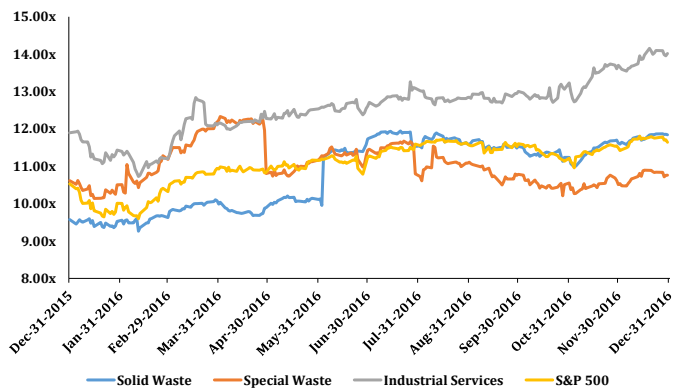


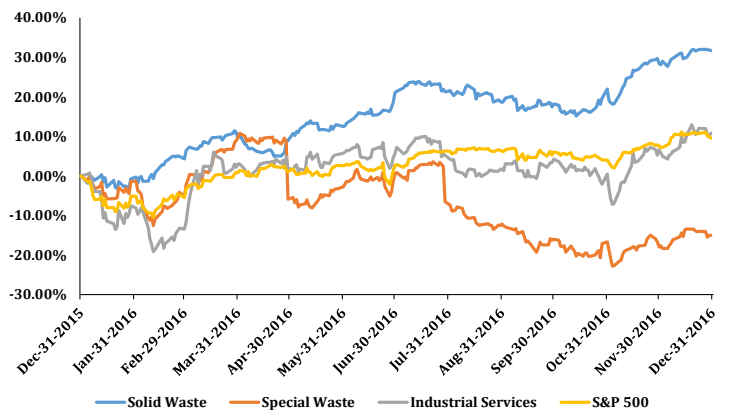
# Trash Talk

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Environmental Services LTM TEV/EBITDA



Environmental Services LTM Share Price (Shown as % change)



## Indices Performance (% change)

	<u>December 2016</u>	<u>LTM</u>		<u>December 2016</u>	<u>LTM</u>
S&P 500	2.2%	9.5%	Solid Waste	2.6%	31.7%
Dow Jones	3.2%	13.4%	Special Waste	3.6%	(15.0%)
NASDAQ	2.5%	7.5%	Industrial Services	3.9%	10.8%

(Source: CapitalIQ)

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

Quest Resource Holding Corporation	23.7%	Industrial Services of America, Inc.	(28.7%)
Ecology & Environment, Inc.	17.6%	Sharps Compliance Corp.	(11.6%)
Advanced Disposal Services, Inc.	10.8%	Darling Ingredients Inc.	(4.4%)
Covanta Holding Corporation	6.9%	Fuel Tech, Inc.	(4.2%)
US Ecology, Inc.	5.8%	Heritage-Crystal Clean, Inc.	(3.7%)

## Environmental Services Industry Contacts

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## Select Public Trading Statistics (as of 12/31/2016)

### Solid Waste:

(\$ in millions, except per share data)

Company	Share Price 12/31/2016	% 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.	\$70.91	98.8%	\$31,342	\$40,597	3.0x	11.2x	18.0x	28.4x	22.1x	23.9x	37.5%	17.2%	27.3%	2.5x
Republic Services, Inc.	\$57.05	98.4%	\$19,395	\$27,108	2.9x	10.4x	17.6x	33.2x	23.1x	24.9x	38.7%	16.6%	28.1%	3.0x
Waste Connections, Inc.	\$78.59	98.4%	\$13,787	\$17,368	6.1x	19.2x	33.8x	40.9x	NM	34.0x	42.7%	18.0%	31.6%	4.0x
Advanced Disposal Services, Inc.	\$22.22	99.1%	\$1,949	\$4,189	3.0x	10.8x	34.6x	0.0x	NM	NM	38.2%	8.5%	27.5%	5.8x
Casella Waste Systems, Inc.	\$12.41	92.5%	\$515	\$1,012	1.8x	9.7x	24.3x	NM	NM	NM	32.2%	7.4%	18.6%	4.8x
<b>Mean</b>			\$13,398	\$18,055	3.4x	12.3x	25.6x	25.6x	22.6x	27.6x	37.9%	13.5%	26.6%	4.0x
<b>Median</b>			\$13,787	\$17,368	3.0x	10.8x	24.3x	30.8x	22.6x	24.9x	38.2%	16.6%	27.5%	4.0x
<b>High</b>			\$31,342	\$40,597	6.1x	19.2x	34.6x	40.9x	23.1x	34.0x	42.7%	18.0%	31.6%	5.8x
<b>Low</b>			\$515	\$1,012	1.8x	9.7x	17.6x	0.0x	22.1x	23.9x	32.2%	7.4%	18.6%	2.5x

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 12/31/2016	% 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.	\$77.04	59.7%	\$6,555	\$9,539	2.7x	12.8x	19.0x	28.0x	31.5x	18.0x	45.1%	14.1%	21.0%	4.0x
Clean Harbors, Inc.	\$55.65	95.6%	\$3,194	\$4,569	1.6x	11.4x	39.9x	NM	36.2x	382.9x	29.4%	4.1%	14.4%	3.4x
Darling Ingredients Inc.	\$12.91	81.0%	\$2,125	\$3,024	1.2x	7.1x	14.5x	14.5x	NM	29.4x	22.4%	4.5%	13.0%	3.9x
US Ecology, Inc.	\$49.15	97.8%	\$1,070	\$1,352	2.7x	11.6x	17.5x	31.1x	26.1x	28.2x	31.2%	15.5%	23.5%	2.4x
Sharps Compliance Corp.	\$3.83	42.6%	\$61	\$57	1.6x	NM	NM	NM	NM	NM	31.9%	(1.0%)	1.7%	(6.2x)
Perma-Fix Environmental Services, Inc.	\$3.90	69.1%	\$46	\$57	1.1x	NM	NM	NM	NM	NM	15.4%	(8.9%)	(1.5%)	(13.3x)
<b>Mean</b>			\$2,175	\$3,249	1.8x	10.7x	22.7x	24.6x	31.3x	114.6x	29.2%	4.7%	12.0%	-1.0x
<b>Median</b>			\$1,998	\$2,638	1.6x	11.5x	18.3x	28.0x	31.5x	28.8x	30.3%	4.3%	13.7%	2.9x
<b>High</b>			\$6,555	\$9,539	2.7x	12.8x	39.9x	31.1x	36.2x	382.9x	45.1%	15.5%	23.5%	4.0x
<b>Low</b>			\$46	\$57	1.1x	7.1x	14.5x	14.5x	26.1x	18.0x	15.4%	-8.9%	-1.5%	(13.3x)

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 12/31/2016	% 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	\$15.60	87.9%	\$2,026	\$4,612	2.8x	13.6x	34.7x	31.2x	NM	NM	30.4%	7.6%	19.9%	7.8x
CECO Environmental Corp.	\$13.95	93.8%	\$477	\$586	1.4x	11.1x	18.2x	48.0x	13.3x	15.0x	31.2%	7.7%	12.6%	2.1x
Heritage-Crystal Clean, Inc.	\$15.70	93.7%	\$352	\$389	1.1x	16.2x	52.6x	NM	33.2x	39.4x	20.6%	2.2%	7.0%	1.5x
Cypress Energy Partners, L.P.	\$10.55	85.4%	\$125	\$215	0.7x	15.1x	25.8x	NM	15.9x	13.6x	11.5%	2.6%	4.5%	7.8x
Ecology & Environment, Inc.	\$10.55	94.2%	\$45	\$36	0.4x	8.2x	10.8x	40.8x	NM	NM	45.3%	3.3%	4.4%	(2.6x)
Fuel Tech, Inc.	\$1.15	56.1%	\$27	\$14	0.2x	NM	NM	NM	NM	NM	37.4%	(12.5%)	(6.7%)	3.1x
Quest Resource Holding Corporation	\$2.45	40.8%	\$37	\$39	0.2x	NM	NM	NM	NM	NM	7.7%	(4.7%)	(2.4%)	(0.4x)
Industrial Services of America, Inc.	\$1.79	53.4%	\$14	\$19	0.6x	NM	NM	NM	NM	NM	(2.0%)	(15.8%)	(8.7%)	(1.6x)
<b>Mean</b>			\$388	\$739	0.9x	12.9x	28.4x	40.0x	20.8x	22.6x	22.8%	-1.2%	3.8%	2.2x
<b>Median</b>			\$85	\$127	0.6x	13.6x	25.8x	40.8x	15.9x	15.0x	25.5%	2.4%	4.4%	1.8x
<b>High</b>			\$2,026	\$4,612	2.8x	16.2x	52.6x	48.0x	33.2x	39.4x	45.3%	7.7%	19.9%	7.8x
<b>Low</b>			\$14	\$14	0.2x	8.2x	10.8x	31.2x	13.3x	13.6x	-2.0%	-15.8%	-8.7%	(2.6x)

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

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### ❖ Wheelabrator Achieves Financial Close on North Wales WTE Facility

December 16, 2016 – Wheelabrator Technologies reached financial close on a new 220,000 tons per year energy recovery facility, with construction to commence in January 2017 on the Deeside Industrial Park in Flintshire, North Wales. It's the latest in a series of steps forward for the company as a global player in the waste-to-energy market since it was divested from Waste Management in 2014 in a \$1.94 billion transaction.

An affiliate of the Short Hills, New Jersey-based Energy Capital acquired the company in the transaction. In conjunction with the closing of the sale, Waste Management and Energy Capital entered into a seven-year waste supply agreement. In 2015, Robert Boucher stepped in as president and CEO, succeeding Mark A. Weidman, who retired after spending 25 years with the company.

This summer, the company also reached financial close on a new 606,000 tons per year energy-from-waste facility at Kemsley in Kent, United Kingdom. Then it moved its U.S. corporate headquarters to Pease International Tradeport in Portsmouth, New Hampshire. In the newest development, Wheelabrator Parc Adfer will be a combined heat and power enabled facility which will generate 18.8 MW (gross) / 16.6 MW (net) of sustainable electricity to meet the needs of over 30,000 U.K. homes and businesses. The facility will also be capable of providing valuable steam or heat to local industry and housing.

Progress to reach close on this £180 million financing follows the award of planning consent by Flintshire County Council's Planning and Development Control Committee in May 2015 and an Environmental Permit by Natural Resources Wales. Site preparation work will start immediately and full construction of the facility is set to commence in 2017. The construction phase is expected to result in hundreds of additional jobs and create around 35 new, full-time operational roles at the facility when plant operations commence in 2019. Parc Adfer is Wheelabrator's third energy recovery facility in the United Kingdom, which in total represents over 1.43 million tons of residual waste treatment capacity.

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## Select Industry News

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### ❖ Wastebuilt Environmental Solutions CEO Transitions to Vice Chairman of the Board of Directors

December 6, 2016 – Bolingbrook, Illinois-based Wastebuilt Environmental Solutions has announced that CEO Greg Podell will transition from CEO to vice chairman of the board of directors, effective January 1, 2017. COO Dave McKeon will assume Podell's operating positions after the transition. Prior to joining Wastebuilt, McKeon held leadership roles at C&H Distributors, McMaster-Carr Supply, Beckley Cardy Group and USABlueBook.

### ❖ Court Reaches Verdict in Los Angeles County vs. Kern County Case

December 8, 2016 – After a decade-long battle, the Los Angeles v. Kern County case has finally come to a close. Tulare County Superior Court Judge Lloyd Hicks issued a tentative ruling that invalidated Kern County, California's 2006 Measure E ban on the land-application of biosolids in the county's unincorporated areas. Following this decision, the City of Los Angeles will continue to recycle biosolids at its farm to grow feed crops, which can be utilized by Kern County dairies.

### ❖ Heritage-Crystal Clean CEO Chalhoub to Retire

December 9, 2016 – Heritage-Crystal Clean Inc. (HCCI) a leading provider of parts cleaning, used oil re-refining, and hazardous and non-hazardous waste services primarily focused on small and mid-sized customers, announced the retirement of Founder, President and CEO Joe Chalhoub effective January 31, 2017. Chalhoub will be succeeded by Brian Recatto, who has served Heritage-Crystal Clean, Inc. as a director for the past four years and was named lead director earlier this year.

With almost 30 years of experience in the environmental services industry, Recatto has served, since 2014, as president U.S. operations for Gibson Energy Inc., an independent midstream energy company in Canada and a major U.S. crude oil logistics operator. Recatto joined Gibsons through its acquisition of OMNI Energy Services, where he had served in various executive positions since 2007, including vice president and COO and president and CEO. Recatto was president from 2004 to 2007 of Charles Holston Inc., a waste management and environmental cleaning company, which OMNI acquired.

### ❖ Recycling Company Owner Charged with Illegally Landfilling Hazardous Waste

December 21, 2016 – Brian Brundage, former owner of Chicago Heights, Illinois-based Intercon Solutions Inc. and current owner of Gary, Indiana-based EnviroGreen Processing LLC, has been charged with a multimillion dollar scheme, which involved reselling or illegally landfilling hazardous e-waste. In addition, Brundage is being accused of using Intercon funds to pay for his personal expenses, such as his nanny's wages and payments to a casino.



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❖ **Residential Waste, Recycling Company to Pay Back Wages**

December 23, 2016 – An investigation by the U.S. Department of Labor’s Wage and Hour Division’s Atlanta District Office, investigators found that Southern Sanitation violated the overtime and recordkeeping provisions of the Fair Labor Standards Act. Investigators found the waste management company failed to pay overtime to 32 employees. The employer paid truck drivers and helpers a fixed rate per day, without regard to how many hours they worked. By doing so, Southern Sanitation caused overtime violations when the employees worked more than 40 hours in a work week and the employer failed to pay the required time-and-one-half their regular rate of pay. Additional overtime violations occurred when the employer made deductions illegally for time spent in short rest breaks, which are compensable, and when deductions from pay were made for meal breaks that employees did not take. The employer also failed to maintain required time and payroll records. Southern Sanitation will comply with the FLSA and pay 32 employees a total of \$37,933 in back wages.

❖ **Lakeshore Recycling Systems Recognized as One of the Nation’s 2016 Best and Brightest Companies to Work For**

December 23, 2016 – Lakeshore Recycling Systems (LRS) has been named one of the nation’s Best and Brightest Companies to Work For. The only waste and recycling company to be named to the list, this honor recognizes LRS within the top 85 largest US businesses with more than 301 employees. LRS promotes an employee-driven culture that elevates employee well-being and workplace satisfaction. In early 2016, LRS substantially grew its benefits package, built a health and fitness center in its corporate headquarters, created new internal events for employee collaboration, created a Junior Executive Board for easier accessibility and communication and increased its community outreach with respected charities to raise donations and awareness for meaningful causes. Through active participation in neighborhood parades, charity events, school visits and other community events throughout greater Chicago, LRS strives to be a good corporate citizen by showcasing the passion and involvement of its most valuable asset, its employees.

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