corporation	(4.4%)
Darling Ingredients Inc.	6.0%	Quest Resource Holding Corporation	(4.4%)

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Select Public Trading Statistics (as of 7/31/2016)

Solid Waste:

(\$ in millions, except per share data)

Company	Share Price 07/31/2016	% of 52 Wk High	Market Capitalization	Enterprise Value	Valuation Multiples			PE Multiples			Operating Margins			Net Debt/EBITDA	
					TEV/Total Revenue	TEV/EBITDA	TEV/EBIT	LTM P/E	CY15 P/E	CY16 P/E	Gross	EBIT	EBITDA		
Waste Management, Inc.	WM	\$66.12	93.8%	\$29,244	\$38,755	2.9x	10.9x	17.6x	25.8x	22.1x	23.7x	37.6%	16.9%	27.2%	2.6x
Republic Services, Inc.	RSG	\$51.26	96.9%	\$17,574	\$25,168	2.7x	9.8x	16.7x	24.6x	23.1x	24.8x	38.6%	16.4%	27.9%	2.9x
Waste Connections, Inc.	WCN	\$74.48	99.4%	\$13,064	\$15,157	7.1x	21.3x	34.7x	41.1x	NM	33.6x	43.9%	19.0%	32.2%	5.0x
Castella Waste Systems Inc.	CWST	\$9.36	98.9%	\$388	\$889	1.6x	8.9x	24.0x	NM	(43.6x)	NM	31.4%	6.7%	18.0%	5.0x
Mean				\$15,068	\$19,992	3.6x	12.7x	23.2x	30.5x	0.6x	27.4x	37.9%	14.7%	26.3%	3.9x
Median				\$15,319	\$20,162	2.8x	10.3x	20.8x	25.8x	22.1x	24.8x	38.1%	16.7%	27.5%	4.0x
High				\$29,244	\$38,755	7.1x	21.3x	34.7x	41.1x	23.1x	33.6x	43.9%	19.0%	32.2%	5.0x
Low				\$388	\$889	1.6x	8.9x	16.7x	24.6x	-43.6x	23.7x	31.4%	6.7%	18.0%	2.6x

Source: Capital IQ

Total Enterprise Value (TEV) = Market Capitalization + Preferred Equity + Debt + Minority Interest - Cash

LTM = Last Twelve Months

Special Waste:

(\$ in millions, except per share data)

Company	Share Price 07/31/2016	% of 52 Wk High	Market Capitalization	Enterprise Value	Valuation Multiples			PE Multiples			LTM Operating Margins			Net Debt/EBITDA	
					TEV/Total Revenue	TEV/EBITDA	TEV/EBIT	LTM P/E	CY15 P/E	CY16 P/E	Gross	EBIT	EBITDA		
Stericycle, Inc.	SRCL	\$90.27	59.6%	\$7,665	\$10,750	3.2x	13.0x	17.2x	31.8x	31.5x	23.0x	44.8%	18.6%	24.6%	3.7x
Clean Harbors, Inc.	CLH	\$51.42	94.3%	\$2,959	\$4,236	1.3x	8.8x	20.3x	98.4x	36.2x	113.0x	28.5%	5.1%	14.7%	3.0x
Darling Ingredients Inc.	DAR	\$15.78	99.1%	\$2,597	\$4,524	1.4x	9.1x	20.4x	32.7x	NM	29.2x	22.2%	4.3%	12.6%	4.4x
US Ecology, Inc.	ECOL	\$45.30	85.5%	\$986	\$1,271	2.4x	10.7x	16.2x	28.9x	26.1x	27.1x	31.1%	15.1%	22.8%	2.4x
Sharps Compliance Corp.	SMED	\$5.20	49.6%	\$80	\$67	2.0x	31.2x	49.0x	74.9x	82.5x	53.7x	34.8%	4.1%	6.4%	(6.3x)
Perma-Fix Environmental Services Inc.	PESI	\$4.52	80.1%	\$52	\$62	1.0x	20.9x	NM	NM	NM	NM	21.9%	(1.3%)	5.0%	2.8x
Mean				\$2,290	\$3,485	1.9x	15.6x	24.6x	53.3x	44.1x	49.2x	30.6%	7.6%	14.3%	1.7x
Median				\$1,791	\$2,753	1.7x	11.8x	20.3x	32.7x	33.8x	29.2x	29.8%	4.7%	13.6%	2.9x
High				\$7,665	\$10,750	3.2x	31.2x	49.0x	98.4x	82.5x	113.0x	44.8%	18.6%	24.6%	4.4x
Low				\$52	\$62	1.0x	8.8x	16.2x	28.9x	26.1x	23.0x	21.9%	-1.3%	5.0%	(6.3x)

Source: Capital IQ

Total Enterprise Value (TEV) = Market Capitalization + Preferred Equity + Debt + Minority Interest - Cash

LTM = Last Twelve Months

Industrial Services:

(\$ in millions, except per share data)

Company	Share Price 07/31/2016	% of 52 Wk High	Market Capitalization	Enterprise Value	Valuation Multiples			PE Multiples			LTM Operating Margins			Net Debt/EBITDA	
					TEV/Total Revenue	TEV/EBITDA	TEV/EBIT	LTM P/E	CY15 P/E	CY16 P/E	Gross	EBIT	EBITDA		
Covanta Holding Corporation	CVA	\$16.02	76.5%	\$2,080	\$4,660	2.8x	13.2x	30.9x	46.5x	105.9x	(134.9x)	31.2%	8.4%	20.5%	7.5x
CECO Environmental Corp.	CECE	\$9.25	83.2%	\$315	\$458	1.2x	9.1x	14.3x	NM	13.3x	13.7x	30.9%	8.2%	12.9%	2.7x
Heritage-Crystal Clean, Inc.	HCCI	\$12.61	94.2%	\$283	\$326	1.0x	13.8x	48.1x	NM	33.2x	39.1x	20.3%	2.0%	6.9%	1.8x
Cypress Energy Partners, L.P.	CELP	\$11.29	80.7%	\$134	\$226	0.6x	12.5x	18.8x	91.8x	15.9x	23.9x	12.0%	3.4%	5.2%	6.0x
Ecology & Environment, Inc.	EHI	\$10.15	84.7%	\$44	\$37	0.3x	5.7x	6.9x	34.4x	NM	NM	44.4%	4.7%	5.7%	(1.3x)
Fuel-Tech, Inc.	FTFK	\$1.59	62.6%	\$37	\$28	0.4x	NM	NM	NM	NM	NM	36.6%	(9.2%)	(3.9%)	3.2x
Quest Resource Holding Corporation	QRHC	\$0.29	28.3%	\$35	\$35	0.2x	NM	NM	NM	NM	NM	7.9%	(4.2%)	(1.9%)	0.0x
Industrial Services of America, Inc.	ISAA	\$1.72	43.0%	\$14	\$17	0.5x	NM	NM	NM	NM	NM	(6.4%)	(17.9%)	(11.5%)	(0.7x)
Mean				\$368	\$723	0.9x	10.9x	23.8x	57.6x	42.1x	-14.6x	22.1%	-0.6%	4.2%	2.4x
Median				\$89	\$132	0.6x	12.5x	18.8x	46.5x	24.5x	18.8x	25.6%	2.7%	5.4%	2.3x
High				\$2,080	\$4,660	2.8x	13.8x	48.1x	91.8x	105.9x	39.1x	44.4%	8.4%	20.5%	7.5x
Low				\$14	\$17	0.2x	5.7x	6.9x	34.4x	13.3x	-134.9x	-6.4%	-17.9%	-11.5%	(1.3x)

Source: Capital IQ

Total Enterprise Value (TEV) = Market Capitalization + Preferred Equity + Debt + Minority Interest - Cash

LTM = Last Twelve Months





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Select Mergers and Acquisitions & Capital Raising News

❖ Republic Announces Final Results of Tender Offers

July 6, 2016 – Republic Services announced the expiration and final results of its previously announced cash tender offers to purchase up to \$600 million combined aggregate principal amount of notes. The company has accepted all \$575.4 million combined aggregate principal amount of notes validly tendered and not withdrawn as of the expiration date. The total consideration for each series of notes includes an early tender payment of \$50 per \$1,000 principal amount of notes validly tendered and not validly withdrawn by such holders at or prior to the early tender time and accepted for purchase. Holders whose notes are purchased pursuant to the tender offers will also receive accrued and unpaid interest on their purchased notes from the last interest payment date for such. Republic has retained Barclays Capital, BofA Merrill Lynch and J.P. Morgan to serve as the advisors for the tender offers.

❖ Action Environmental Acquires Pequannock Disposal

July 26, 2016 – Through its subsidiary Interstate Waste Services, New Jersey-based waste and recycling company Action Environmental Group has acquired New Jersey-based waste management company Pequannock Disposal Company. With this transaction, Action has acquired Pequannock's operations and business assets, which include residential, commercial and demolition waste and recycling collection as well as equipment and vehicles. Action is also continuing to ramp up its company-wide safety efforts by growing its internal safety team and utilizing smart safety tools, such as digital training and third-eye cameras.

Select Industry News

❖ San Francisco Continues Efforts to Become a Zero Waste City by 2020

July 1, 2016 – Recology, San Francisco's waste and recycling provider, is paving the way for the future of the city by diverting 80 percent of the city's waste from landfill. Currently, the city produces 650 tons of organic waste per day and the process of composting is helping combat the city's environmental destruction. All San Francisco residents and businesses are required by law to separate their garbage into these three categories. The law was passed in 2009 with hopes of getting the city closer to that zero waste status by 2020.

❖ Waste Management Wins New Contract with Lockport, New York

July 8, 2016 – The Lockport, New York town board awarded a three-year refuse and recycling contract to Waste Management. The contract has two two-year options, which will commence in January 2017. Waste Management offered a year-one price of \$911,464, which breaks down to \$162.24 per household for curbside collection of trash and recyclable materials. Ten years ago, the annual cost per household was \$210. The fee this year is \$183.98, almost \$22 more than Waste Management will charge under new contract terms. The town retained its existing trash volume limit, up to six bags or cans per week per property, while ordering every-other-week recycling collection in large, wheeled and lidded carts.

❖ Enevo Announces Ric Hobby as North American President and General Manager

July 13, 2016 – Enevo announced that waste industry veteran Ric Hobby has been appointed president & general manager for Enevo North America. In his new capacity, Hobby will oversee Enevo's rapidly growing sales and operations efforts in North America. With over 16 years of waste industry leadership, Hobby's previous roles have been with such organizations as The Miner Corporation, HAVI Global Solutions, SMS Assist, Waste Management/Oakleaf Waste, Republic Waste Services and Wastequip.

❖ West Dundee, Illinois Hesitant About Joining E-Waste Recycling Program

July 13, 2016 – In Illinois, officials of the Kane County Division of Environmental Resources are searching for at least three municipalities to serve as an electronics recycling drop-off location. County officials have drawn up a proposal for West Dundee village, which states that the county's contracted recycler, eWorks Electronics Services Inc., would set up and staff each drop-off site during business hours. They would also provide free trailers and transportation logistics, packing materials and electronics processing and recycling services. Earlier this year, West Dundee terminated its recycling program agreement due to the fact that it would not be able to handle recycling for the entire county. Now, the village is currently weighing its options before it commits to becoming an electronics recycling drop-off location.

❖ Battery Recycling Has Reached New Highs

July 22, 2016 – According to Call2Recycle, Inc., a record 7.3 million pounds of single-use and rechargeable batteries have been recycled in 2016 as of the mid-year mark, an increase of 20 percent compared to the same time period last year. This achievement contributes to the more than 115 million pounds of batteries diverted from U.S. and Canadian landfills and responsibly recycled by the organization over the past 20 years. In the U.S., retailers and municipalities contributed to the growth in battery collections, up 17 percent and 147 percent respectively this year, resulting in almost 2.4 million pounds accumulated.



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❖ Medical Waste Management Association Created to Support Medical Waste Disposal Industry

July 27, 2016 – This month, the Medical Waste Management Association (MWMA) was launched. This new association, which is a Phoenix-based nonprofit trade group that offers support for those in the biohazard and medical waste disposal industry, was created to promote operating standards, research, education and regulatory advocacy for organizations that transport, process, store or dispose of biological and medical waste.

❖ Waste Management Names New President

July 27, 2016 – Waste Management announced a management change with current CFO James C. Fish Jr. being named to the position of president. Fish will retain his existing role as CFO, while the company conducts a search to fill that role. Fish, 54, joined Waste Management in 2001. Prior to becoming CFO, he held several key positions with the company, including senior vice president for the company's eastern group, area vice president for Pennsylvania and West Virginia, market area general manager for Massachusetts and Rhode Island, vice president of price management and director of financial planning and analysis.

❖ Casella Lands Three-Year Recycling Contract with Skowhegan, Maine

July 27, 2016 – Casella Recycling LLC, a division of Rutland, Vermont-based Casella Waste Systems, has extended its recycling agreement with the Town of Skowhegan, Maine. For the past 10 years, Skowhegan has been in a recycling agreement with Casella and this new agreement will extend the contract for three more years. Casella currently purchases the town's cardboard, plastics, glass, newspaper and mixed paper collected at its transfer station. The town makes \$55,000 on average per year on the sale of the material.

❖ Salem, Massachusetts Approves Multiple Solid Waste Collection Increases

July 28, 2016 – In Salem, Massachusetts, residents will soon be faced with solid waste collection increases. Those who reside in Marion County and have basic waste collection services will see a 16 percent increase, while those who live in Polk County will only receive a 30 cent rate increase. These rate changes are mostly due to a boost in solid waste disposal fees and mixed organic waste and a decrease in recycling revenue. These rate changes will go into effect on October 1, 2016.

❖ ReCommunity Files Federal Lawsuit Against Ann Arbor Michigan

July 29, 2016 – Resource Recovery Systems and FCR (ReCommunity) filed a complaint in federal court yesterday against the City of Ann Arbor, Michigan, for damages arising from the city's termination of its recycling contract with ReCommunity. According to a press release, "The filing includes claims that the city breached its contract, broke promises relied upon by ReCommunity and unjustly enriched themselves at ReCommunity's expense through wrongful actions to escape a contract they believed was no longer financially advantageous. Additionally, the city's actions put dozens of employees out of work, created additional burdens for city taxpayers, and ended a vital, popular service for its residents." ReCommunity has had a contract with Ann Arbor to manage the city's recycling facility and transfer station since 1993. Those services included the sale of recyclables and sharing the profits from such sales when the revenues exceeded operating costs. The contract included a requirement that the city pay ReCommunity when sale revenues fell short of the amount of ReCommunity's cost to operate the site. It also included a requirement for the city to reimburse ReCommunity's costs for the repair and replacement of recycling equipment. ReCommunity said the city knew the fund was "insufficient to cover costs of needed repairs."

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Sources include Waste360, Waste Dive and various publicly available news publications. Additional information is available upon request.

