Environmental Services Insider



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Highlights

M&A Activity

- The middle market is active, with M&A volume in the first half of 2011 up 33 percent over the same period a year ago. Q2 '11 deal flow was up 34 percent over the prior quarter and 41 percent over the comparable period last year. Valuations remain strong in a competitive deal market, with the median strategic buyer multiple exceeding a healthy 8x EBITDA. The median financial buyer multiple also remains healthy, equaling 7.4x EBITDA for middle market transaction values below $500 million (Page 2).

- M&A activity in environmental services is following the same positive trend, with deal flow in the first half up 31 percent from the year ago period. Sectors leading transaction activity are Solid Waste, up nearly two-fold and Metals Recycling & E-Waste, doubling over the same period. Q2 '11 deal flow slowed from the prior quarter with Solid Waste and Metals Recycling & E-Waste off their first quarter pace, while Special Waste showed a notable increase, with the number of transactions doubling over the same period (Page 3).

Industry Valuations

- Concerns of an economic slowdown continue to weigh heavily on the equity markets. Environmental stocks have come under pressure but demonstrated resilience with LTM EBITDA[1] multiples firming from Q1 '11 levels (Page 22). Market volatility is evidenced in broader index performance. The S&P is up roughly 3 percent through the year to date period, yet down 7 percent from its market high in April and down 17 percent year over year.

(1) As of July 22, 2011

Operating Highlights

- Business conditions are improving. Public solid waste companies are reporting flat to modest growth in MSW volumes and see upside from improving commercial volumes. Pricing discipline and cost control remain a primary focus. Companies are spending on growth initiatives to mine value in additional waste streams and continue to pursue accretive acquisitions. Recycling is growing in importance in the portfolio mix.

- Public special waste companies report an improving demand picture with increased industrial activity, particularly in the energy and chemical end markets. Capital projects are coming online as visibility has improved with the economic recovery. Sustained high energy prices are contributing to increased project activity in energy services.

- Domestic scrap markets are showing improving demand dynamics with participants reporting strong results on higher volumes and pricing. A strong export market is also contributing to volume growth. Companies are making investments in technology to improve processing capabilities and seeking accretive tuck-in acquisitions to expand geographic reach and increase access to supply. Recent actions by the federal government may be harbingers of change in the regulatory landscape governing e-waste.

- Public E&C companies are seeing greater market stability and improving backlog. Companies report increased private sector bidding activity and are encouraged by strong upside in the recovery. Government contracting remains clouded amid budget uncertainty; however, participants are diversifying exposure and expect visibility to improve as issues abate later this year or early into 2012. Acquisitions remain in focus to cross-sell offerings and expand capabilities and reach into higher-growth, higher-margin service areas, with mining, energy (notably the emerging shale gas plays in the U.S), oil sands, and energy efficiency cited as areas of significant future growth.

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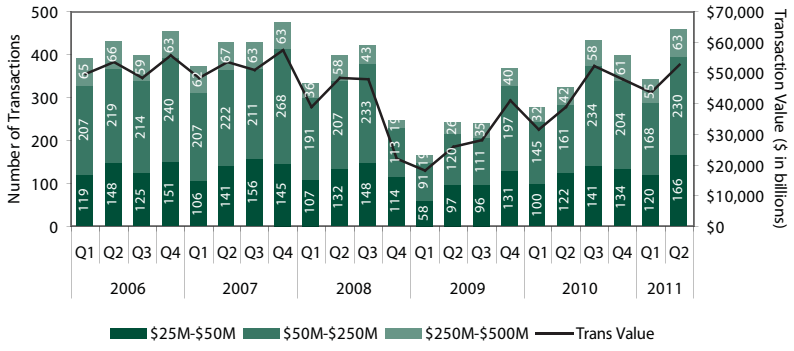
Overall M&A Activity

Mergers & Acquisitions Activity

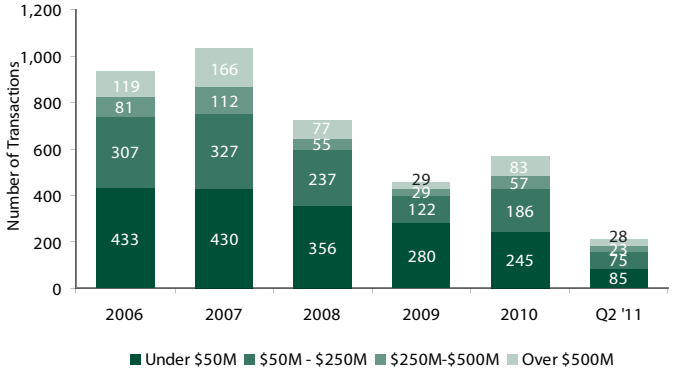
Middle Market M&A Activity



Based on announced deals, where the primary location of the target is in the United States.
Middle market enterprise values between $25 million and $500 million.

Source: Capital IQ.

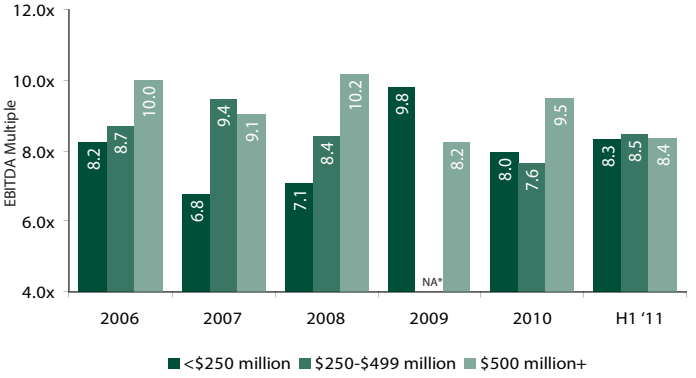
Private Equity Transaction Activity
Transaction Count by Deal Size



Counts only include deals with disclosed transaction values.

Source: PitchBook.

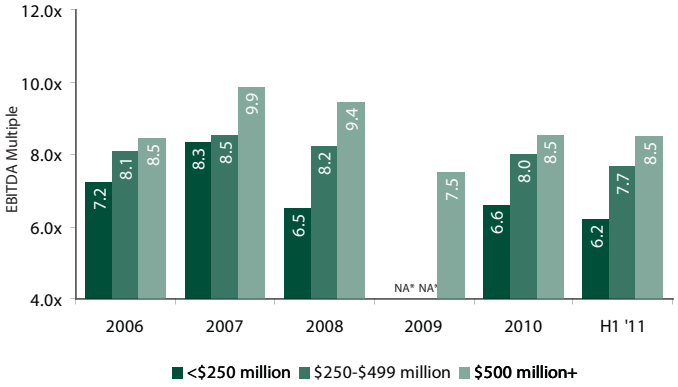
Strategic Buyer Valuation Trends



**NOTE: Data not reported due to limited number of observations for period.*

Source: Standard & Poors LCD.

Financial Buyer Valuation Trends

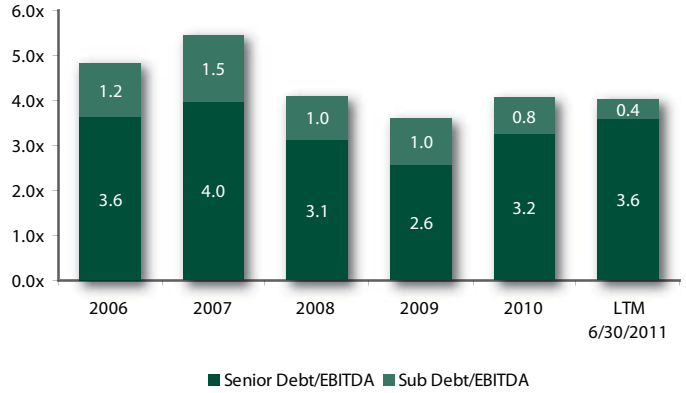


**NOTE: Data not reported due to limited number of observations for period.*

Source: Standard & Poors LCD.

Acquisition Financing Trends

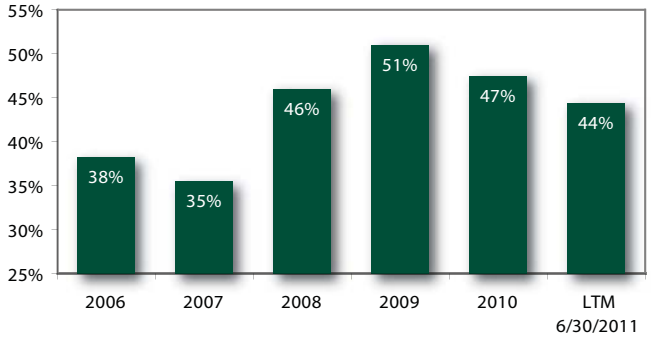
Leverage



Middle market enterprise values between $25 million and $500 million.

Source: Standard & Poors LCD.

Equity Contribution



Middle market enterprise values between $25 million and $500 million.

Source: Standard & Poors LCD.

Mergers & Acquisitions

NOTABLE Q2 '11 M&A ACTIVITY IN SOLID WASTE

In June 2011, **Swisher Hygiene Inc.** (NasdaqGM: SWSH) announced it was acquiring Dade City, Florida-based **Central Carting Disposal Inc.** and **CCI Hauling Inc.**, continuing its expansion strategy throughout Florida. CCI serves more than 26,000 customers in central Florida. Total consideration paid includes up to $15 million in cash.

The transaction follows on the purchase of Fort Lauderdale, Florida-based **Choice Environmental Services, Inc.** in February 2011. Choice serves south and central Florida with a fleet of 150 trucks. The company's run rate revenues were tracking to $70 million at the time of the acquisition. The Choice acquisition established Swisher's growth platform to expand in solid waste. Former CEO Glen Miller is leading the expansion effort, who sees significant opportunities for organic and acquisition-related growth. Swisher has publicly stated its aggressive acquisition strategy, with the intent to pursue accretive, tuck-in acquisitions of solid waste businesses in markets where it has existing strong market share from the company's chemical and hygiene businesses.

In June 2011, **Progressive Waste Solutions Ltd.** acquired Chalmette, Louisiana-based **SDT Waste and Debris Services, LLC** (SDT). SDT has 250 employees and provides services in 24 cities and parishes in Louisiana. Progressive Waste speaks to a robust acquisition pipeline, particularly in the U.S. markets.

Environmental Services M&A Activity

Veolia ES Solid Waste Inc. (Veolia) announced several tuck-in acquisitions in the second quarter, including the June 2011 purchase of **Parker Sanitation Inc.** of Panama City, Florida, which marks an entry to a new market. Parker Sanitation serves both residential and commercial customers in Panama City as well as surrounding areas in Bay County, Florida. In May 2011, Veolia announced three tuck-in acquisitions in three states, **JC Sanitation LLC** of McClellandtown, Pennsylvania; **Treesmith Inc.** of Tuscaloosa, Alabama; and **Suburban Disposal and Recycling Inc.** of Warrensburg, Illinois.

In April 2011, **Waste Connections Inc.** (NYSE: WCN) announced it acquired **Hudson Valley Waste Holding Inc.** and its wholly owned subsidiary **County Waste and Recycling Service Inc.** (County Waste). The transaction marks an entry for WCN in the Northeast and its first buy in New York, acquiring the largest independent waste hauler in the Albany and Hudson Valley local markets. The transaction is WCN's largest acquisition since it acquired certain assets from Republic Services in February 2009.

The purchase is consistent with WCN's acquisition to build footprints in secondary, suburban markets, said CEO Ron Mittelstaedt, stating that County Waste is three to five times the size of its next competitor. WCN is looking to expand its business within County Waste's 12-county operating area in and around Albany. County Waste generates EBITDA of ~$35 million to $40 million on annual sales of ~$120 million, according to analyst estimates. The run rate for the collection business is ~$90 million per year, comprised of 65 to 70 percent residential and 30 to 35 percent commercial and roll-off. The remaining $30 million is generated by the transfer station and recycling assets. WCN paid a cash purchase price of $299 million for the company. Clairvest Group made a growth equity investment in Hudson Valley in March 2010 (Page 6).

Transaction Multiples:
~2.5x Revenue; 7.5x–8.5x EBITDA

Based on announced deals, where the primary location of the target is in the United States.
Source: Capital IQ, mergermarket, PitchBook, and BGL Research.

SOURCE: Capital IQ, Waste & Recycling News, Equity Research; and Company Filings.



Mergers & Acquisitions

In April 2011, private equity-backed **Advanced Disposal Services Inc.** acquired certain assets of **Countywide Waste Disposal Inc.** of MacClenny, Florida. The tuck-in buy adds 500 residential customers and 55 commercial customers to strengthen the route density of the company's existing frontload and residential collection operations in Baker County. Countywide is the seventh acquisition for Advanced Disposal in the last 12 months. Advanced Disposal is a portfolio company of Highstar Capital, which acquired the company in July 2006. The company recently announced it refinanced its existing senior credit facilities, opening up $100 million in additional availability to pursue acquisitions.

NOTABLE Q2 '11 M&A ACTIVITY IN SPECIAL WASTE

In June 2011, **Clean Harbors, Inc.** (NYSE: CLH) completed the acquisition of Alberta, Canada-based oilfield services company **Peak Energy Services Ltd.** (PES). PES provides drilling and production equipment and services to the oil and natural gas industries in western Canada and the U.S with over 4,000 pieces of rental equipment. The company operates 13 locations in western Canada and Wyoming, Colorado, North Dakota, Montana, and Pennsylvania. PES also has a water technology business. PES' core offerings complement CLH's Energy and Industrial group and leverage these services into key shale markets in the U.S. PES reported revenues and EBITDA of CAD $153 million and CAD $23.3 million, respectively, in fiscal 2010. The CAD $196 million purchase price consisted of CAD $161 million in cash and assumed net debt of CAD $35 million.

Transaction Multiples: ~1.3x Revenue; ~8.4x EBITDA

In June 2011, **Synagro Technologies, Inc.** announced it acquired Lafayette, Louisiana-based oilfield services company **Drilling Solutions, LLC**. Founded in 2007, Drilling Solutions provides closed-loop solids control and waste management services to the oil & gas industry. The company currently provides services and equipment to various oil & gas exploration and production companies within the Eagle Ford, Bakken, Barnett, and Haynesville shale regions of the U.S. The purchase provides Synagro with a new platform for growth within the oil & gas industry through the addition of closed-loop solids control and waste management expertise. Synagro was acquired by The Carlyle Group in a leveraged buyout in April 2007.

In June 2011, **Daniels Sharpsmart Inc.** acquired the Bronx medical waste facility from Stericycle, Inc., expanding its capabilities in the Northeast. Stericycle divested the facility under an agreement with the U.S. Justice Department following its acquisition of Healthcare Waste Solutions. The Bronx facility purchase is the company's 14th in the U.S., making Daniels the second largest medical waste disposal company in North America, according to a company statement. The New York facility has the potential to serve the Northeast region, which provides more than 150,000 hospital beds, according to Daniels vice president David Skinner. The facility will provide for disposal of medical, sharps, and pharmaceutical waste for hospitals and other medical and dental facilities in New York, New Jersey, Connecticut, Pennsylvania, and Rhode Island.

Environmental Services M&A Activity

In May 2011, **Tradebe Environmental Services, LLC** acquired **United Industrial Services, Inc.**, a hazardous waste management company based in Meridien, Connecticut. Tradebe's 'second significant acquisition in North America,' United operates the largest regional network of RCRA permitted facilities in the Northeast. Founded in 1976, United employs over 250 people and operates five RCRA Part B treatment, storage, and disposal facilities in Connecticut (2 facilities), Massachusetts (2), and New York (1) and operates a waste transfer and storage facility in New Hampshire. The company also owns and operates a diverse fleet of waste transportation vehicles including more than 150 vacuum trucks, bulk transporters, roll-off trailers, and other specialty vehicles.

The addition of United will expand Tradebe's North American capabilities in wastewater and biological treatment, field service and waste collection capabilities, regional emergency response, and Norlite, a rotary kiln facility. Norlite recovers thermal energy from organic waste as fuel in the manufacture of lightweight aggregate, which is utilized in LEED green building certified products within the construction and agricultural industries. Tradebe, based in Barcelona, Spain, now operates 43 hazardous and nonhazardous waste treatment and recycling facilities in the U.S., Spain, France, and the United Kingdom.

In April 2011, **Waste Management of Pennsylvania**, a subsidiary of Waste Management, Inc**.** (NYSE:WM), announced it acquired certain assets of **Bosque Disposal Systems, LLC,** a provider of water solutions to the natural gas industry. The assets sold relate to treating and recycling of flow back and produced water from wells drilled in shale formations. Bosque has developed a portable water treatment system for application in oil and gas extraction operations. WM acquired Bosque's water treatment, recycling processes, and operations in the Marcellus Shale region. The transaction also included the purchase of various mobile water treatment units, frac tanks, and joint ownership of certain technology. Waste Management has an unmatched network of landfills and transportation assets overlaying the Marcellus Shale formation, according to Pennsylvania/West Virginia Market Area vice president James Fish. "With this acquisition, Waste Management is uniquely positioned to provide producers with an integrated portfolio of solutions for both drilling solids and waters," Fish said.

SOURCE: Capital IQ, mergermarket, Waste & Recycling News, Equity Research, and Company Filings.



Mergers & Acquisitions

NOTABLE Q2 '11 M&A ACTIVITY IN METALS RECYCLING & E-WASTE

In April 2011, **Schnitzer Steel Industries Inc.** (NasdaqGS: SCHN) announced the acquisition of Los Angeles, California-based **American Metal Group, Inc.** (AMG), expanding the company's supply network in Northern California and continuing its regional growth strategy within its metals recycling platform. AMG has been in operation for over 50 years. The purchase adds a strong nonferrous franchise and a large scale CRV operation, according to a company statement. Schnitzer has completed 8 acquisitions in the past 12 months.

In April 2011, **PSC Metals, Inc.**, acquired Crossville, Tennessee-based scrap metal processor **Wedel Iron & Metal LLC**. The purchase expands the company's existing operations in Tennessee and furthers its strategy to expand in the Southeast. Wedel is the fourth buy for PSC Metals in 2011. PSC Metals operates from more than 33 locations across the Southeast and Midwest. PSC Metals operates as a subsidiary of Icahn Enterprises, L.P.

NOTABLE Q2 '11 M&A ACTIVITY IN E&C

In June 2011, **AMEC plc** (LSE: AMEC) acquired leading U.S. engineering and environmental services company, **MACTEC, Inc**. Headquartered in Alpharetta, Georgia, MACTEC provides a broad range of services including environmental planning, assessment and remediation; infrastructure engineering; water resources; and construction support services. The acquisition adds 2,600 people and 70 offices to AMEC's Environment & Infrastructure (E&I) business, significantly expanding its U.S. presence and augmenting its global platform of consulting, engineering, and project management expertise. The MACTEC purchase marks AMEC's second acquisition in the U.S. so far this year and the largest U.S. acquisition in its history.

The cash purchase price paid was $280 million. The transaction represents an exit for Pamlico Capital and Nautic Partners LLC, which acquired the company in February 2002, yielding a return of 2.7x their investments.

Transaction Multiples: ~.7x Revenue; 8.8x EBIT

In June 2011, **TRC Companies, Inc.** (NYSE: TRR) acquired the **Environmental Business Unit** of **RMT, Inc.**, a subsidiary of Alliant Energy (NYSE: LNT). Headquartered in Madison, Wisconsin, the business specializes in consulting, development, engineering, and construction through remediation and restoration; environmental, health and safety management; air pollution control; and solid waste management services. The unit employs approximately 200 consultants across 10 primary locations. Net service revenues are projected to be approximately $27 million in 2011. The acquisition is expected to bring additional service capabilities and significantly expand TRC's presence in the Midwest, while also strengthening the company's market position in Texas. The addition will also enable TRC to leverage cross-selling opportunities to an expanded base of industrial customers. The all-cash transaction was $13.3 million.

Transaction Multiples: ~.49x Revenue

Environmental Services M&A Activity

In June 2011, **Tutor Perini Corporation** (NYSE: TPC) acquired tunneling contractor **Frontier-Kemper Constructors, Inc.** of Evansville, Indiana and Black River Falls, Wisconsin-based **Lunda Construction Company**, a regional contractor in the Midwest specializing in heavy highway construction. With operations in the U.S. and Canada, Frontier-Kemper significantly enhances Tutor Perini's tunnel business capabilities, a market that has 20 percent-plus gross margins and limited market participants. The two acquisitions contribute accumulated backlog of $690 million and had 2010 revenue of $550 million. The combined purchase price for the two acquisitions totaled $267 million. In July 2011, TPC announced it was acquiring New York, New York-based **GreenStar Services Corporation**. GreenStar is a leading specialty contractor in the U.S., offering one-stop shopping for its clients, including in-house design and coordination of mechanical, electrical, plumbing discipline capabilities. The purchase significantly expands TPC's expansion in the Northeastern markets. The transaction represents an exit for Eos Partners which acquired WDF in June 2007 and later merged the company with Five Star Electric in January 2008 (Page 8).

In April 2011, **URS Corporation** (NYSE: URS) acquired **BP Barber & Associates, Inc.**, a regional consulting firm focused on civil and environmental engineering. The purchase expands the company's presence in water/wastewater and provides it with a stronger base in the Southeast to cross-sell its services. Founded in 1916 and headquartered in Columbia, South Carolina, BP Barber provides a broad range of civil and environmental engineering services, with a core focus on four areas: water services (comprises majority of the business), environmental, urban development, and surveying/GIS. The company employs approximately 150 people and has regional offices in Charleston, Florence, and Greenville, South Carolina; Savannah, Georgia; and Charlotte, North Carolina.

In April 2011, **A&D Environmental Services, Inc.** announced it acquired **Greenleaf Environmental Group, Inc.** of Buford, Georgia. Greenleaf provides environmental contracting services specializing in waste management, remediation, industrial maintenance, environmental remediation, piping systems, lab packing, OSHA and DOT training, and light civil and mechanical construction services. Greenleaf is the second acquisition for A&D Environmental. The company completed the add-on acquisition of NuWay Environmental Services in March 2008. A&D Environmental provides turn-key environmental and industrial services solutions to government agencies and manufacturing, power generation, transportation, petroleum distribution, and real estate development companies located in the Southeastern U.S. Services included storage tank cleaning, process equipment cleaning, piping cleaning, facility decontamination, and demolition operations, as well as UST/AST closures and demolition/shoring. A&D Environmental is backed by private equity firms Centerfield Capital Partners and Tillery Capital, which acquired the company in February 2008.

SOURCE: Capital IQ, mergermarket, Waste & Recycling News, Equity Research, and Company Filings.



Private Equity Roundtable

Participants

Broadly, environmental services is regarded as an essential service, and investors are drawn to the sector's relative resilience and strong macro secular growth, with core drivers being increasing environmental awareness, growing resource scarcity, and growing waste streams, all of which are expected to drive demand for new technologies and services in the coming years. Recurring revenue and stable cash flows are regarded as salient attributes of many business models and are an attraction for investors and lenders to the space.

BGL conducted a roundtable discussion with a group of private equity sponsors that have experience investing and specialization in the environmental services sector. We asked them to identify subsectors that are garnering increased interest from an investment perspective, trends in M&A activity, and how the credit markets are facilitating transaction activity. Our findings revealed that private equity has a healthy appetite for investing across a diverse range of sectors. The credit markets remain active, and sponsors speak to a competitive financing market for quality transactions. Sponsors are actively looking for opportunities to partner with strong management teams, bringing capital support, industry specialization, and operational expertise to assist in taking businesses to that next level of growth.

PARTICIPATING FIRMS

CLAIRVEST

FIRM: **Clairvest Group**
Toronto, Ontario, Canada
Michael Castellarin, Managing Director

FUND: $467 million (2011)

FOCUS AREAS: Nonhazardous solid waste
Hazardous and nonhazardous liquid waste
Oilfield waste management
Water and wastewater

"Many of the sectors within environmental services are reasonably capital intensive, and so whether you are growing by acquisition or organically, having a financial partner may be an integral part of doubling or tripling the size of a business. Our preference is to provide minority growth equity in transactions with owner/operators who want a financial partner, appreciate the strategic and financial expertise a partner can provide, and are interested in building a more robust team to handle the growth."

County Waste

Clairvest Group made a growth equity investment in Hudson Valley Waste Holding, Inc. (dba County Waste & Recycling Service, Inc.) in March 2010. County Waste was very much a best-in-class nonhazardous solid waste company that was built by Scott Earl over the course of many years. The company was regionally focused in the northeastern U.S., and a majority of its revenue came from subscription residential collection. In partnership with management, a capital program was developed that included the execution of several growth initiatives, the first of which was the implementation of single stream recycling, which at the time was not prevalent in the greater Albany region, enabling the company to manage the recyclables in its own MRF. It was a tremendous success in terms of increased recycling participation, the improvement in recycling rates, and the amount of material that flowed through the MRF once it was opened. The commodity markets remained strong, which of course helped as well.

Waste Connections made a compelling offer and acquired the company in April 2011. Had we stayed invested and worked together, we believe some privatization opportunities and acquisition opportunities would over time have materialized. The transaction underscores our expertise in assisting our owner/operator partners and their management teams in executing major strategic initiatives that drive growth. In the case of County Waste, over half of the value creation came from EBITDA growth. Clairvest realized a return of 2.0x invested capital, equating to an IRR of 87 percent over the 13-month duration of the investment.

Winters Bros. WASTE SYSTEMS, INC.

Winters Bros. Waste Systems, Inc. was a leading integrated provider of nonhazardous solid waste management services including collection, transfer, and recycling throughout the Nassau and Suffolk counties on Long Island, New York. Long Island represented a large and dense market (within a relatively small geographic footprint) with fragmented competition, where Winters had built a leading market position by developing a strong local brand and a reputation for dependable collection service.

In June 2006, Clairvest Group provided growth capital to back management in advancing their strategic plan centered on organic growth balanced between pricing and volume gains, expansion of the existing transfer station, and completing acquisitions in the Long Island marketplace. In less than one year, Winters acquired the Long Island assets of Waste Management and Allied Waste, representing revenue of just under $100 million, and realized material post integration synergies by changing disposal outlets, consolidating routes, and rationalizing overhead costs. The successful integration of its acquisitions and continued organic growth in Long Island transformed Winters into the dominant player in its market.

Winters was sold to IESI in August 2007 generating a return to Clairvest of 4x its invested capital or an IRR of 192 percent.



Private Equity Roundtable Participants

PARTICIPATING FIRMS

SUMMER STREET CAPITAL PARTNERS

FIRM: **Summer Street Capital Partners**
Buffalo, New York

Brian D'Amico, Managing Partner

FUND: $187 million (2007)

FOCUS AREAS: Nonhazardous solid waste
Waste-to-energy

"We tend to be focused on organizational development and performance management more so than most, providing the strategic resources to address the questions of 'Where do we go?' 'How are we going to get there?' and 'Who is going to do what?' Very simply put."

Summer Street Capital Partners made an investment in Interstate Waste Services (IWS) in early 2004, then a leading independent solid waste and recycling company in New York and New Jersey, and grew the company aggressively through acquisition to create route density in the company's regional footprint. Over the course of our investment, IWS successfully completed five significant and accretive acquisitions, integrating both collection and disposal assets into the existing operations. We made a second investment to support the acquisition of a large competitor, growing the company into the dominant private collection operation in the region. In addition to acquisition support, we provided performance management and organizational development, adding staff and IT resources, and over the three years of our investment, grew revenues nearly four-fold, from $37 million to $145 million. We exited in November 2006 through a sale to private equity firm Highstar Capital.

ROARK CAPITAL GROUP

FIRM: **Roark Capital Group**
Atlanta, Georgia

Michael Lee, Vice President

FUND: $1.0 billion (2008)

FOCUS AREAS: Nonhazardous solid waste

"We like the stable, recurring revenue and high free cash flow characteristics of solid waste, and the opportunity to execute regional consolidation plays in what is still a fragmented industry. Our President, Jeffrey Keenan, who was a Founder and Chairman of IESI, provides us with operating expertise, acquisition acumen, and a point of differentiation as we pursue new growth platforms in the sector."

Roark Capital Group made a $100 million growth equity investment in Waste Pro in October 2009. Waste Pro is a leading provider of solid waste collection services to residential and commercial customers in the Southeast and operates primarily through exclusive municipal franchise contracts. Since we invested, the company has completed 13 acquisitions and is continuing to develop its pipeline and expects to complete a handful of additional acquisitions this year.

GFL Environmental Corporation provides nonhazardous solid and liquid waste collection, transfer and processing and soil remediation services in Canada. We invested $90 million in GFL (initial investment completed in November 2010) and during that timeframe, GFL has completed three acquisitions and expects to complete another three to five more this year.

In each of these investments, we provided our partners with capital support to pursue accretive, tuck-in acquisitions. Our President, Jeffrey Keenan, has helped identify and evaluate acquisitions and assist with integration post-closing. We have also provided assistance with refinancings to secure more flexible credit facilities that enable management to invest in organic growth and fund acquisitions.

ELEMENT partners

FIRM: **Element Partners**
Radnor, Pennsylvania

Sam Gabbita, Partner

FUND: $486 million (2009)

FOCUS AREAS: Water and wastewater
Recycling
Waste-to-energy
Clean transportation
Energy efficiency

"As a dedicated investor in high-growth energy and environmental companies, our investment process is largely theme-driven. Once we gain a thorough understanding of the value chain in a given area, we then reach out to industry-leading companies that may want to consider a value-added partner with a shared vision for growth or consolidation in their target markets. Although we consider control buyouts, our preference tends to be minority growth investments with exceptional managers."

Element Partners became the first institutional equity investor in Agility Fuel Systems in January 2011. Agility designs, engineers, and manufactures natural-gas based fuel systems for heavy duty trucks, buses, and specialty vehicles. Our interest originated approximately 18 months ago as we considered the market dynamics around the shale gas development, knowing that if significant shale gas came online there would be an abundance of low-cost natural gas for which there would be some interesting end-use applications. One of these applications was the use of natural gas as a transportation fuel, both for environmental (cleaner) and economic (cheaper) reasons. We researched the natural gas vehicle supply chain in North America and identified two privately-held companies that manufactured the fuel systems that power dedicated natural gas engines for heavy duty vehicles. We contacted each company independently and were fortunate in that they both responded favorably to our investment thesis, including a possible merger of the two competitors.

Ultimately, Element provided acquisition financing to facilitate a merger of the two companies creating a leader in their market segment. We continue to observe increased penetration of natural gas engines and fuel systems in applications such as refuse trucks and transit buses. We are also seeing new applications in "return to base fleets" such as regional trucking.



Private Equity Roundtable Participants

PARTICIPATING FIRMS

FIRM: **Virgin Green Fund**
San Francisco, California

Evan Lovell, Co-Founder and Partner

FUND: $220 million (2008)

FOCUS AREAS: Environmental services (water and wastewater, waste to value)
Renewable energy
Resource efficiency

"For many businesses that are growing rapidly and are looking for growth equity, a minority investor that can provide a significant source of capital can be a good partner. We have raised over $1 billion dollars in debt and equity for the businesses in our current portfolio to help them grow and expand into different geographies, if that was part of the business plan."

Virgin Green Fund made a minority investment in Seven Seas Water in February 2008. Seven Seas designs, builds, owns and operates desalination water and waste water treatment facilities for hotels, resorts and governments in the Bahamas, Caribbean, and Southern U.S. We partnered with a strong management team that had deep experience in the desalination sector, providing capital to fund organic growth and execute selective acquisitions to build scale and began to win projects to provide desalination services to industry and municipalities. Early into the investment, we made the strategic decision to fund the build out of containerized reverse osmosis desalination equipment that could be sent on a rapid deployment to locations that required water immediately. We made the investment without having the immediate customers, which was function of having a strong management team that knew the marketplace and future demand. Many of the projects that we have been awarded have turned into long-term contracts and benefit from the use of the containerized units. Five years into our investment, Seven Seas has grown from a small base of operations to one of the largest providers of desalinated water in the Caribbean and Bahamas with a rapidly growing base of operations in Latin America.

FIRM: **Eos Partners**
New York, New York

Samuel Levine, Managing Director

FUND: $600 million (2007)

FOCUS AREAS: Energy services
E-recycling and e-waste
Energy efficiency

"One of the greatest diligence signals for us is what the CEO wants to do with his or her own personal shares. We believe the CEO knows more about the company that he or she has been running for 20 years than we do. And if he or she believes that the next 5 years are going to be better and would rather retain significant amounts of his or her own equity instead of selling it, for us, that is a great diligence signal."

Eos Partners made a growth equity investment in WDF Services Corporation (WDF) in June 2007, then a leading infrastructure focused mechanical and specialty construction services provider serving the municipal, education, environmental, and commercial markets in the New York metropolitan area. In partnership with management, we implemented an acquisition strategy to fund growth, identifying Five Star Electric, which we acquired in January 2008, adding the largest unionized electrical contractor in WDF's market. We merged the two companies to form GreenStar Services Corporation, establishing a single source MEP (mechanical, electrical and plumbing) service provider to capitalize on the unprecedented growth of complex infrastructure and environmental projects in the company's markets. We exited our investment in July 2011 through a sale to Tutor Perini Corporation. At the time of the sale, GreenStar had revenues of $560 million and backlog exceeding $1.0 billion.

Alston Capital Partners

FIRM: **Alston Capital Partners**
New York, New York

Robert Egan*, Partner
*Former Managing Partner at Environmental Capital Partners

FUND: Launching fund raise in Q3 '11

FOCUS AREAS: Environmental services
Energy services and efficiency
Pollution control
Resource management

"Our target company profile typically falls into one of two categories: high growth entrepreneurial driven entities with core values that embrace sustainability as a key driver, or traditional companies with high growth potential due to the shifting environmental landscape."

Environmental Capital Partners invested in Intechra Group in mid-2009. Intechra Group is a leading electronic waste management company that provides Fortune 1000 companies with the ability to deal with end of life issues for all of their IT and electronic hardware. Intechra provides reverse logistics, data security, asset resale and parts recovery, as well as environmental compliance with all downstream issues. ECP identified this sub category of recycling as high growth and in need of capital and strategic direction given the early stages of its development.

At the stage of our investment, Intechra needed a reorganization of its operations and customer offerings and a revised capital structure to allow it to fully emerge as a market leader. The company required a capital partner that could provide strategic resources to re-position the business to provide both improved customer services and increased efficiencies in its operating assets. This realignment of the company's focus and assets allowed for dramatic profit improvement. During the first 12 months under our ownership, the company grew from negligible EBITDA to over $10 million in EBITDA. Arrow Electronics acquired the company in December 2010. ECP realized a 7.5x return on its original investment.



Private Equity Roundtable

BGL: ***What is attracting increased private equity interest in environmental services broadly?***

Michael Castellarin, Clairvest Group: Regulatory drivers add to growth rates being ahead of GDP. In addition, many of the sectors have decent recurring revenue characteristics and very little customer concentration. Solid waste may be the best in that regard. Many sectors within environmental services are fragmented where you have the ability to execute a regional consolidation strategy. For example, in many cases, when you acquire a solid or liquid waste business in the same market territory, there are a number of tangible cost-based synergies that executives in the industry are very familiar with and know how to extract. So, many of the entrepreneurs that are building decent-sized waste businesses have a great deal of experience integrating acquisitions and have been successful in mining those cost-based synergies. That is attracting attention and increased investment in many of these environmental services sectors.

Brian D'Amico, Summer Street Capital Partners: You have opportunities for stable organic growth and exceptionally strong relative acquisition growth, so you have the ability to grow these businesses through acquisition more effectively than in other sectors.

Robert Egan, Environmental Capital Partners: The World Economic Forum has released data that indicates there will be a tripling of the global middle class by 2030. If North American patterns of consumption are adopted in developing countries such as China and India, they estimate it would require the resources of five planet earths to support population growth and the changing demographics. This is a very powerful indicator that environmental services will be increasingly important both in the U.S. and in the global economies. It is not unrealistic to clearly state that natural resource management is a mission critical element within both the U.S. and global economies and could reach crisis levels in the next two decades if not addressed now.

Sam Gabbita, Element Partners: For us, the primary attraction to environmental services is first that it fits our fund's investment focus, and second, because we see attractive high growth sectors within the broad category. There are a number of subsectors within environmental services that are growing far faster than GDP. I do think it takes more specialization and focus to really understand the dynamics of some of these markets. We also see fragmentation in certain of our target subsectors that we believe offers attractive buy-and-build investment opportunities.

Michael Lee, Roark Capital Group: Stable growth and the recession resistant characteristics of a necessary and essential service. In addition, industry fragmentation presents opportunities for consolidation.

Samuel Levine, Eos Partners: Environmental services can be less volatile and less correlated to economic cycles because the driver of growth, depending on the niche, may be regulatory changes.

Evan Lovell, Virgin Green Fund: I think people are starting to look at the forward cycle being attractive for environmental services. Energy has been a big focus for private equity given the macro themes of increased demand. More sponsors are also starting to think about the water sector as a market segment. Generally speaking, I think environmental services is back in favor, and interest is particularly strong in the energy side.

Sector Opportunities

SECTOR OPPORTUNITIES

BGL: ***What are the sector opportunities, what is driving growth, and what challenges do you anticipate in the coming years?***

Solid waste

consolidation opportunities

Castellarin: A regional consolidation strategy is probably the primary thesis. Having an excellent collections business complemented by transfer station and recycling assets is a very important mix. If you can accentuate those assets with acquisitions and perhaps some organic growth development in a particular region, you can become an even more valuable asset for a strategic buyer. That is a down-the-middle thesis for us in certain geographies. A different investment thesis could revolve around controlling a valuable disposal asset (e.g., acquisition of Fred Weber by Progressive Waste Solutions), or into the future, a waste-to-energy plant.

D'Amico: We have always liked solid waste collection and disposal. It is an essential service, competition is generally local or regional, and the opportunities for consolidation and the attractive economics of that consolidation makes this sector particularly attractive to us. We have a strategy that is focused on the curb out. We want to control the tons and work toward disposal. Conversely, others will start with disposal and work their way out, which we believe is a riskier play, especially in today's market.

Lee: There obviously is the opportunity for further consolidation. A primarily collection-focused operation, depending on the marketplace dynamics, can be augmented with either transfer station assets or disposal assets within the area so you can get the benefits of internalization. I think there is still significant opportunity to invest in a platform and consolidate some of the small-tier (under $10 million of EBITDA) waste haulers.

Recycling/diversion initiatives

D' Amico: Volume to landfills in 2009 fell for the first time in 50 years. What is happening is greater success in diverting material for beneficial use—single stream recycling on the residential side to dirty MRF recycling at the transfer station/commercial side. There is an investment taking place at the landfill and transfer station level to improve diversion and reduce landfill disposal requirements. Smart landfills will put a dirty MRF onsite so they can extend the life of their facility and gain an additional revenue source from the material they are already getting. Reduce your disposal cost by 30 percent and of that 30 percent of cost savings you have also added a revenue stream because you have recyclable material. Having strong commodity markets has helped that. Automation has also helped that. That is a theme that we are very interested in investing behind.

Lee (adding): The return on invested capital on a MRF is a little more challenging than the economics of a landfill or even investing in trucks for a collections business. It makes sense for the larger players with significant disposal assets to invest the capital, and for all the volume that gets away from their landfills, they pick it up with their MRF.



Private Equity Roundtable

Sector Opportunities

Solid waste (continued from page 9)

Recycling/diversion initiatives

D'Amico: Recycling is a huge opportunity overall. The market has underutilized recycling and single stream is changing that and is becoming more prevalent. There are large metro areas that haven't quite figured out how to handle residential recycling. There is significant upside there.

Lee (adding): There has been a big push toward single stream recycling to make it easier for residential customers to participate and improve recycling rates. Municipalities are looking for partners to invest capital to build single stream recycling facilities and service the communities. As participation rates increase, the companies that focus on collections are potentially going to have some growth opportunities related to that dynamic.

Gabbita: Our sense is that there is increased recycling interest and opportunity (e.g., acquisition of Casella recycling assets by two private equity firms) because the waste streams are getting more specialized and people are getting smarter about how to extract value from those streams. Certainly for plastics, or for that matter anything that is crude derived, people are starting to look at profit opportunities pretty thoughtfully. Similarly, we are seeing activity in food waste and organics diversion that we think is pretty interesting.

Castellarin: Organic waste diversion regulations and initiatives can create a new revenue opportunity for waste management collection companies with the addition of a third waste stream. In addition to garbage and recyclable material, you now have kitchen and yard waste. It may be an opportunity (for collection & transfer and processors) or ultimately may develop into a threat (for disposal asset owners) from a volume perspective. It really depends on the business and its mix of assets in a given market that implements diversion initiatives.

Egan (adding): Organics recycling is an industry that is in the early stages of growth that will over time become a staple in the U.S. Market dynamics will mandate that it is successful endeavor given the costs associated with not recycling organics and/or the costs associated with making materials from virgin resources relative to recycling.

Castellarin: The NSWMA has worked very hard at getting C&D wood waste under proper protocol to be qualified as a biomass feedstock, which could be a very helpful policy for those that run C&D facilities and can meet the protocol.

Lee: Many cities and local municipalities are facing budget challenges so there will be new opportunities to privatize the collection of residential waste. As an example, the city of Toronto is expected to privatize in the next year.

The economy is stabilized but we haven't seen the uptick in commercial volumes. We also expect to see improvement in C&D volumes with a more robust recovery.

Challenges

Castellarin: The decline in volumes has been a challenge, particularly for landfill owners and incinerator owners because the reduced volume puts additional pressure on tipping fees. It appears that we have entered a phase of more stability and even modest growth in volume, so that is a favorable trend for owners of disposal assets.

Another challenge, and this has accelerated somewhat over the past few years, is government intervention. Flow control is the poster child example of government intervention. That can present a major challenge for integrated waste companies that have transfer station and landfill assets. For a collection company operating in a competitive market, if it cannot pass on the increased cost of disposal, flow control can pose a challenge.

D'Amico: Volume and pricing came down during the recession, which had a significant impact on earnings. There is no doubt about it. Organic growth is limited in some geographies to price and to a lesser degree volume. It comes down to being a good operator. You need to be lean. If you have the ability to acquire competitors and grow through acquisition, you can generate significant synergies through consolidation rather than just try to fight it out in the streets.

Egan: Permitted landfill facilities are still a major part of what to do with waste. It is a high-margin business, but there are tremendous barriers to get new landfills permitted. A key focus there will be to increase the efficiency and the capacity at existing landfills while reducing any environmental issues that are associated with operating them.

Lee: Fuel prices have been an increasing challenge. It is also getting more competitive from a pricing perspective. We have recently seen some strategics that previously had been less focused on collections, particularly if they had a profitable landfill, are now getting more competitive to win back or grow their collections businesses. Given that dynamic and where costs are today, we are seeing some challenges in maintaining and expanding margins.

E-waste and e-recycling

Castellarin: Electronic waste is certainly an area that we are watching fairly closely. The low barriers to entry and the myriad of state regulations in the business give investors pause. The possibility of federal regulation could certainly help the sector, which I would say will likely happen over the medium-to long-term. I don't know that anyone considers the likelihood of federal legislation a short-term possibility.

D'Amico: We have looked at the sector a fair amount and have yet to find a model that has long-term sustainable profitability. The business models we have seen are heavily dependent on underlying commodity prices. I expect that it will be a big opportunity in the medium-term (three to four years), but today, the business models are a little too immature.

Egan: Given the rapidity of technological innovation, we believe the e-waste stream will only increase. The regulatory landscape is challenging; however, in the case of Intechra, we felt our investment would only improve as more states enacted legislation. The company's core competency was to service Fortune 1000 companies that had multi-state issues with their electronics and needed assistance managing those issues. Data security is a driver of the Fortune 1000 customers as much as the environmental concerns.



Private Equity Roundtable

E-waste and e-recycling (continued from page 10)

Egan: Currently there are no identifiable integrated players that service the entire value chain with a full product offering and manage all elements in a way that is profitable and satisfying to a broad range of customers. There are players that profess to the market they are integrated from reverse logistics and collection to downstream recycling; however, most are not skilled at both elements of core competency. I see that as a play for the future.

Regulation is an impediment to the downstream recycling business given that reimbursement is subject to multiple different schemes in the various states, and in some states, no reimbursement scheme at all. Commodity prices affect profitability up and down the chain, which is another challenge, particularly for downstream recyclers. In 2008, the industry went through the most dramatic decline that we have on record. The outlook of corporate IT departments on refreshed spending went through a period of limited visibility. However, now there is pent up demand, and we are starting to see refreshed cycles at corporations.

Gabbita: E-recycling is a key area of focus for us. Our attraction to the market in general is driven by the fact that it has been the fastest growing of the waste streams over the past five to six years. We also like the trends of an increasing pace of technology device obsolescence, security-driven concerns around data destruction, and increased environmental regulation. Our primary challenge has been that the market and value chain are both highly fragmented, which from one standpoint creates consolidation opportunities, but on the other hand makes it more difficult to find a platform that scales well. From a regulatory standpoint, the landscape today is a patchwork of state regulations that drive how markets mature from a demand perspective. So as we think about scaling businesses and building out an integrated national provider of e-waste services, you could essentially end up creating a few different operations in states that have relevant legislation and missing large swaths of the market geographically. That said, we do think that regulation is going to materialize in a reasonably meaningful way which should benefit the industry.

Lee: E-waste will be a big growth opportunity. The challenge today is that many e-waste businesses are heavily subsidized by the government, and for many companies, their EBITDA is less than or equal to the government subsidy amount. Depending on state budgetary constraints, there is the risk that subsidies are reduced, and without the subsidies, it is just not economically appealing to recycle e-waste.

Levine: We think e-recycling is a continuing big secular growth opportunity. Companies that manufacture and sell electronic products are becoming increasingly sensitive to how those products are disposed of at the end of their life. There are environmental and security concerns, and so we have seen companies that are growing and making money specializing in collection, documentation and security, scrapping, and/or disposal of those end of life consumer electronic products. If you can build a sophisticated back office that can handle the different state regulatory requirements, you will have created something that has real industrial value.

Sector Opportunities

Waste-to-energy

D'Amico: We are spending a significant amount of time on waste-to-energy. There has been a lot of activity in the U.S. for the first time because of the lower capital investment requirements and developing technologies that utilize a form of combustion other than thermal to create a fuel from the waste, which makes it more attractive. We believe there is a meaningful WTE opportunity coming over the next five to ten years, just given the level of demand and capital being invested in these technologies. It is going to happen and somebody is going to make a lot of money on it.

Egan: We are looking at waste-to-energy but haven't seen many opportunities that we think are ubiquitous or scalable across a broad platform. In most cases, the identifiable commercially proven and profitable opportunities are specifically project driven rather than scalable entities across a broad range of opportunity. You have permitting issues, high capital costs, and in many cases technology issues, as the facilities that have gone up have taken longer and cost more to construct and the amount of energy produced has not always been up to spec. I do see the technologies becoming impactful over the next decade.

Lovell: Waste-to-energy has not been a big growth area in the U.S., although it has been in Europe. Some countries in Europe will take over 50 percent of their waste and turn it into energy, whereas in the U.S. that figure is closer to 13 percent. If energy prices remain high, it may be an area where regulation and NIMBY-related issues will become more relaxed and you will see some further growth.

Industrial liquid waste

Castellarin: Now that we are past the recession and the economic outlook is improving, we are more bullish about looking at industrial liquid waste businesses. That is a sector for which a regional consolidation thesis applies. Whether it be nonhazardous liquid waste or water treatment, having a strong collection network supported by well-located treatment facilities to support that collection operation, you can build the business through expansionary growth into adjacent markets, tuck-in acquisitions, and the introduction of new industrial services complementary to your existing customer base.

Used oil collections & re-refining

Castellarin: Companies with re-refining facilities have an advantage. In terms of regulatory developments, over the medium-term, the EPA is considering changes in the regulation of used oil as an industrial burner fuel. That could present a challenge for the industry.

Gabbita: While our experience has been that the success or failure of re-refiners can fluctuate significantly with oil prices, we are finding there are more thoughtful players in the market trying to build a high-value recurring revenue service model. For example, in terms of public companies, if you look at what Heritage Crystal Clean is doing, they appear to be pushing beyond just used oil collections. The Valvoline re-refined oil product introduction was also very encouraging news in the market. It really highlighted that there is an opportunity to substitute re-refined oil and actually market it effectively with one of the major industry players.



Private Equity Roundtable

Used oil collections & re-refining (continued from page 11)

Lee: Several of the larger companies that have invested in re-refineries are going to be looking for a reliable stream of feedstock so that they can fill capacity at their facilities.

Lovell: Valvoline's entry to the market is an important milestone because there has been a question as to whether there would be enough customer acceptance of used motor oil to allow them to do that. It is an important step, but I think it is too early to tell whether it will work. If it can be expanded, the economies for the providers of motor oil make a lot of sense. If they get widespread customer acceptance, I could see them moving to a big segment of their products being used motor oil. That would significantly increase the demand for re-refined oil.

Energy services

Castellarin: We think there will be tighter regulations on how E&P companies manage their waste streams. The states that have accepted that it is an integral part of their economy want to make sure it is regulated and controlled. We think it could be a benefit. Backing an oilfield waste services business that manages and treats waste at the rig site would be an attractive platform.

Egan: We think energy services is a huge area of opportunity, as almost all traditional sources of energy create a tremendous amount of waste and pollution within their production. It will be essential to recapture, reuse, and reduce waste associated with developing energy, and I would include in that electricity, coal-driven electricity, natural gas driven electricity, and natural gas as transportation fuel. There will be increased focus on the methods for collecting used frack water and removing chemicals to make the water reusable, using less fresh water in the process, and reusing the chemicals or cordoning them off for remediation. Those drivers will benefit providers of these services.

Gabbita: Generally speaking, there has clearly been a strong increase in E&P activity particularly around shale gas and horizontal drilling. There is a developing regulatory trend that will put increasing scrutiny on how responsible drillers are with water treatment, chemicals, and solids that are extracted or part of the drilling process. We are very actively evaluating partnering opportunities in this area.

Levine: There have been significant technological improvements made over the last few years which make drilling in shale much more affordable which in turn is driving increased drilling activity. How the E&P companies handle the waste that comes out of that drilling process is a significant issue that is gaining more public scrutiny. We think it is an area where there is going to be a significant amount of money spent over a long period of time, and it is a good place to focus.

Lovell: We think the long-term macro environment supports continued energy use here in the U.S. as well as in Western Europe, and there will be increased regulatory oversight of how byproducts of the energy industry are treated, whether it is produced water for shale gas or offshore drilling, treatment of drill cuttings and drill muds, or treatment of refining byproducts or petrochemical byproducts. There is value to be created from having service providers that offer an environmentally-friendly treatment solution and capture value in those waste streams.

Sector Opportunities

Lovell: As fracking for shale gas becomes a larger growth industry and moves closer to residential locations, as in the case of the Marcellus Shale, there is going to be more stringent regulatory overview of what energy companies can do with water used as a byproduct. If E&P companies can prove they can treat the water in an environmentally-friendly way that is a real opportunity for companies that are involved in the treatment of produced water.

Water and wastewater

D'Amico: Wastewater treatment is an area of interest, but it is very regional. You need to have a cooperative and stable local POTW. Similar to solid waste, you want to control the customer relationship so you get the disposal. You want to have a collection fleet and enough scale to have a diversified industrial customer base that ensures your facility is self-sufficient. Certainly any area that has hydrofracking is a boon for water treatment.

Egan: We have looked at water filtration, water pumps, and other ancillary products that increase the efficiency of water used. We have also looked at water companies with better reverse osmosis technology. As technology improves, it becomes more economical to use reverse osmosis or alternative forms of technology and desalination.

Gabbita: As a firm, we spend a significant amount of time in the water sector. Companies in our portfolio today focus on water purification for potable water, including use of both desalination and point-of-use filtration technologies. We are spending more time looking at opportunities in wastewater and water remediation. Our focus here tends to be on finding niche water service opportunities where the customer is resource constrained or there is a disposal issue for which we can provide a long-term recurring service to that customer. Most typically, we are finding niches that are under the radar and are not competed heavily by the big water service players.

Lovell: Desalination is an area of interest for us. From a macro perspective, the cost of desalination has declined dramatically over the past decade while the requirement for water has increased resulting in a depletion of water sources in water scarce locations. The confluence of these factors has created an interesting demand, with the industry projected to see double-digit growth over the next decade. We like businesses that can provide desalination services on an outsourced service basis, selling desalinated water under long-term commercial agreements where both price and supply are guaranteed by both parties. That business model provides a unique service to the customers and has a high return on investment.

Another area is water related to agriculture, which is driven by a number of macro themes. As you see increased consumption of food across the globe and increased use of commodities for energy, you are going to see increased use of irrigation monitoring or metering technologies and devices which can help the agricultural industry become more efficient in its use of water. Drip irrigation is a good example, which has a corresponding result in increased plant yields. We think that while there are interesting opportunities in the U.S. and Europe, those businesses have the benefit of being able to play in a global marketplace when they are providing those technologies and services, so it opens up a growth platform in Asia and Latin America for many businesses. We think the continual development of technology focused on driving efficiency and information for agriculture is going to be an important segment going forward.



Water and wastewater (continued from page 12)

Lovell: Drinking water is another area of focus for us. We believe there is a continued awareness of the population of the health benefits of drinking water and some significant backlash associated with bottled water. We believe drinking water devices that use municipal water but treat the water at the point of use to standards that are higher than bottled water is an attractive area for both commercial and residential users in both the U.S. and Europe. The U.S. market is highly fragmented with a number of "mom and pop" operators and is an interesting opportunity to grow into. In Europe, water is significantly part of the culture and consumption is dramatically higher than it is in the U.S., so the market is experiencing double-digit growth. European regulations against the delivery of water have become more stringent, so we believe there is going to be mass migration from bottled water delivery to point of use both in the residential and the office setting.

Environmental consulting, engineering & construction

D'Amico: Corporations are becoming more focused on green strategies and implementing analyses of their carbon footprints and need help implementing those plans. Consulting firms that have a global footprint and the ability to access developing markets like Asia, India, and South America are being brought in to advise and help design systems and waste plans, and that is a growth area that we see.

Levine: We think there are many corporations that know they have enormous assets, namely buildings and manufacturing facilities, that need to be improved, and there are significant cost saving opportunities driving 'Corporate America' to explore how to implement those cost saving solutions. That is exacerbated by increasing regulatory scrutiny and sensitivity—the good citizen patina that larger corporations feel obligated to address. Those companies are reaching out to engineering and consulting companies who can identify and implement retrofits of those buildings to make them more energy efficient, which is driven in part by pure cost savings and in part to address a political agenda to reduce emissions and carbon footprints currently generated by older buildings. With that, there are many opportunities with companies that are focused on energy efficient building materials and energy efficient building systems.

We have spent time looking at air quality control in connection with coal-fired power plants. There is still a significant portion of energy produced in the U.S. that comes from coal-fired power plants. While there has been significant spending to address emissions issues over the past several years, we think increased regulatory scrutiny will provide opportunity for service companies and manufacturers to install and operate air quality control products and services focused on the coal-fired power plants.

M&A OUTLOOK

BGL: ***What sectors within environmental services are seeing increased M&A activity?***

Gabbita: We are seeing strategic interest in a number of subsectors we follow, including recycling, transportation (both fuels and vehicles), water, and core alternative energy. We have observed that there are corporates looking for growth and recognize that certain energy and environmental sectors are growing much faster than their core businesses. For unique businesses in these sectors that have a track record of growth and strong brand, we are seeing very high purchase price multiples. For example, test and measurement equipment and instrumentation (e.g., sensors) for water, more broadly, strong franchises in the water equipment sector, are being acquired at very high multiples.

Lovell: We are seeing more consolidation in e-recycling. We think that market is very fragmented with a large number of small, regional "mom and pops" and should be consolidated because it is an industry where economies of scale and having a national footprint as a service provider to corporations and retail makes a lot of sense.

In energy services, there has been consolidation by some of the mid- to large-tier public strategics that are acquiring regional- and industry-specific service providers in the waste sector. That consolidation continues to make sense because they can offer multiple products and services to their large oil and gas customers in different locations.

BGL: ***Are you seeing a resurgence of strategic buyers in the market?***

Castellarin: There has been a lot of activity among the strategics, which includes the publicly-traded strategics and private equity-backed strategics completing add-on deals to their portfolio companies. Many of these companies have quite a bit of cash. The downturn, while difficult, was a period of time where they really battened down the hatches and built very strong balance sheets. That is driving a fair amount of M&A activity.

Egan: The resurgence of strategic buyers has not terribly impacted our lower middle market approach because at the time we get involved the companies generally are at a stage where they need capital and resources to develop to the point where they are attractive to strategic buyers. If I had to put a point on it, once you are above $10 million of EBITDA, provided you have an attractive suite of products or services and have proven the ability to scale to any level that the market will require, then you are eligible for strategic interest. We view the resurgence of strategic buyers as a positive influence in our sector of the market because it allows us more comfort going in that there will be an attractive exit on the other side.

Gabbita: We think that strategics have been exceptionally active. During the last six months, we have felt like there has been a lot of strategic money chasing companies. The competition for deals tends to get away from us pretty quickly just given what strategics are willing to pay.



Private Equity Roundtable

M&A Activity

Lee: I think the M&A market has picked up over the last 12 to 18 months. It is pretty competitive for the larger opportunities due to interest from the strategics, most of which are not highly levered and have liquidity.

BGL: ***How are strategic buyers approaching transactions in today's market?***

Castellarin: If you look back to the 80's and 90's, there were a number of highly acquisitive strategic buyers in the solid waste space. You had a number of consolidators making acquisitions at a very fast pace over a very wide geography. The days of that frenzied activity appear to be over. Strategic buyers today are working with a refined filter. In each market, they might have a certain type of deal that they are looking for; if it comes around in 2011, great, but if it comes around in 2013, so be it. They do not appear to be out chasing volume through acquisitions.

Republic Services stated it was looking to complete roughly $100 million in acquisitions this year, which implies that it is looking at reasonably small, in–market tuck-ins where it can extract significant cost-based synergies.

Waste Connections is another example of a company that has a very strategic mindset and has exhibited tremendous discipline as it has developed its business. When looking at acquisitions, the company is not jumping in to major metropolitan cities. It is staying disciplined and has a strategic filter on what makes a good deal for the company and sticks to it.

If you look at Waste Management and the investments they are making in organics and waste-to-energy, that investment activity is very strategic in nature. There has been a lot of thought that has gone into their organic growth division, and they have put the people and the capital resources in place to go out and build a collection of investments that will put them at the leading edge of how to mine their waste for value-add materials, whether that is through electricity, ethanol, organics into compost, to name a few examples. They are not just haphazardly approaching the market.

D'Amico (adding): I think Waste Management is one of the smarter public waste companies. They are looking out and saying, there are going to be new technologies that convert waste into energy, and we are better off trying to be part of it than try to discourage it. They have more landfills than anyone else in this country, but they are smart enough to know that they need to be on the inside of this technological change. Because the technology is unproven, they are spreading around their investments, and I think they are doing a good job of it.

BGL: ***Please comment on valuation trends you are seeing in the market today.***

Castellarin: Across the overall middle market, on average, EBITDA multiples have gone up one turn in the last year. The leverage multiple has gone up too, but not a full turn, and that has required more equity in the deals. When credit markets are frothier as they are today, certainly compared to 18 months ago, it certainly helps private equity to step up to the plate, and if they want to be competitive with a strategic, it certainly helps them to do so.

D'Amico: We have been surprised at how quickly valuations have rebounded. Some of the recent strategic buys in solid waste, for example, were priced at very full multiples (~10x EBITDA). If you think you are buying the right asset and it is a platform into a consolidation play, the expectation is that you are going to buy down the multiple through add-ons. For a strong platform, that is the justification.

We did not invest in any solid waste companies in '07 and '08. From our perspective, multiples were high during that period, and you had too much volume risk on the downside. Now you are looking at a recovery, and while valuation multiples have ticked up in recent quarters, you are buying at the right time.

Egan: There was almost no ability to make educated investments at the end of '08 and during the first half of '09 due to a lack of visibility at both the macro and micro levels. Then there were some tremendous investment opportunities, certainly through the first half of '10. Now we are seeing optimism reenter the market, and valuations certainly have increased back to rational levels. Seller expectations have also increased.

Gabbita: For attractive, growing energy and environmental companies, it feels a bit more like a sellers market than a buyers market. For businesses in these sectors with growth and significant proprietary technology, we are seeing strategics pay multiples that exceed most normal views of financial-sponsor backed transactions. We are also seeing heightened competition from traditional, generalist LBO firms that need to put capital to work.

Levine: For full sell-side M&A transactions, it is extremely competitive. That being said, if a strategic buyer is completely focused on making an acquisition, they will be able to pay multiples more than straight private equity firms, and if that is the nature of the auction, the strategics will win.

Lovell: For healthy businesses with $10 million of EBITDA or more, depending on the growth profile of the business, we are seeing EBITDA multiples in the 7x-9x range. I will say that strategic and private equity buyers are thinking a lot harder about the next few years and what is happening in the economic cycle because many environmental services businesses are so intrinsically tied to economic performance. For marquee properties, you are going to see high prices, but we may see more robust prices paid for businesses when the runway on the economy is more visible.



FINANCING MARKETS

BGL: ***Please comment on the availability of financing today.***

Castellarin: The credit markets are very competitive. We are getting back to credit deals that provide at least 3x senior leverage and as high as 5x total leverage for the "right" business. So we are getting into some pretty aggressive levels of credit which can fuel M&A activity. Assuming there is no major external shock to the economy, I see the credit markets remaining active at least through the remainder of the year.

D'Amico: I would characterize the credit markets as active. Lenders are eager to put money to work, and they certainly have become more aggressive over the last 12 months.

Egan: We've seen tremendous improvement in the availability of financing in the lower middle market. Asset based lending is now highly competitive. If you have unencumbered tangible assets, the market is very strong. And on the cash flow side, we have seen a return to up to 3.5x total debt to EBITDA which is a level we are comfortable with. I think it will probably remain steady in the near-term versus improve dramatically given the growing concerns that the economy is going to continue to expand at a very modest pace.

Lee: We see a strong debt market funded mostly by banks with a good understanding of the industry.

Levine: The financing markets are active right now. There is some caution now about slower growth and possible fear of a double-dip. So there is a renewed sense of concern and conservatism which is probably healthy.

Lovell: The financing markets have come back. We are seeing good availability for leverage used in buyouts and the availability for refinancing of term loan debt that we have in our portfolio companies. For some of our earlier stage businesses that need venture lending, we are seeing good availability from that market as well. I think lenders are taking more time than they have historically in terms of diligence and are still being selective, which is good. They should be. Assuming that we do not see a big contraction in the economy, I think the availability of financing should remain pretty strong for good assets.

BGL: ***Is there a line of demarcation in EBITDA size that affects availability?***

D'Amico: While $10 million-plus of EBITDA is still a key threshold, the bigger the better is still the preference. I don't think that has changed at all.

Egan: Financing in the lower middle market is more difficult than it was prior to the recession, but it is becoming available. It is just expensive. A lot of the availability is being provided by nontraditional sources on the cash flow lending side that have higher return hurdles than commercial banks. There is increasing interest from commercial banks on the smaller cash flow loans, but it is still selective.

Gabbita: Our experience is that there is definitely delineation at $10 million of EBITDA. I think there is even a finer cut when you go below $5 million.

Levine: For companies with $10 million of EBITDA or more, we think there is very attractive debt financing available, particularly if they have shown steady to improving cash flows over the past couple of years. Debt financing gets much more difficult if the company is showing hockey stick projections because lenders become concerned about the sustainability of the current level of EBITDA. Below $10 million of EBITDA, debt financing is much more difficult. There are still cash flow lenders available but at more conservative leverage multiples.

Lovell: For stable, steady cash flow businesses in excess of $25 million of EBITDA, that is probably a pretty competitive environment, both for the private equity sponsors as well as the lenders, because I think some of those businesses sat on the sidelines during the last couple of years to wait for a time when they could get a better price. Financing in the lower middle market (sub $10 million) is still tight. That is where growth capital can be an interesting alternative. If we feel like a business is growing and has the opportunity to grow with our money, we do not have to rely on leverage to get the returns required for our limited partners. We can finance it with growth equity.

BGL: ***What sectors are attracting lender interest?***

Castellarin: Nonhazardous solid waste would be the predominant environmental services platform in lender portfolios.

D'Amico: Lenders have a strong interest in solid waste, wastewater, and waste-to-energy opportunities. Hazardous waste, for lenders that don't understand the sector, is usually tough.

Gabbita: I think there is general interest from the lending community to come into high-quality energy, environmental, and cleantech companies because of growth and strong equity institutional sponsorship. Leverage terms can be pretty attractive for services companies with high credit-quality customers and long-term contracts. However, there are cases where we see high-growth companies get capitalized more conservatively by lenders because they don't yet have a consistent level of "underwritable" EBITDA.

Levine: Lenders are more wary of opportunities in environmental services around the shale drilling areas because it is a reasonably new, high-growth market. Leverage will be more conservative and will require more equity to fund those structures.

Lovell: Lenders have been oriented toward the energy marketplace because of growing sponsor interest. I think they are seeing growth and stability of cash flows as you see higher energy prices and continued higher demand for energy.



Private Equity Roundtable

Financing Markets

BGL: ***What are you seeing in terms of leverage, pricing, and covenants in deals?***

Castellarin: In solid waste, there is still solid lending activity below $10 million of EBITDA, call it $4 million to $10 million of EBITDA. Particularly if it is private equity-backed, a senior debt to EBITDA covenant of 3x is a distinct possibility. You may even get higher. For an attractive business with $10 million of EBITDA or more, you may even get to 4x-plus senior leverage. If the company's revenue stream is geared more toward municipal contracts with definite expiries (and renewal based on re-bidding), and the EBITDA margins of the business are closer to 15 percent, senior leverage may be negatively impacted. Generally speaking, spreads have narrowed, and there has been some pressure on fees.

D'Amico: We tend not to lever up companies very aggressively so we are comfortable with 3.5x senior. That has not seemed to be an issue for us. Total leverage is comfortably at 4.5x now. Covenants have been very reasonable.

Egan: We have seen a return to up to 3.5x total debt to EBITDA. Some deals have gone beyond that, but as a firm, we do not overlever our companies given that we are generally approaching strategic initiatives and growth phases that require capital investments and do not want to overleverage our situation.

Gabbita: We are getting some attractive pricing on deals that are not highly levered with strong institutional equity sponsorship. Structures with 1x to 2x leverage are fetching attractive rates for five- and six-year term loans and revolvers—well below anything I would have ever expected.

Lee: The capital requirements in solid waste require the use of less leverage. Generally speaking, senior leverage will be 1x-1.5x less than you might see in the general middle market, and that has remained consistent over time. You also do not see much mezzanine debt in this industry. From a lender perspective, you are looking at companies with real assets and recurring revenues from long-term contracts. Transactions are structured with lower leverage, so even if you invest in a company with modest growth, you have security in that tangible asset base, so there is a higher expectation of payoff at term.

Levine: Depending on the particulars of the company and the industry, senior and total leverage for companies under $10 million of EBITDA can be 2x/3x, whereas senior leverage for companies with EBITDA of $10 million or more can exceed 3x. Mezzanine can range from 1x-1.5x. Having said that, we almost always significantly underlever companies we invest in because we want subsequent organic growth and acquisitions to be funded with debt and protect the downside by not overleveraging from the intital point of investment.

Pricing on senior and mezzanine continues to get more favorable. From the worst of the recession to today, spreads have tightened considerably.

Lovell: We are seeing senior leverage of 2.5x-3x for businesses below $10 million of EBITDA and 3x-4x above $10 million.

BGL: ***Are you seeing more flexibility from lenders on use of funds to finance growth (i.e., acquisition and capex lines)?***

Castellarin: There is some additional flexibility on the structure (i.e., more to revolver, less to term) and some flexibility on the covenants.

Egan: We've seen the increased ability to get additional capex lines or acquisition lines and covenants that are more reasonable than they were a year ago.

Lee: To a degree, yes. If they see a private equity group is involved that has the ability to put more growth equity capital into the business, it does make it easier to have a more flexible facility in place.

Levine: Yes, because lenders are being forced to get more flexible in order to be competitive and put money to work.

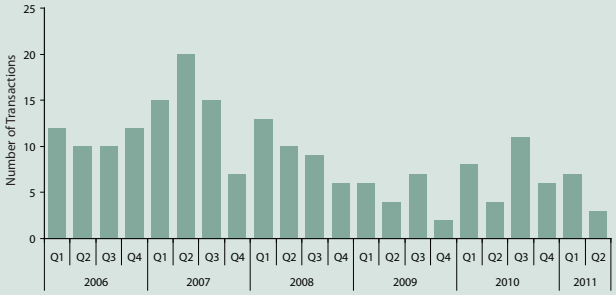
Lovell: I think they have been more flexible in terms of wanting to help companies with various lines of financing to help growth, whether it is capex, working capital, or strategic tuck-in acquisitions. I think they recognize that it is an important area for portfolio companies to grow.



Private Equity Roundtable

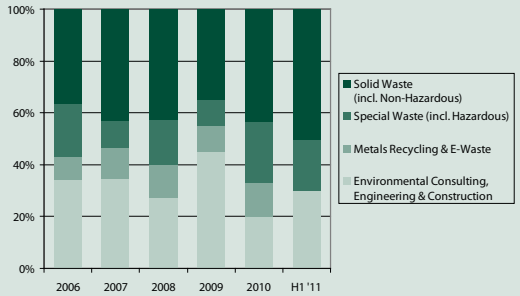
Private Equity in Environmental Services

Quarterly Transaction Activity



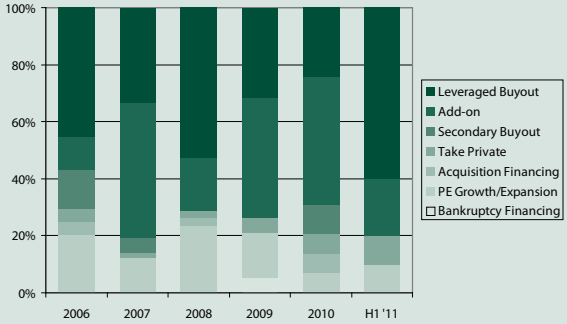
Private equity investment activity in environmental services slowed considerably during the downturn, declining from peak levels in 2007. The sector saw a healthy uptick in 2010, which has been followed by steady deal flow through the first half of 2011. Current market dynamics, namely the growing private equity capital and portfolio overhang and strong financing market, should support a steady second half and keep 2011 on pace with last year.

Deal Count by Sub Sector

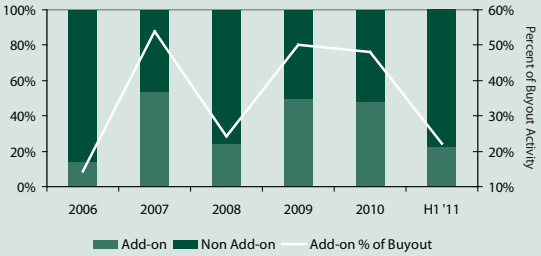


Solid Waste leads transaction activity in environmental services, accounting for the largest share of private equity deal flow since 2006. Through the first half of 2011, Solid Waste comprised 50 percent of private equity transactions in environmental services, followed by E&C with 30 percent. In 2010, Solid Waste generated the highest level of transaction activity at 43 percent, followed by Special Waste with 23 percent.

Deal by Type

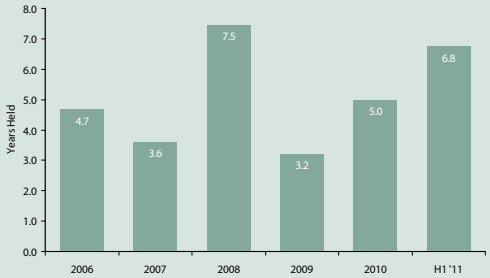


Platform investments in environmental services are accounting for a higher percentage of private equity deal flow so far this year, representing roughly 70 percent of transaction activity versus 48 percent in 2010.



Add-ons have represented a material portion of environmental services transaction activity, thus demonstrating an opportunity for value creation through a buy-and-build strategy. Through the first half of 2011, add-on activity, as a percent of total buyout activity, declined to 22 percent, compared to 48 percent in the first half of 2010. Given a similar level of deal flow from H1 '10 versus H1 '11, the drop in add-on activity as a percentage of total deal activity indicates (i) increasing interest by private equity to deploy capital towards platform investment opportunities within enviromental services and (ii) an increasing number of platform investment opportunities for private equity.

Time to Exit



NOTE: Outliers excluded from calculation.

The average holding period for environmental services investments was 6.8 years in 2011, up considerably from 3.2 years in 2009, and above the 5.1 year average in 2010 for the broad market. Sponsors may begin to seek exits as market conditions remain favorable, capitalizing on increased liquidity from cash-rich strategic buyers and private equity firms looking to tap surplus dry powder. Broadly, the sector's relative resilience and favorable demand drivers are drawing interest from an expanded base of private equity buyers looking for growth platforms.

Source: PitchBook.



Market Update: Oil Collections & Re-Refining

Valvoline's entry into the market in March may have marked a turning point for used oil collections and re-refining. Regarded as an innovator and a creator of categories in the lubricants market, Valvoline's NextGen may do the same for used oil, timing a "ready" market and capitalizing on the upswing of the green movement as consumers and businesses increase demand for eco-friendly "green" oil.

For this update, we went back to participants in our April sector spotlight (*BGL Environmental Services Insider, April 2011*) to identify major developments and get their outlook on the market. Participants cite increased awareness generated since the Valvoline launch, a favorable demand outlook for re-refined oil, and renewed interest both from domestic producers and international technology companies looking to expand in the U.S., further underscoring the likelihood of increased investment activity in the sector.

Collectors and re-refiners consider options

Re-refiners are intent on building their captive used oil networks and continue to show an increased appetite to engage discussions with collectors. In turn, collectors see re-refinery expansion underway and are becoming concerned about the street price of collected oil, so they feel the need to be affiliated with someone who has a re-refinery. Matthew Finlay, a managing director at private equity firm MidMark Capital which backs used oil collector Universal Environmental Services (UES), has seen a dramatic change in the willingness of potential M&A candidates to talk since the industry learned the news of its plans to expand into re-refining. "Along with the increased level of activity in the re-refinery space, we've seen a substantial increase in the number of used oil collection business owners who are willing to have real strategic discussions." In April 2011, UES announced it was partnering with Avista Oil AG, a leading collector and re-refiner in Europe, to build a U.S. re-refinery. "We are generally open for M&A discussions regardless of how much of the capacity we fill within our own collection footprint," Finlay said. "While we collect a significant majority of the gallons needed for our plant, there is nothing to say we wouldn't, together with Avista, build another re-refinery in a different geography if the opportunity presented itself. We are open to absolutely anything," Finlay added.

> "Re-refined oil is a product whose time has come."
>
> —John Wesley
> CEO, Universal Lubricants

Private equity investors have turned their focus on the sector, and several have expressed interest in establishing platforms in used oil collections. They recognize that there is a real opportunity to put forth a concerted effort on the used oil collections side, as fragmentation presents the opportunity to bring together a number of collectors to build platforms of geographic, regionally-focused consolidation hubs. "Collections is still a very fragmented business. I think ultimately, it should be consolidated over a period of time," said Keith Yamada, a partner at private equity firm CIVC Partners, which backs used oil collector Thermo Fluids. "I see it as a natural progression of the business."

Is valvoline going to be a game changer?

Industry reaction to Valvoline's entry to the used oil market has been mixed, but on the margin, resoundingly positive. "To some extent, I think it is what is driving some of the demand," Yamada said. "If anything, it is part of a bigger wave towards recycling and reusing and demonstrates how this waste stream is growing in importance. We kind of like it." Although players like Safety Kleen have been doing it for years, one of the industry's biggest challenges continues to be market acceptance. Insiders say that Valvoline's product launch and media rollout are helping dramatically in educating consumers and service installers on the value and technical efficacy of re-refined oil. "Valvoline is a category validator, and we welcome them to the table," said John Wesley, chief executive officer at Universal Lubricants. "It is going to help legitimize the position that re-refined oils are as good as if not better than virgin-based products." NextGen is Valvoline's number one marketing initiative of the year. "Its built-in DIFM outlet base is unprecedented," said one insider, "and its growing retail shelf space will go a long way." "Clearly there are significant resources going in to promoting this sector," commented Scott Parker, executive director at NORA. "This is the one development that we have seen over the past decade that could be a game changer in terms of affecting demand for re-refined product."

Asked when the industry can potentially expect to see a sea change happen, Wesley offered, "You will know that Valvoline is successful when BP (Castrol) and Shell (Pennzoil) make their announcement that they are joining the fray." Insiders say that there are no known projects underway that would enable either company to market a product, at the earliest, by this time next year. "They cannot get into the re-refining business by 2012 unless they make a strategic acquisition," Wesley added. Insiders speculate they might test the waters by partnering with someone under a base oil supply agreement, and longer-term, might look to secure re-refining partners or develop their own technology and re-refine.

Re-refiners with retail brands are looking for growth. Safety Kleen has a well-established brand in EcoPower and is bolstering its senior management team with the addition of a new CEO and CMO to build out its consumer branded distribution. In April 2011, Robert Craycraft, a former Valvoline executive, joined as CEO, and in July, Curtis Knapp was appointed as the company's first-ever Chief Marketing Officer to lead channel marketing. Knapp's 23 years in the lubricants field includes prior senior-level management positions with Sunoco Lubricants, Warren Distribution, and Castrol North America. In June, Safety Kleen announced its intentions to move forward with the construction of a third re-refinery to further solidify its position as the largest re-refiner in North America.

SOURCE: Capital IQ, Equity Research, Company Filings, and BGL Research.



Market Update: Oil Collections & Re-Refining

Is valvoline going to be a game changer? (continued from page 18)

Universal Lubricant's EcoUltra has had several successes in the service channel, recently signing Enterprise Rent-A-Car to supply its rental vehicle fleet at airport service centers in five states, and hopes to channel that success in retail. "I think our ability to be a best value alternative to Valvoline still exists," Wesley said. Universal Lubricants is already selling Eco-Ultra in quart packages through its website. "We have to make this product available for consumers who want to participate in a green movement but can't find a product on the shelf," Wesley added. Wesley said he could foresee a late 2011 launch of Eco-Ultra in national retailers, depending on market confirmation of Valvoline's launch. On the success of re-refined oil in the retail channel, Wesley offered, "The economics make sense right now. And I think they have the opportunity to make sense well into the future. We can give the consumer a host of choices, now a green choice, and they can make the decision based on their preference and cost should not be the determining factor."

Insiders are optimistic that re-refining demand will grow with or without a 'home run' from Valvoline, saying that the market is large enough to absorb more re-refineries in the U.S. without taking re-refined oil down the value chain into a blended retail product. "The industry will be successful selling base lube into the more traditional blender markets. It doesn't have to go all the way to retail," said one insider. "The model works exceedingly well. Pricing is very good for just that kind of market."

Escalating demand picture

Collectors are seeing a very consistent demand and with strong visibility being driven by demand ultimately for feedstock for re-refiners. "We are seeing a very active market for RFO within the asphalt market, which comes at a time when you are also seeing very strong demand from re-refiners as new capacity comes online," offered Keith Yamada at CIVC Partners.

As Valvoline gains more traction and other retail brands enter the market, and there is increased penetration of re-refined oil in commercial channels, insiders see real opportunity to expand the market. Wesley believes re-refined oil could grow substantially, from 1 percent of the lubrication market which it contributes today, to as much as 20 percent, which would require a doubling of re-refining capacity. "Most existing re-refineries have debottlenecked all they can from the existing infrastructure. To accommodate that growth, the industry will need to build twice as much production capacity than exists today."

Potential exists that demand for green base oil will eventually outstrip available supply. While not an issue today, insiders say that if decisions are not made to start permitting and building, three years from now it will be an issue. "If there is not enough capacity to satisfy demand, the consumer is going to be penalized for being green because the cost of the feedstock will be higher than virgin. It just will," Wesley said. This could have the affect of slowing industry growth dramatically.

As the re-refining industry undergoes further expansion, there is going to be more pressure on the cost to acquire feedstock. "This has not happened before," commented Scott Parker at NORA, referencing the expansion of re-refining capacity in the Midwest, where a concentration of re-refiners raises future concerns around the pricing dynamics for feedstock. The addition of Heritage Crystal Clean's 50 million gallon re-refinery will bring total processing capacity to 170 million gallons in the region. Parker adds, "There is going to be increased competition for feedstock, and until now, we have not really had that dynamic." Collectors of scale will having pricing power. "Our customers are getting smarter and smarter about the business," Yamada said. "There is more competition for those used oil gallons. They are also looking for a way to participate in the economics of changes in prices of their commodity or their waste material." "Maybe that increases the need to acquire collectors," one insider said. Eventually, re-refiners could be forced to compete against industrial burners for base oil if the demand really begins to outstrip supply, insiders said. "So we are going to be fighting in the marketplace for a precious heretofore non-useful commodity," Wesley added.

Re-refiners expand

Re-refiners are gearing up for what is expected to be a surge in demand and are expanding capacity. Several key players have made recent announcements of their strategic expansion plans and progress on existing projects:

- **Safety Kleen** announced in June 2011 its plans for a second U.S. re-refinery, which could increase domestic processing capacity by as much as 45 million gallons, or nearly 50 percent. The company said it is moving forward with preliminary engineering and is evaluating several potential sites in the Southeast and Gulf Coast regions. Dave Sprinkle, executive vice president of oil re-refining, stated in a press release announcing the expansion, "We have several locations under evaluation, each of which makes good sense in terms of used oil availability, existing infrastructure, and logistics. Now we have to determine which site makes the most economic sense." With the addition of a third facility, Safety Kleen's overall processing capacity would increase to approximately 200 million gallons of used oil feedstock annually in North America, further solidifying its position as the world's leading re-refiner of used oil. The news follows on the company's October 2010 announcement of its Breslau, Ontario facility expansion. The $26 million expansion is expected to increase the facility's annual processing capacity to 50 million gallons. According to a company statement, the Breslau plant is undergoing a 10-million gallon per year capacity expansion.

- **Heritage Crystal Clean** (NasdaqGM: HCCI) reported in its Q1 '11 earnings call an accelerated timetable for the completion of its 50 million gallon re-refinery in Indianapolis, Indiana, with the expectation to sell intermediate product by Q3 '11 and base oil by the end of the year. The company expects to ramp up to full capacity utilization within twelve months. CEO Joseph Chaloub cited plans to actively grow HCCI's used oil collection network organically and through selective acquisitions to secure used oil feedstock for its re-refinery. The company reported year-over-year organic growth of more than 20 route trucks, adding five in Q1 '11. The acquisition of the Warrior Group in February brought in an additional 12 to 14 trucks. HCCI expects to continue to add new trucks at an accelerated pace in 2011. The company had 57 oil collection trucks at the end of the first quarter and has the goal to reach 100 to 120 trucks over the next 18 months.

SOURCE: Capital IQ, Equity Research, Company Filings, and BGL Research.



Market Update: Oil Collections & Re-Refining

Re-refiners expand (continued from page 19)

- **Universal Environmental Services** closed on a financing commitment of up to $52 million to fund the construction of its 30 million gallon re-refinery in Peachtree City, Georgia. The company is in detailed engineering and expects to break ground in Q4 '11, targeting Q1 '13 to begin production. Equity partner Avista Oil AG is a leading used oil collector, re-refiner, and blender in Europe. The company processes 100 million gallons of used oil annually and produces Group I and Group II base oils. The company has built three re-refining plants within the last 10 years, including a facility in Germany and Denmark and a joint venture in Saudi Arabia.

- **Universal Lubricants** (UL) is currently working through the permitting process for a second and potentially third re-refinery. The company is evaluating the economics of a 20-30 million gallon facility, which would likely require expansion of the company's collection footprint, said CEO John Wesley. UL has been backed by private equity sponsor Pegasus Capital Advisors since 2007.

- **NexLube Tampa LLC** reported in June 2011 it completed the permit process for its Tampa, Florida re-refinery and blending plant announced in February 2010. The company has started detailed engineering, with an updated timetable to begin construction in 2012 and open in 2013. The re-refinery is projected to take in 24 million gallons of used oil annually and produce an estimated 17 million gallons per year of Group II base oil. The company is using Revivoil technology developed by Viscolube of Italy and Axens of France. Viscolube has two re-refining plants in Italy and has built plants in Poland, Indonesia and Spain.

- **Green View Technologies** announced in May 2011 its plans to open a re-refinery in Rollinsford, New Hampshire in late summer. The facility is strategically located halfway between Boston, Massachusetts and Portland, Maine to service the New England region. The company expects to process five million gallons of waste oil per year initially, producing Group II base oils, distillate fuel and an asphalt product. Pesco Beam, which worked on the Heartland Petroleum re-refinery, provided the equipment and technology for the Green View facility.

Recovering Value in Waste

Used oil has become a valuable waste stream and is growing in importance across the value chain. Recent events call attention to momentum that is building, both in terms of the industry's growing capital needs, as well as future M&A opportunities as consolidation plays are executed, particularly on the collections side. Those factors, coupled with increased attention and focus on the sector, ample availability of private equity capital, and renewed appetite for investment, create a favorable environment to explore strategic options as the industry undergoes further expansion. We welcome the opportunity to assist you in evaluating opportunities within the sector.

BGL's dedicated Environmental Services practice has extensive history with and transaction expertise across the entire environmental services spectrum, with particular emphasis on five key areas:

- Solid Waste (incl. Non-Hazardous)
- Special Waste (incl. Hazardous)
- Reclamation & Remediation Technologies
- Metals Recycling & E-Waste
- Environmental Consulting, Engineering & Construction

The combination of our in-depth industry expertise, industry contacts, and extensive product capabilities provide unique insight and perspective and create significant value for our clients (see last page).

BGL Contact

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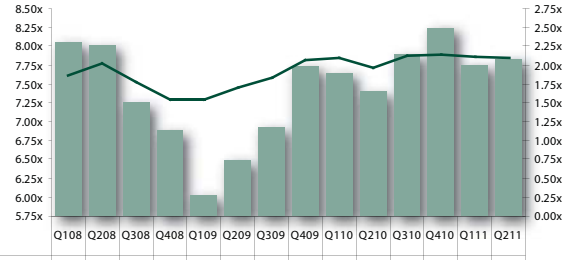
SOURCE: Capital IQ, Equity Research, Company Filings, and BGL Research.



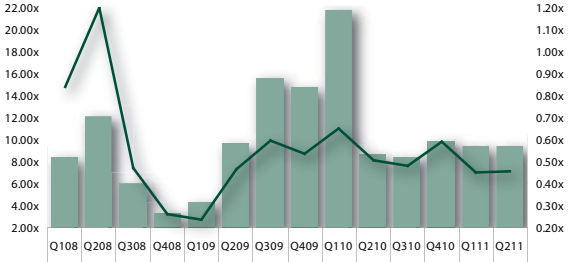
Industry Valuations

Solid Waste (Incl. Non-Hazardous)



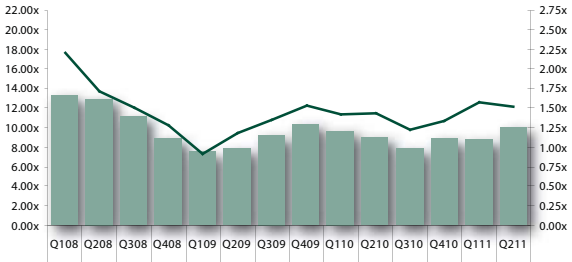
	Q108	Q208	Q308	Q408	Q109	Q209	Q309	Q409	Q110	Q210	Q310	Q410	Q111	Q211
EV/EBITDA	8.1x	8.0x	7.3x	6.9x	6.0x	6.5x	6.9x	7.7x	7.6x	7.4x	7.9x	8.2x	7.7x	7.8x
EV/Revenue	1.9x	2.0x	1.8x	1.5x	1.5x	1.7x	1.8x	2.1x	2.1x	2.0x	2.1x	2.1x	2.1x	2.1x

Metals Recycling & E-Waste



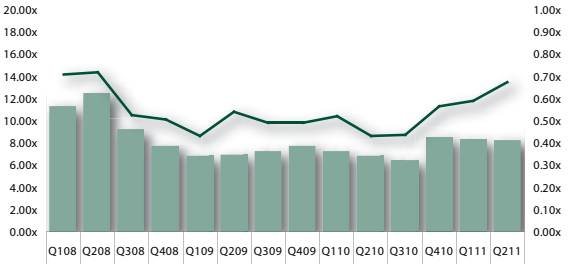
	Q108	Q208	Q308	Q408	Q109	Q209	Q309	Q409	Q110	Q210	Q310	Q410	Q111	Q211
EV/EBITDA	8.4x	12.1x	6.0x	3.3x	4.3x	9.6x	15.6x	14.7x	21.8x	8.6x	8.4x	9.8x	9.4x	9.4x
EV/Revenue	0.8x	1.2x	0.5x	0.3x	0.2x	0.5x	0.6x	0.5x	0.6x	0.5x	0.5x	0.6x	0.5x	0.5x

Special Waste (Incl. Hazardous)



	Q108	Q208	Q308	Q408	Q109	Q209	Q309	Q409	Q110	Q210	Q310	Q410	Q111	Q211
EV/EBITDA	13.2x	12.9x	11.1x	8.9x	7.5x	7.9x	9.3x	10.4x	9.6x	9.0x	7.9x	8.8x	8.7x	10.0x
EV/Revenue	2.2x	1.7x	1.5x	1.3x	0.9x	1.2x	1.3x	1.5x	1.4x	1.4x	1.2x	1.3x	1.6x	1.5x

E&C



	Q108	Q208	Q308	Q408	Q109	Q209	Q309	Q409	Q110	Q210	Q310	Q410	Q111	Q211
EV/EBITDA	11.3x	12.5x	9.2x	7.7x	6.8x	6.9x	7.2x	7.8x	7.2x	6.8x	6.4x	8.5x	8.3x	8.3x
EV/Revenue	0.7x	0.7x	0.5x	0.5x	0.4x	0.5x	0.5x	0.5x	0.5x	0.4x	0.4x	0.6x	0.6x	0.7x

BGL Environmental Services indices defined on Page 22.
**Figures include latest reported earnings for index constituents. Q2 2011 earnings had not been released for all companies by publish date.*
SOURCE: Capital IQ.



Industry Valuations

($ in millions, except per share data) Company Name	Country	Ticker	Current Stock Price (1)	% of 52W High	Market Capitalization (2)	Enterprise Value (3)	TTM Enterprise Value / Revenue	TTM Enterprise Value / EBITDA	Total Debt/ EBITDA	TTM Revenue	TTM Margins Gross	TTM Margins EBITDA
SOLID WASTE (INCL. NON-HAZARDOUS)												
Waste Management, Inc.	United States	NYSE:WM	$35.97	90.6%	$17,057.0	$25,882.0	2.0x	8.0x	2.8x	$12,683.0	37.4%	25.7%
Republic Services, Inc.	United States	NYSE:RSG	30.27	91.5%	11,479.9	18,232.0	2.2x	7.4x	2.8x	8,113.8	41.0%	30.4%
Veolia Environnement S.A.	France	ENXTPA:VIE	18.25	75.1%	9,218.3	27,447.8	0.8x	7.4x	5.7x	34,786.6	17.8%	10.7%
Waste Connections Inc.	United States	NYSE:WCN	33.87	97.7%	3,828.5	4,964.9	3.7x	11.4x	2.5x	1,403.4	43.4%	32.3%
Progressive Waste Solutions Ltd.	Canada	TSX:BIN	22.47	88.5%	2,713.2	3,959.1	2.6x	9.0x	2.9x	1,588.6	41.1%	28.5%
Casella Waste Systems Inc.	United States	NasdaqGS:CWST	6.50	78.4%	172.8	636.1	1.4x	8.0x	5.5x	466.1	31.9%	18.0%
WCA Waste Corporation	United States	NasdaqGM:WCAA	5.88	93.8%	139.6	405.2	1.7x	7.6x	5.1x	235.2	27.6%	22.6%
Median			**$22.47**	**90.6%**	**$3,828.5**	**$4,964.9**	**2.0x**	**8.0x**	**2.9x**	**$1,588.6**	**37.4%**	**25.7%**
Mean			**$21.89**	**87.9%**	**$6,372.7**	**$11,646.7**	**2.1x**	**8.4x**	**3.9x**	**$8,468.1**	**34.3%**	**24.0%**
SPECIAL WASTE (INCL. HAZARDOUS)												
Veolia Environnement S.A.	France	ENXTPA:VIE	$18.25	75.1%	$9,218.3	$27,447.8	0.8x	7.4x	5.7x	$34,786.6	17.8%	10.7%
Stericycle, Inc.	United States	NasdaqGS:SRCL	92.19	96.3%	7,914.4	8,907.8	***5.9x***	***19.2x***	2.2x	1,502.3	48.8%	30.9%
Clean Harbors, Inc.	United States	NYSE:CLH	112.28	98.4%	2,972.1	2,975.0	1.6x	9.2x	1.7x	1,811.3	30.3%	17.9%
Covanta Holding Corporation	United States	NYSE:CVA	17.59	98.9%	2,515.4	4,572.4	2.8x	10.9x	5.5x	1,609.3	40.2%	25.8%
Newalta Corporation	Canada	TSX:NAL	12.50	91.5%	607.6	904.2	1.5x	8.1x	2.7x	597.4	31.5%	18.6%
EnergySolutions, Inc	United States	NYSE:ES	5.14	71.1%	456.3	1,116.5	0.6x	6.0x	4.9x	1,788.4	13.7%	9.6%
US Ecology, Inc.	United States	NasdaqGS:ECOL	17.66	95.5%	323.4	375.2	3.1x	10.8x	1.6x	119.4	35.2%	29.0%
Heritage-Crystal Clean, Inc	United States	NasdaqGM:HCCI	21.53	95.4%	310.8	302.4	2.6x	***32.6x***	0.3x	116.9	69.4%	7.9%
Perma-Fix Environmental Services Inc.	United States	NasdaqCM:PESI	1.55	80.7%	85.5	99.8	1.0x	11.0x	1.4x	97.8	19.1%	9.3%
Median			**$17.66**	**95.4%**	**$607.6**	**$1,116.5**	**1.6x**	**9.2x**	**2.2x**	**$1,502.3**	**31.5%**	**17.9%**
Mean			**$33.19**	**89.2%**	**$2,711.5**	**$5,189.0**	**2.2x**	**9.1x**	**2.9x**	**$4,714.4**	**34.0%**	**17.7%**
METALS RECYCLING & E-WASTE												
Sims Metal Management Limited	United States	ASX:SGM	$18.09	80.9%	$3,715.8	$3,744.9	0.5x	10.9x	0.4x	$8,021.4	16.0%	4.1%
Schnitzer Steel Industries Inc.	United States	NasdaqGS:SCHN	55.94	80.6%	1,537.5	2,002.2	0.7x	9.2x	2.2x	3,017.1	11.2%	7.1%
INTERSEROH SE	Germany	XTRA:ITS	52.00	98.5%	511.7	607.8	0.3x	11.5x	2.8x	1,939.9	12.4%	2.7%
Metalico Inc.	United States	AMEX:MEA	5.87	87.7%	278.3	405.3	0.7x	7.5x	2.4x	601.1	13.4%	9.0%
Industrial Services of America, Inc.	United States	NasdaqCM:IDSA	10.87	51.3%	75.4	119.8	0.3x	6.4x	2.5x	375.0	7.7%	5.0%
Median			**$18.09**	**80.9%**	**$511.7**	**$607.8**	**0.5x**	**9.2x**	**2.4x**	**$1,939.9**	**12.4%**	**5.0%**
Mean			**$28.55**	**79.8%**	**$1,223.8**	**$1,376.0**	**0.5x**	**9.1x**	**2.1x**	**$2,790.9**	**12.1%**	**5.6%**
E&C												
URS Corporation	United States	NYSE:URS	$44.26	91.6%	$3,480.3	$3,785.1	0.4x	5.3x	1.1x	$9,289.4	8.1%	6.7%
AECOM Technology Corporation	United States	NYSE:ACM	26.51	88.4%	3,159.9	3,978.2	0.5x	8.4x	2.6x	7,336.4	6.2%	6.0%
Shaw Group Inc.	United States	NYSE:SHAW	26.37	63.4%	1,905.0	1,835.7	0.3x	9.0x	8.8x	6,195.5	6.4%	3.0%
Tetra Tech Inc.	United States	NasdaqGS:TTEK	23.14	85.2%	1,442.6	1,511.9	0.9x	8.5x	0.8x	1,626.7	18.7%	11.0%
Arcadis NV	Netherlands	ENXTAM:ARCAD	16.69	91.9%	1,121.7	1,395.3	0.7x	8.0x	2.3x	2,019.3	20.8%	8.6%
Great Lakes Dredge & Dock Corporation	United States	NasdaqGS:GLDD	6.32	70.8%	371.7	523.5	0.8x	4.9x	2.4x	680.9	17.6%	15.6%
TRC Companies Inc.	United States	NYSE:TRR	6.53	72.5%	178.1	169.5	0.7x	***18.8x***	1.0x	240.0	16.8%	3.8%
Median			**$23.14**	**85.2%**	**$1,442.6**	**$1,511.9**	**0.7x**	**8.2x**	**2.3x**	**$2,019.3**	**16.8%**	**6.7%**
Mean			**$21.40**	**80.5%**	**$1,665.6**	**$1,885.6**	**0.6x**	**7.4x**	**2.7x**	**$3,912.6**	**13.5%**	**7.8%**

NOTE: Figures in bold and italic type were excluded from median and mean calculation.
(1) As of 7/22/2011.
(2) Market Capitalization is the aggregate value of a firm's outstanding common stock.
(3) Enterprise Value is the total value of a firm (including all debt and equity).
Source: Capital IQ.



Global Environmental Services Practice

- Solid Waste (incl. Non-Hazardous)
- Special Waste (incl. Hazardous)
- Reclamation & Remediation Technologies
- Metals Recycling & E-Waste
- Environmental Consulting, Engineering & Construction (E&C)

Who We Are

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- Senior bankers with significant experience and tenure; partners average over 20 years of experience
- Offices in Chicago and Cleveland
- Founding member and the exclusive U.S. partner of Global M&A, the world's leading partnership of investment banking firms focusing on middle market transactions
- Deep industry experience across core sectors of focus, including: Business and Environmental Services, Industrials, Metals and Metals Processing, Construction and Building Materials, Consumer Products, Healthcare, and Real Estate

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M&A Advisory	Private Placements	Financial Restructuring
Acquisitions & Divestitures	Private Equity	Restructurings
General Financial & Strategic Advice	Mezzanine Debt	Capital Raises
Public & Private Mergers	Bank Debt	Divestitures
Special Committee Advice	Private High Yield	§363 Auctions
Strategic Partnerships & Joint Ventures	Recapitalizations	
Valuations & Fairness Opinions		

Representative Transactions

Sell-side Advisor — Recycler of Electronic & Other Hazardous Waste

Sell-side Advisor — Reclaimer for Ozone-Depleting and Global Warming Gases

Sell-side Advisor — International, Vertically Integrated Waste Management Firm

Sell-side Advisor — International, Environmental Consulting, Engineering & Construction Firm

Sell-side Advisor — Regional Scrap Metal Processor

Sell-side Advisor — Provider of Emergency Response, Industrial Cleaning & Remediation Services

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