



December 2017

Electric
Vehicles



Ecosystem
Intelligence



Mobility-as
-a-Service



Autonomous
Solutions



Data &
Analytics



About Greentech Capital Advisors

Our mission is to empower companies and investors who are creating a more efficient and sustainable global infrastructure. We are purpose-built to ensure that our clients achieve success. We have deeply experienced senior bankers and investment professionals who are sector experts and understand our clients' industry and needs. We reach a vast global network of buyers, growth companies, asset owners and investors, and thereby provide clients with more ways to succeed through a deeper relationship network. We have directly relevant transaction experience which enables us to find creative structures and solutions to close transactions. We are an expert team of 55 professionals working seamlessly on our clients' behalf in New York, Zurich and San Francisco and through a strategic partnership in Japan. Our team of experienced bankers and investment professionals provides conflict-free advice and thoughtful, innovative solutions, and we do so with an intensely focused effort that does not stop until our clients achieve success.

Business Developments

Greentech's Take:

- > As of Jan. 5, Delphi and Aptiv have traded up ~11% and ~5%, respectively, since the spin off was completed on Dec. 4
- > We expect other spin-off transactions to follow given public market appetite for pure play exposure to Advanced Mobility

Greentech's Take:

- > While autonomous Mobility-as-a-Service may still be years away, this partnership could be an indication of business strategies going forward

- > **Apple** patented a navigation system for self-driving cars, detailing methods to make self-driving vehicle navigation more efficient ([CNBC](#))
- > **Baidu** is suing a former executive who it says stole proprietary autonomous driving technology to power a start-up ([FT](#))
- > **Delphi** completed its spin-off of its Powertrain Systems segment, and is now trading as **Aptiv** (NYSE:APTIV), focusing on components for electric and autonomous vehicles ([Forbes](#))
- > **Didi Chuxing** plans to expand into Mexico next year, intensifying its global rivalry with Uber and expanding to its first market outside of China ([Reuters](#))
- > **Ford** will launch 50 new vehicles in China by 2025, including 15 electrified vehicles ([Reuters](#))
- > **GM** is introducing Marketplace, an in-vehicle touchscreen/dashboard linking drivers to vendors for take-away orders or reservations ([Bloomberg](#))
- > **Kia** and **Hyundai** will include built-in virtual assistants with AI-powered smarts for their cars beginning in 2019 ([TechCrunch](#))
- > **Lyft** began its self-driving car pilot with **nuTonomy**, and is now matching its riders with self-driving vehicles in parts of Boston ([TechCrunch](#))
- > **NIO**, an EV startup, launched its first production car, the ES8 – a fully electric SUV with 220 miles of range and 1-hour fast charging ([TechCrunch](#))
- > **Nissan** will bring fully autonomous cars to the market in 2022 ([Bloomberg](#))
- > **Nissan** will start testing robo-taxis on Japanese streets in March, the first step in rolling out a self-driving taxi service using Leaf electric cars ([WSJ](#))
- > **Qualcomm** obtained a permit to test AVs on public roads in CA ([CNBC](#))
- > **Renault** showed off a self-driving car prototype called SYMBIOZ, capable of handling level 4 autonomous driving ([Seeking Alpha](#))
- > A consortium led by **SoftBank** acquired approximately 20% of Uber Technologies through a tender offer that values Uber at \$48 billion ([WSJ](#))
- > **Toyota** plans to offer over 10 purely battery-powered vehicles from 2020 on ([TechCrunch](#))
- > **Volkswagen AG** unit **Electrify America** plans to install 2,800 electric vehicle charging stations in 17 of the largest U.S. cities by June 2019 ([Reuters](#))
- > **Xiaomi**, a Chinese smartphone maker, indicated that its expansion roadmap in India includes plans to sell electric vehicles ([Economic Times](#))

Regulatory Developments

Greentech's Take:

- > Winners and losers in certain markets will be determined by national / regional / individual cities' regulation on access to critical live transportation data

- > **California** nixed a plan to let self-driving car manufacturers evade liability for crashes if the vehicle has not been maintained according to manufacturer specifications ([AP](#))
- > The **Federal Transit Administration** (FTA) released a five-year research agenda for investigating the use of autonomous vehicles in transit ([Dive](#))
- > The **European Court of Justice** ruled that Uber is a taxi service, not just a technology platform ([NYT](#))
- > The **Chinese government** is citing national security concerns in seeking to limit foreign companies' high-resolution cameras and GPS-equipped cars from accessing China's roads ([FT](#))
- > **China** will continue to exempt the 10 percent purchase tax and extend a tax rebate on new-energy vehicles at least through 2020 ([Bloomberg](#), [Reuters](#))
- > **Taiwan** is expecting to ban the sale of non-electric motorcycles by 2035 and non-electric automobiles by 2040 ([BNEF](#))

Selected Capital Raises

Greentech's Take:

- > The implementation of V2G technologies will be an important factor for EV growth as the strain on the grid takes on new challenges

- > **Didi Chuxing** raised \$4 billion from SoftBank and Mubadala for AI capacity building, international expansion and a new energy vehicle ecosystem ([WSJ](#))
- > **Guardian Optical Technologies**, a developer of sensor technology for automobile OEMs, raised \$5.1 million in Series A funding ([Business Wire](#))
- > **Lyft** raised another \$500 million to its most recent \$1 billion funding round back in October ([TechCrunch](#))
- > **Nuvve**, San Diego based company focused on vehicle-to-grid (V2G) solutions, received Series A financing from EDF Renewable Energy ([GTM](#))
- > **Ouster**, a LiDAR autonomous sensor startup, received \$27 million in Series A financing led by auto powerhouse Cox Enterprises ([TechCrunch](#))
- > **Passport**, a mobile payments company for the transportation industry, raised \$43 million in Series C funding led by Bain Capital Ventures ([Passport](#))
- > **SolidEnergy Systems**, a U.S.-based lithium-metal battery company, raised a \$30 million series C round from unnamed investors ([CMN](#))
- > **Upstream Security**, a provider of cloud-based cybersecurity platforms for connected cars and AVs, raised \$9 million in Series A funding ([Newswire](#))
- > **Vayyar Imaging**, a 3D imaging sensors company, closed a \$45 million Series C financing round led by Walden Riverwood and ITI ([Business Wire](#))
- > **XPENG Motors**, a Chinese electric vehicle maker, raised an undisclosed amount of new funding from investors led by Alibaba Group ([CMN](#))

Selected Mergers & Acquisitions

- > **Daimler** bought a majority stake in ride-hailing company **Chauffeur Prive**, a French rival to the larger Uber car-ride app ([Reuters](#))
- > **DENSO** acquired **InfiniteKey**, a developer of phone-as-a-key software that allows smartphones to unlock car doors ([Newswire](#))
- > **Lear** acquired **EXO Technologies**, a developer of SaaS based GPS software for autonomous and connected vehicle applications ([Newswire](#))

Selected Partnerships

Greentech's Take:

- > Waymo's partnership, if successful, may address some difficult questions about insurance / liability in the age of autonomous Mobility-as-a-Service

- > **Alibaba** signed a deal with **Ford** to cooperate in cloud computing, connectivity and retail, potentially to sell Ford cars on Alibaba ([Reuters](#))
- > **Avis** and **Continental** are working to offer a completely mobile car rental experience that features keyless entry and ignition using the latter's Key-as-a-Service (KaaS) technology ([Avis](#))
- > **BMW** is teaming up with **Solid Power** to develop and commercialize the latter's solid-state battery technology for use in electric vehicles ([TechCrunch](#))
- > **DHL** plans to begin testing autonomous delivery vehicles next year in concert with **Nvidia** and **ZF** ([The Drive](#))
- > EV charging company **Greenlots** was selected by **Electrify America** to support a \$2 billion investment in charging infrastructure in the U.S. ([Dive](#))
- > **Honda** is partnering with **SenseTime**, a Chinese startup valued at over \$1 billion, to develop AI that will power autonomous cars ([TechCrunch](#))
- > **LG** and **HERE** have partnered to combine LG's telematics tech and HERE's location services to create a communications hub for AVs ([TechCrunch](#))
- > **Renovo** and **Samsung Electronics** are developing highly-automated vehicle technology, focusing on automated mobility on demand (AMoD) ([Renovo](#))
- > **Toyota** is partnering with **Panasonic** on battery technology, investing as much as \$13.3 billion through 2030 in battery development ([TechCrunch](#))
- > **Waymo** is working with insurance startup **Trov** on protections for riders using its forthcoming self-driving ride hailing service ([TechCrunch](#))

Capital Raises

Date	Company	Invested (\$mm)	Investors	Company Description
12/21	Didi Chuxing	\$4,000.0	SoftBank Group Corp., Mubadala Capital	Provider of a mobile ride-hailing application designed to match customers with local drivers in China. The company's ride-hailing platform operates a mobile ride-sharing network that includes chauffeur services, minibus, car rental and ride-sharing.
12/20	Passport	\$43.0	Bain Capital Ventures, Grotech Ventures, MK Capital, Relevance Capital	Provider of parking, transportation and transit management platform designed to centralize and control parking and transit systems. The company's parking, transportation and transit management platform delivers intelligent data to improve decision making.
12/20	Vayyar Imaging	\$45.0	Walden Riverwood Ventures, ITI, Claltech, Battery Ventures, Bessemer Ventures, Israel Cleantech Ventures, Amity Ventures	Developer of 3D imaging sensors designed to see through all kinds of objects. The company's 3D image sensing technology utilizes state of art embedded chip, radio frequency and advanced imaging algorithm sensors that can be applied in an extensive breadth of applications .
12/19	Nuvve	Undisclosed	EDF Renewable Energy, Toyota Tsusho, other undisclosed investors	Provider of commercially available V2G solutions, which allow for bidirectional EV charging aligned to meet the needs of the grid.
12/15	XPENG Motors	Undisclosed	Alibaba, GGV Capital, Matrix Partners China	Manufacturer of electric vehicles. The company aims to create a "one-stop shop" model, and change the user, purchasing and maintenance experience of car ownership for young people.
12/13	Upstream Security	\$9.0	Charles River Ventures, Gilot Capital Partners, Maniv Mobility	Developer of a cloud-based cyber security platform intended to protect the technologies and applications of connected and autonomous vehicles.
12/12	SolidEnergy Systems	\$30.0	Applied Ventures, Vertex Ventures China, other undisclosed investors	Developer and manufacturer of advanced semi-solid Lithium-Metal technology batteries that are designed to be the lightest practical rechargeable cells in the world.
12/11	Ouster	\$27.0	Cox Enterprises, Fontinalis Partners, Amity Ventures, Constellation Technology Ventures, Tao Capital Partners, Carthona Capital	Developer of high performance LIDAR technology, allowing customers to measure and map their surroundings for their autonomous vehicles, and providing perception technology for the autonomous vehicle and robotics sectors.
12/11	Lyft	\$500.0	Alphabet / CapitalG, InMotion Accelerator, SharesPost, Janus Capital Group, M13, AllianceBernstein, KKR, Fidelity Management and Research, Ontario Teachers' Pension	Provider of an on-demand ride-sharing platform designed to match customers with local drivers through their smartphone. The company's ride-sharing platform offers an online marketplace that connects local drivers with passengers who request rides through their smartphones.
12/5	WM Motor	Undisclosed	Baidu Capital, Amiba Capital, Susquehanna International Group	Developer of electric cars. The company specializes in the designing, development and manufacturing of electric vehicles.
12/5	Leapmotor	Undisclosed	Sequoia Capital China	Manufacturer of electronic vehicles. The company aims to produce fashionable smart electric cars for Chinese consumers; its research and development focus on intelligent internet, electronic control and battery systems as well as vehicle design.
12/4	Guardian Optical Technologies	\$5.1	GlenRock Israel, SPARZ Group, Maniv Mobility	Developer of a motion detecting 3D sensor designed to monitor the interior of cars and work in conjunction with safety belts and airbags.

Mergers & Acquisitions

Date	Target	Acquiror	EV		Target Description	
			(\$mm)	Revenue		EBITDA
12/27	Volvo Group	Geely	€ 3,250.0	n.a.	n.a.	Geely is acquiring 8.2% stake in the truckmaker, which comes with 15.6% of the voting rights
12/21	Chauffeur Prive	Daimler	n.a.	n.a.	n.a.	Provider of a cab booking application that allows customers to order a car with driver directly from their smartphone.
12/13	Perdriel Group	Renault	n.a.	n.a.	n.a.	French media group that produces the weekly business magazine Challenges
12/14	InfiniteKey	DENSO	n.a.	n.a.	n.a.	Developer of phone-as-a-key software created to allow smartphones to act as advanced key fobs to unlock car doors
12/11	MobileView	Safe Fleet	n.a.	n.a.	n.a.	Developer of mobile surveillance and video management products for transit bus and rail vehicles
12/11	EXO Technologies	Lear Automotive	n.a.	n.a.	n.a.	Developer of SaaS based global positioning system (GPS) software designed to enhance modern day receivers
12/8	Uber (Singapore-based car rental service)	ComfortDelGro	\$474.0	n.a.	n.a.	Uber's car rental business in Singapore

Advanced Mobility Market Update

Trading Comparables

Company	Price as of 12/31/2017	Market Cap	Firm Value	EV / Revenue		EV/EBITDA		P/E	
				2017E	2018E	2017E	2018E	2017E	2018E
Automotive Companies									
Toyota	¥ 7213.0	\$208,930	\$343,526	1.3x	1.3x	12.2x	11.6x	11.2x	10.6x
Volkswagen	€ 168.70	100,993	260,177	0.9x	0.9x	6.5x	6.0x	7.1x	6.4x
Daimler	€ 70.80	90,954	210,016	1.0x	1.0x	8.8x	8.7x	7.7x	7.8x
BMW	€ 86.83	67,707	170,604	1.4x	1.4x	9.7x	9.5x	7.8x	7.9x
Ford	\$ 12.49	49,616	160,769	1.1x	1.1x	13.9x	13.1x	6.9x	8.0x
General Motors	\$ 40.99	58,223	128,944	0.9x	0.9x	7.0x	7.6x	6.5x	7.0x
Honda	¥ 3862.0	62,102	106,971	0.8x	0.8x	9.1x	8.4x	10.7x	10.0x
Nissan	¥ 1123.50	42,095	106,830	1.0x	1.0x	10.1x	9.4x	7.4x	7.2x
Hyundai	₩ 156000.0	38,079	85,936	0.9x	0.9x	10.8x	10.0x	9.4x	7.5x
Renault	€ 83.91	29,797	70,039	0.9x	0.9x	8.9x	8.5x	5.4x	5.3x
SAIC Motor	¥ 32.04	57,484	67,948	0.5x	0.5x	14.3x	11.7x	10.5x	9.6x
Tesla	\$ 311.35	52,328	61,846	3.1x	2.2x	NM	30.8x	NM	NM
Fiat Chrysler	€ 14.91	34,895	43,354	0.3x	0.3x	2.7x	2.6x	6.7x	5.7x
BYD	HK\$ 68.10	26,083	36,761	1.8x	1.5x	15.9x	12.6x	35.2x	23.1x
Geely	HK\$ 27.10	31,098	28,376	1.6x	1.3x	13.8x	10.5x	21.0x	15.1x
Suzuki	¥ 6534.0	28,480	27,231	0.8x	0.8x	5.9x	5.4x	15.1x	13.6x
Tata Motors	RS 431.20	21,456	27,224	0.5x	0.5x	5.0x	3.8x	16.4x	11.0x
Guangzhou Automobile	HK\$ 18.52	24,440	22,743	1.7x	1.5x	21.7x	17.3x	9.6x	8.0x
Subaru	¥ 3583.0	24,465	16,316	0.5x	0.5x	3.7x	3.3x	11.8x	9.4x
Peugeot	€ 16.96	18,422	13,004	0.2x	0.1x	1.8x	1.6x	7.6x	7.2x
Dongfeng Motor	HK\$ 9.46	10,427	10,937	0.6x	0.5x	18.5x	21.0x	4.9x	4.7x
KIA	₩ 33500.0	12,685	10,739	0.2x	0.2x	4.3x	2.9x	10.1x	5.9x
Mazda	¥ 1511.50	8,477	8,183	0.3x	0.3x	3.8x	3.6x	8.4x	7.5x
Mitsubishi	¥ 814.0	10,769	6,541	0.3x	0.3x	5.2x	4.0x	NM	12.3x
FAW Car Group	¥ 10.76	2,689	2,708	0.6x	0.6x	12.0x	9.7x	47.8x	27.6x
Mean				0.9x	0.8x	9.4x	9.4x	12.4x	9.9x
Median				0.9x	0.9x	9.0x	8.7x	9.4x	7.9x
Truck Companies									
Daimler	€ 70.80	\$90,954	\$210,016	1.0x	1.0x	8.8x	8.7x	7.7x	7.8x
Volvo	KR 152.70	39,719	52,126	1.2x	1.2x	9.6x	9.0x	15.2x	13.9x
PACCAR	\$ 71.08	24,992	30,295	1.5x	1.5x	9.8x	8.9x	17.0x	15.1x
MAN SE	€ 95.40	16,834	19,763	1.1x	1.0x	15.5x	12.5x	52.4x	31.7x
Isuzu	¥ 1887.0	14,212	15,158	0.8x	0.8x	7.6x	6.8x	13.9x	12.5x
Navistar	\$ 42.88	4,221	8,126	0.9x	0.8x	14.0x	11.0x	71.9x	20.0x
Mean				1.1x	1.1x	10.9x	9.5x	29.7x	16.8x
Median				1.1x	1.0x	9.7x	9.0x	16.1x	14.5x
Tier 1 Suppliers									
Continental	€ 225.05	\$54,050	\$58,648	1.1x	1.0x	7.2x	6.6x	14.2x	12.8x
Denso	¥ 6763.0	47,672	46,886	1.0x	1.0x	7.9x	7.4x	17.8x	16.2x
Bridgestone	¥ 5238.0	37,808	36,859	1.1x	1.1x	6.5x	6.1x	13.5x	12.6x
Michelin	€ 119.55	25,759	28,729	1.1x	1.0x	5.7x	5.4x	13.0x	11.6x
Aptiv	\$ 84.83	22,551	26,471	1.9x	1.8x	12.2x	11.4x	18.0x	16.5x
Magna	C\$ 71.24	20,518	23,832	0.6x	0.5x	5.8x	5.5x	9.4x	8.4x
Valeo	€ 62.27	17,920	19,648	0.8x	0.7x	6.9x	6.0x	14.7x	12.9x
Goodyear	\$ 32.31	7,959	13,721	0.9x	0.9x	6.4x	5.6x	11.1x	8.7x
Lear	\$ 176.66	11,935	12,909	0.6x	0.6x	6.0x	5.8x	10.4x	9.8x
Autoliv	\$ 127.08	11,050	11,847	1.1x	1.0x	9.2x	8.3x	20.3x	17.9x
Faurecia	€ 65.13	10,796	11,581	0.5x	0.5x	5.2x	4.8x	14.6x	12.9x
Visteon	\$ 125.14	3,892	3,666	1.1x	1.0x	10.0x	9.2x	20.0x	17.8x
ATS Automation Tooling Systems	C\$ 15.55	1,165	1,159	1.3x	1.3x	11.5x	10.8x	24.0x	20.5x
Stoneridge	\$ 22.86	644	729	0.9x	0.8x	7.5x	7.1x	15.0x	14.8x
Mean				1.0x	0.9x	7.7x	7.1x	15.4x	13.8x
Median				1.0x	1.0x	7.0x	6.3x	14.7x	12.9x
Autonomous Driving Chip Makers									
Intel	\$ 46.16	\$216,029	\$231,035	3.6x	3.5x	8.7x	8.4x	14.2x	14.2x
Nvidia	\$ 193.50	117,261	112,956	10.4x	8.9x	33.7x	28.3x	47.7x	41.5x
Qualcomm	\$ 64.02	94,794	79,379	3.5x	3.2x	9.3x	11.2x	15.7x	18.0x
Advanced Micro Devices	\$ 10.28	9,918	10,463	1.8x	1.6x	31.3x	18.4x	76.9x	28.9x
Mean				4.8x	4.3x	20.8x	16.6x	38.6x	25.7x
Median				3.5x	3.4x	20.3x	14.8x	31.7x	23.5x

Advanced Mobility Market Update

Trading Comparables (cont.)

Company	Price as of 12/31/2017	Market Cap	Firm Value	EV / Revenue		EV/EBITDA		P/E	
				2017E	2018E	2017E	2018E	2017E	2018E
Intelligent Transport									
Roper Technologies	\$ 259.0	\$26,512	\$31,240	6.3x	6.0x	19.4x	17.9x	27.8x	25.6x
FLIR Systems	\$ 46.62	6,460	6,444	3.4x	3.2x	16.2x	14.1x	25.1x	22.1x
LS Corp	W 72500.0	2,181	5,845	0.6x	0.6x	7.4x	7.5x	9.3x	9.8x
CSG Smart Science & Technology	Y 19.73	2,211	2,200	NM	NM	NM	NM	NM	NM
Beijing E-Hualu IT	Y 27.10	1,539	2,004	2.9x	2.0x	29.7x	22.9x	49.3x	32.8x
Cubic Corporation	\$ 58.95	1,604	1,790	1.1x	NM	16.9x	13.6x	NM	34.2x
Vaisala	€ 44.50	974	887	2.1x	2.0x	14.8x	13.4x	26.1x	22.6x
INIT Innovation in Traffic Systems	€ 18.31	221	259	1.6x	1.5x	16.3x	12.1x	48.7x	29.9x
Iteris, Inc	\$ 6.97	229	213	1.9x	1.6x	NM	57.0x	NM	NM
Image Sensing Systems ⁽¹⁾	\$ 2.95	15	13	NM	NM	NM	NM	NM	NM
Mean				2.8x	2.6x	17.3x	19.8x	31.8x	25.6x
Median				2.1x	2.0x	16.3x	13.9x	27.8x	26.8x
ITS / Smart Tolling									
Atlantia	€ 26.32	\$26,099	\$45,444	6.1x	5.9x	10.4x	9.9x	18.7x	17.5x
Abertis Infraestructuras	€ 18.55	22,061	44,434	6.3x	6.2x	10.2x	9.6x	19.4x	17.3x
Ferrovial	€ 18.93	16,641	22,956	1.6x	1.6x	20.9x	21.4x	34.0x	36.4x
Autostrada	€ 24.23	2,880	6,160	2.6x	2.4x	7.0x	6.5x	15.4x	14.5x
Conduent	\$ 16.16	3,400	5,111	0.9x	0.9x	7.7x	7.1x	20.5x	16.5x
Kapsch TrafficCom	€ 49.95	780	800	0.9x	0.9x	8.8x	8.0x	15.6x	14.0x
Cross Harbour ⁽¹⁾	HK\$ 12.90	615	187	NM	NM	NM	NM	NM	NM
Q-Free	NOK 8.05	88	113	0.9x	0.9x	9.6x	6.8x	NM	15.9x
Mean				2.8x	2.7x	10.7x	9.9x	20.6x	18.9x
Median				1.6x	1.6x	9.6x	8.0x	19.0x	16.5x
Telematics									
TomTom	€ 8.26	\$2,333	\$2,212	2.1x	2.1x	12.7x	10.4x	34.2x	25.1x
Orbcomm	\$ 10.18	756	966	3.5x	3.2x	20.4x	14.9x	NM	NM
CalAmp	\$ 21.43	763	765	2.0x	1.8x	14.5x	12.6x	18.7x	16.7x
Ituran	\$ 34.20	717	689	2.7x	2.6x	10.1x	8.9x	16.7x	15.9x
Cartrack ⁽¹⁾	R 19.10	463	475	NM	NM	NM	NM	NM	NM
Mix Telematics	R 6.59	321	299	2.1x	1.9x	8.9x	7.7x	30.5x	23.9x
Quartix	£ 3.55	228	222	6.7x	NM	24.1x	21.0x	30.1x	26.5x
Inseeqo	\$ 1.61	94	203	0.9x	0.9x	NM	8.8x	NM	43.9x
Quarterhill (fka Wi-LAN)	C\$ 2.32	220	189	1.7x	1.5x	3.0x	9.4x	3.6x	12.6x
TeleNav	\$ 5.50	244	149	0.7x	0.5x	NM	NM	NM	NM
Kerlink	€ 19.36	118	104	2.4x	1.7x	NM	NM	NM	NM
Mean				2.5x	1.8x	13.4x	11.7x	22.3x	23.5x
Median				2.1x	1.8x	12.7x	9.9x	24.4x	23.9x
Logistics									
UPS	\$ 119.15	\$102,714	\$117,193	1.7x	1.6x	11.0x	10.3x	19.8x	18.3x
FedEx	\$ 249.54	66,849	79,522	1.2x	1.1x	9.0x	8.0x	19.6x	17.1x
Deutsche Post	€ 39.75	57,929	62,585	0.8x	0.8x	10.0x	9.3x	17.4x	16.2x
Fortive	\$ 72.35	25,146	27,911	3.9x	3.6x	18.1x	16.0x	25.4x	22.6x
J.B. Hunt	\$ 114.98	12,619	13,696	1.7x	1.6x	13.1x	11.3x	31.2x	25.2x
Penske	\$ 47.85	4,104	9,949	0.5x	0.5x	13.2x	12.5x	11.1x	10.4x
Descartes Systems	\$ 28.40	2,189	2,210	8.3x	7.5x	27.4x	23.4x	NM	59.0x
Mean				2.6x	2.4x	14.5x	13.0x	20.7x	24.1x
Median				1.7x	1.6x	13.1x	11.3x	19.7x	18.3x
Communications / Infrastructure									
AT&T	\$ 38.88	\$238,723	\$354,143	2.2x	2.2x	6.8x	6.7x	13.4x	13.0x
Verizon	\$ 52.93	215,925	330,538	2.6x	2.6x	7.3x	7.1x	14.1x	13.5x
Cisco Systems	\$ 38.30	189,341	153,676	3.1x	3.1x	9.0x	9.1x	15.8x	15.2x
T-Mobile	\$ 63.51	52,838	83,005	1.9x	1.8x	7.6x	7.0x	25.6x	22.3x
Sprint	\$ 5.89	23,527	55,493	1.7x	1.7x	5.0x	4.7x	NM	NM
Hitachi	¥ 877.90	37,668	52,757	0.6x	0.6x	5.7x	5.3x	13.7x	11.5x
Toshiba	¥ 317.0	18,349	24,307	0.6x	0.7x	4.1x	13.0x	NM	9.6x
Xerox	\$ 29.15	7,408	11,873	1.2x	1.3x	7.0x	6.7x	8.6x	8.2x
Mean				1.8x	1.7x	6.6x	7.5x	15.2x	13.3x
Median				1.8x	1.7x	6.9x	6.9x	13.9x	13.0x
Aggregate Mean				1.8x	1.6x	11.0x	10.7x	19.6x	16.7x
Aggregate Median				1.1x	1.1x	9.2x	9.0x	15.3x	14.3x

Source: FactSet, SEC filings and third party providers. Values in U.S. Dollars. Share prices shown in local currencies.

(1) Limited equity research coverage.

Global Experts in Sustainable Technology & Infrastructure



San Francisco

New York

Zürich

Tokyo

Partnership with Sangyo Sosei Advisory Inc.

INVESTMENT BANKING

Mergers & Acquisitions

- Corporate sales
- Asset sales
- Acquisitions
- Minority investments
- Joint ventures
- Fairness opinions

\$12bn

Capital Raising

- Equity private placements
- Debt private placements
- Project finance advisory
- Co-managed public offerings

\$4bn

Strategic Advisory

- Strategic consulting
- IPO preparation
- Financial restructuring
- Specialized opinions
- Independent capital markets advice

>20 assignments

ASSET MANAGEMENT

Public Equity

- GCA Sustainable Growth Fund
- GCA Emerging Markets Sustainable Growth Fund

\$600mm

Highly Experienced Partners Supported by 55 Professionals

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- > >150 completed transactions
- > Founder and head of advisory business
- > Large industrials and energy companies
- > Broad coverage of senior leaders

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- > Advanced building products

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- > Power infrastructure services
- > Renewable energy value chain
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