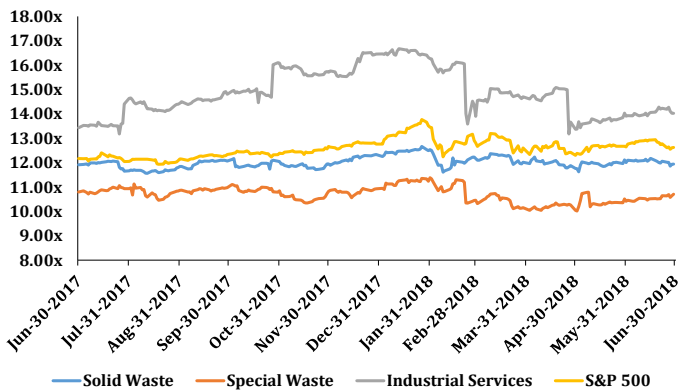


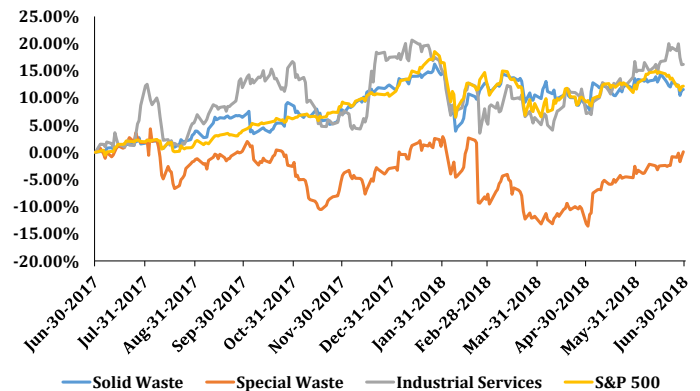
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Environmental Services LTM TEV/EBITDA



Environmental Services LTM Share Price (Shown as % change)



Indices Performance (% change)

	June 2018	LTM		June 2018	LTM
S&P 500	(0.6%)	12.2%	Solid Waste	(0.6%)	11.6%
Dow Jones	(1.5%)	13.7%	Special Waste	4.2%	0.1%
NASDAQ	(0.6%)	22.3%	Industrial Services	1.2%	16.2%

(Source: CapitalIQ)

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

Casella Waste Systems, Inc.	8.6%	Attis Industries, Inc.	(26.4%)
CECO Environmental Corp.	7.5%	Perma-Fix Environmental Services, Inc.	(8.2%)
Advanced Disposal Services, Inc.	6.0%	Fuel Tech, Inc.	(6.1%)
Darling Ingredients Inc.	5.8%	Ecology & Environment, Inc.	(4.3%)
US Ecology, Inc.	5.1%	Industrial Services of America, Inc.	(2.8%)

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Select Public Trading Statistics (as of 6/30/2018)

Solid Waste:

(\$ in millions, except per share data)

Company	Share Price 06/30/2018	% 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	CY18 P/E	CY19 P/E	Gross	EBIT	EBITDA		
Waste Management, Inc.	WM	\$81.34	90.6%	\$35,170	\$45,096	3.1x	11.2x	17.2x	17.5x	23.0x	21.1x	37.9%	18.3%	27.9%	2.4x
Republic Services, Inc.	BSG	\$68.36	97.7%	\$22,417	\$30,564	3.0x	11.0x	18.4x	17.3x	23.2x	21.1x	38.5%	16.7%	27.9%	2.9x
Waste Connections, Inc.	WCN	\$75.28	95.9%	\$19,824	\$23,504	5.0x	16.0x	28.3x	29.1x	32.2x	29.0x	41.8%	17.8%	31.5%	2.5x
Advanced Disposal Services, Inc.	ADSW	\$24.78	96.4%	\$2,194	\$4,110	2.7x	10.2x	36.3x	46.9x	44.8x	38.7x	36.4%	7.3%	26.2%	4.8x
Casella Waste Systems, Inc.	CWST	\$25.61	93.1%	\$1,093	\$1,591	2.6x	13.8x	31.4x	NM	40.7x	33.1x	32.0%	8.3%	18.8%	4.3x
Attis Industries, Inc.	ATIS	\$0.38	10.5%	\$7	\$26	15.7x	NM	NM	NM	NM	NM	7.8%	NM	NM	(0.8x)
Mean				\$13,451	\$17,482	5.4x	12.4x	26.3x	27.7x	32.8x	28.6x	32.4%	13.7%	26.5%	2.7x
Median				\$11,009	\$13,807	3.1x	11.2x	28.3x	23.3x	32.2x	29.0x	37.2%	16.7%	27.9%	2.7x
High				\$35,170	\$45,096	15.7x	16.0x	36.3x	46.9x	44.8x	38.7x	41.8%	18.3%	31.5%	4.8x
Low				\$7	\$26	2.6x	10.2x	17.2x	17.3x	23.0x	21.1x	7.8%	7.3%	18.8%	-0.8x

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 06/30/2018	% 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	CY18 P/E	CY19 P/E	Gross	EBIT	EBITDA		
Stericycle, Inc.	SREL	\$65.29	78.4%	\$5,587	\$8,271	2.3x	11.6x	18.1x	NM	17.5x	16.7x	40.6%	12.8%	19.9%	3.8x
Darling Ingredients Inc.	DAR	\$19.88	97.6%	\$3,273	\$5,005	1.4x	8.8x	19.2x	15.2x	19.2x	24.5x	21.7%	3.7%	12.2%	3.7x
Clean Harbors, Inc.	CLH	\$55.55	95.3%	\$3,121	\$4,526	1.5x	10.5x	32.6x	28.9x	NM	NM	29.7%	4.6%	14.3%	3.3x
US Ecology, Inc.	ECOL	\$63.70	98.5%	\$1,397	\$1,629	3.2x	14.7x	23.3x	26.2x	27.9x	24.8x	30.5%	13.6%	21.6%	2.1x
Sharps Compliance Corp.	SMED	\$3.69	64.4%	\$59	\$56	1.4x	NM	NM	NM	NM	NM	29.8%	0.2%	4.1%	(2.0x)
Perma-Fix Environmental Services, Inc.	PEFI	\$4.50	87.4%	\$54	\$54	1.1x	44.2x	NM	NM	NM	NM	21.4%	(3.7%)	2.5%	0.5x
Mean				\$2,249	\$3,257	1.8x	18.0x	23.3x	23.4x	21.5x	22.0x	28.9%	5.2%	12.4%	1.9x
Median				\$2,259	\$3,078	1.4x	11.6x	21.2x	26.2x	19.2x	24.5x	29.7%	4.2%	13.2%	2.7x
High				\$5,587	\$8,271	3.2x	44.2x	32.6x	28.9x	27.9x	24.8x	40.6%	13.6%	21.6%	3.8x
Low				\$54	\$54	1.1x	8.8x	18.1x	15.2x	17.5x	16.7x	21.4%	-3.7%	2.5%	(2.0x)

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 06/30/2018	% 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	CY18 P/E	CY19 P/E	Gross	EBIT	EBITDA		
Covanta Holding Corporation	CVA	\$16.50	95.4%	\$2,138	\$4,541	2.5x	14.5x	46.8x	7.0x	NM	NM	30.1%	5.3%	17.3%	7.7x
Heritage-Crystal Clean, Inc.	HCCI	\$20.10	79.8%	\$463	\$455	1.2x	11.8x	21.6x	19.9x	33.2x	22.0x	23.2%	5.7%	10.4%	(0.2x)
CECO Environmental Corp.	CECE	\$6.14	57.4%	\$213	\$270	0.8x	12.0x	38.0x	78.7x	25.5x	15.9x	32.9%	2.2%	6.9%	2.5x
Cypress Energy Partners, L.P.	CELP	\$7.25	85.3%	\$87	\$171	0.6x	11.2x	17.6x	12.8x	13.7x	NM	12.4%	3.4%	5.3%	7.0x
Ecology & Environment, Inc.	EEI	\$12.45	86.1%	\$54	\$39	0.4x	7.2x	9.0x	25.2x	NM	NM	44.7%	4.1%	5.1%	(3.0x)
Quest Resource Holding Corporation	QRHC	\$1.94	66.7%	\$30	\$34	0.3x	NM	NM	NM	NM	NM	12.5%	(4.1%)	(0.7%)	(4.8x)
Fuel Tech, Inc.	FTEK	\$1.08	59.0%	\$26	\$20	0.4x	NM	NM	NM	NM	NM	39.1%	(5.0%)	(2.3%)	5.0x
Industrial Services of America, Inc.	ISDA	\$2.07	76.7%	\$17	\$24	0.4x	10.8x	211.9x	NM	NM	NM	6.2%	0.2%	4.0%	3.4x
Mean				\$378	\$694	0.8x	11.2x	57.5x	28.7x	24.1x	18.9x	25.1%	1.5%	5.8%	2.2x
Median				\$70	\$105	0.5x	11.5x	29.8x	19.9x	25.5x	18.9x	26.7%	2.8%	5.2%	3.0x
High				\$2,138	\$4,541	2.5x	14.5x	211.9x	78.7x	33.2x	22.0x	44.7%	5.7%	17.3%	7.7x
Low				\$17	\$20	0.3x	7.2x	9.0x	7.0x	13.7x	15.9x	6.2%	-5.0%	-2.3%	(4.8x)

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

❖ Action Environmental Group Acquires Miele Sanitation

June 13, 2018 – Action Environmental Group, provider of non-hazardous waste management and recycling services for New York City, Northern New Jersey, Rockland and Orange County, New York, has acquired Miele Sanitation, a Bergen County, New Jersey-based waste management company. With this transaction, Action Environmental Group, through its subsidiary Interstate Waste Services (IWS), has acquired operations and assets of Miele Sanitation. The acquired business assets include commercial waste and recycling collection, equipment and vehicles.

❖ Continuous Material Recovery Acquires ReWall

June 27, 2018 – Due to the rollout of China's waste import ban, tens of thousands of tons of paper and plastic no longer have a clear path to reuse and are being sent to landfills. By acquiring the manufacturing assets of Des Moines, Iowa-based ReWall Company, Continuous Material Recovery is poised to create an entirely new value network in construction building materials along with ushering in a new era for recycling. To address the rising consumer demand for durable sustainable building materials and corporate zero waste goals, Continuous is taking post-consumer and post-industrial mixed paper and plastic destined for landfill and manufacturing the materials through a proprietary process into 4-foot-by-8-foot building material boards for exterior wall and commercial roofs. This new product will be a welcome opportunity for companies committed to zero waste goals. By using Continuous roof cover boards for their large commercial roof projects, companies will qualify for waste diversion volumes as an offset toward their zero waste reporting. Continuous boards are an advanced engineered composite building material that are extremely durable and ideal for superior building envelope performance.

❖ Valet Living Acquires Invisible Waste Services

June 29, 2018 – Valet Living, a pioneer of the doorstep collection amenity, has acquired Invisible Waste Services (IWS). Servicing more than one million apartment homes across 38 states, and as the nation's leading provider, Valet Living has expanded to deliver on its vision as the only nationally recognized, full-service amenities provider to the multifamily industry, enhancing life for both residents and property managers. In addition to doorstep collection and recycling services, Valet Living sets the standard for turn services, maintenance support, pet solutions and Valet Living Home, a mobile application platform for residential amenities. IWS, the nation's second largest doorstep trash provider, is excited to join the Valet Living portfolio and enable all of its associates to join the Valet Living team as well. As innovators in the multifamily industry, IWS and Valet Living will now work together under the Valet Living umbrella and operate as one.

Select Industry News

❖ Westchester, New York Trash Hauler to Pay Over \$2M and Serve Prison Time for Fraud Scheme

June 1, 2018 – Stephen DiSalvo, a Florida native, has been charged on 40 counts of fraud and theft and sentenced to three to six years in prison for a scheme involving ATNM Corporation. He's also forfeited \$1 million and has been ordered to pay more than \$2 million with his codefendants Christopher C. and Christopher E. Leggio. Between 2013 and 2015, DiSalvo and his businesses partners altered several hundred dump tickets to reflect a higher tonnage of solid waste being transported. The altered tickets were attached to ATNM invoices and sent to a hauling broker, who ended up paying more than \$1 million of unnecessary costs to ATNM during the scheme.

❖ The Coca-Cola Foundation Grants \$1M to The Recycling Partnership to Fight Marine Debris

June 5, 2018 – Marine debris is a global crisis for the world's waterways and oceans and an imminent concern for consumers, communities and industries. By 2050, it is estimated that there will be more marine debris than fish in our ocean and 80 percent of marine debris comes from land-based sources. To help address the challenge of waste in waterways and help improve the collection of recyclables for reuse, The Coca-Cola Foundation is contributing \$1 million to The Recycling Partnership to support a new coastal and waterway communities grant program that will provide new carts with lids to targeted communities.

❖ Waste Management Unveils \$30M RNG Facility in Louisville, Kentucky

June 6, 2018 – Waste Management has unveiled its new \$30 million renewable natural gas (RNG) technology at its Outer Loop Recycling and Disposal facility in Louisville, Kentucky. This innovative facility captures methane produced by the landfill and converts it to pipeline quality natural gas. The facility processes up to 5,000 standard cubic feet per minute (SCFM) of incoming landfill gas. This equates to about 2,500 mmbtu per day of RNG, or 18,000 diesel gallon equivalents (DGE) per day, enough to fuel about 800 of the company's compressed natural gas (CNG) collection trucks.



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❖ Waste Pro to Service 127,000 Multifamily Residences in Charlotte, North Carolina

June 7, 2018 – The city of Charlotte, North Carolina, has selected Waste Pro to provide waste and recycling collection services to 127,000 multifamily residential units. Waste Pro will begin servicing the city on July 1. Under Waste Pro's new three-year contract, it will provide the city with solid waste and recycling collection on a weekly basis, with bulky items, such as furniture, collected upon request. Services will be based out of Waste Pro's Concord operations. Waste Pro USA, Inc. is one of the country's fastest growing privately owned waste collection, recycling, processing and disposal companies, operating in nine southeastern states. Waste Pro, with revenue in 2018 projected to be nearly \$700 million, serves more than two million residential and 40,000 commercial customers from more than 75 operating locations. Waste Pro is headquartered in Longwood, Florida, and maintains more than 265 exclusive municipal contracts and franchises.

❖ China's Waste Import Ban Causing Recyclables to be Sent to Landfill

June 26, 2018 – Americans recycle about 66 million tons of recyclables per year, but now, instead of being able to process and send a large portion of that material overseas to China, companies and individuals are forced to find new homes for the materials. China rolled out its waste import ban and new contamination standard earlier this year, and since then, the recycling industry has faced a number of challenges, such as collecting and processing cleaner material and finding new markets for recyclables. While recycling companies and individual recyclers search for new markets, many are forced to landfill the material simply because recyclables are entering facilities at a fast pace and there is no place to put it all.

❖ Thailand Temporarily Halts Imports of Plastic Waste, E-Waste

June 26, 2018 – Nearly a month after China and Vietnam announced their temporary suspensions of scrap plastic imports, the Department of Industrial Works (DIW) has issued an order to temporarily halt imports of plastic waste and e-waste. While this move is temporary for now, the department is planning on proposing an indefinite ban on these imports in the near future. To date, 37,000 tons of e-waste and 120,000 tons of plastic waste have been imported into Thailand in 2018.

❖ Republic Services Named to Forbes' World's Most Innovative Companies List

June 27, 2018 – Republic Services, Inc. has been recognized as one of the most innovative companies in the world by Forbes Magazine. Ranked No. 89, Republic is one of only two recycling and solid waste management companies on the 2018 list (Waste Connections ranked No. 84). Forbes selects its annual 100 World's Most Innovative Companies list by identifying companies that investors believe to be forward-thinking and that will continue to achieve profitable new growth through future advances. This recognition from Forbes underscores investor confidence in Republic's demonstrated ability to advance its business through creative disruption and innovation. Examples can be found throughout Republic's strategy and operations, including growth through differentiation, advanced technologies, a cleaner fleet and landfill solutions. This honor from Forbes is the latest in a series of third-party validations for Republic, including Ethisphere's World's Most Ethical Companies List, Barron's 100 Most Sustainable Companies List and Dow Jones Sustainability – North America and World – Indices.

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

