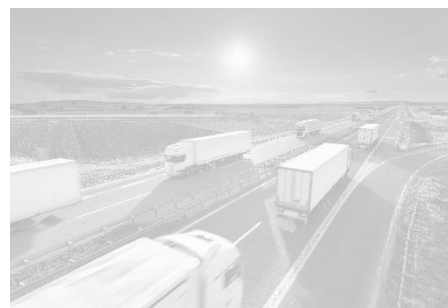
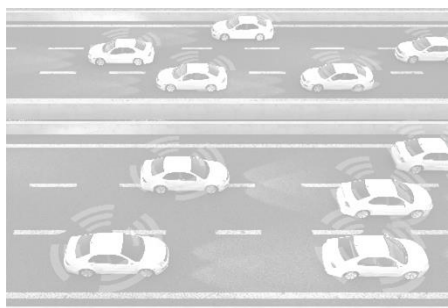


Advanced Mobility Market Update



April 2018

Electric
Vehicles



Ecosystem
Intelligence



Mobility-as-
a-Service



Autonomous
Infrastructure



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:

- > Vehicle OEMs are realizing that both MaaS network operation and vehicle sales will be important in the future of mobility

- > **ABB** debuted the world's fastest electric vehicle charger at Hannover Messe, capable of adding up to 200km of range in 8 minutes ([ABB](#))
- > **Alibaba** joined rival internet giants Baidu and Tencent in the race for self-driving cars after confirming it has been conducting vehicle tests ([SCMP](#))
- > **BMW** announced a car subscription pilot in Nashville, where drivers receive unlimited access to a fleet of BMWs for a set monthly fee ([Bloomberg](#))
- > **Chevrolet** is teaming up with Shell to launch a new feature that allows drivers to pay for gas from their vehicle's infotainment screen ([The Verge](#))
- > **Deutsche Post** is exploring strategic options for its electric delivery-van business, including courting outside investors to fund expansion ([Bloomberg](#))
- > **FlixBus**, Europe's biggest intercity bus operator, is starting the world's first all-electric long-distance bus route with battery-powered vehicles ([BNEF](#))
- > **Ford** intends to operate its own robo-taxi network "at scale" in 2021 to transport people and goods ([FT](#)); Ford announced it will stop selling all Ford brand sedans in North America, except for the Mustang and Focus hatchback, by 2019 in an effort to improve their operating margin ([Auto News](#)); Ford debuted GoRide, a non-emergency medical transportation service ([Ford](#))
- > **General Motors** announced it is reorienting its **OnStar** business to capitalize on its data collection and connectivity operations ([Auto News](#))
- > **Luminar**, a Silicon Valley-based LiDAR start-up that already has a deal with Toyota, has announced the introduction of its new LiDAR unit ([Wired](#))
- > **Lyft** plans to spend millions of dollars a year to fund projects that would offset the pollution created by its drivers ([BNEF](#))
- > **Porsche** is predicting that hybrid and battery-electric vehicles will make up as much as half of its deliveries by 2025 ([BNEF](#))
- > Amsterdam-based navigation device maker, **TomTom** announced trucks will hit the road later this year, with their software and maps that will automatically adjust speed when a curve or incline comes up ([Bloomberg](#))
- > **Toyota** is opening a European start-up office in London to develop new transport services as part of an ambitious bet that it can build expertise in upcoming technologies from ride hailing to car-sharing ([FT](#))
- > **Volvo Trucks** is launching its first commercial electric truck offering, with production and sales slated to begin in 2019 ([CleanTechnica](#))

Regulatory Developments

Greentech's Take:

- > The Chinese government's proactive steps towards AV testing is helping establish China as the frontrunner for AV development

- > The **California Department of Motor Vehicles** adopted new regulations pertaining to autonomous vehicles along with three new permitting options: testing with a driver, driverless testing, and deployment ([TechCrunch](#)); **Waymo** took advantage of these new regulations and applied to test its autonomous vehicles without drivers on California roads ([SF Chronicle](#))
- > **China's Ministry of Transport** has announced new requirements for testing autonomous vehicles, and starting in May provincial and city governments will have the authority to allow autonomous vehicles road-testing ([Quartz](#))
- > The **Environmental Protection Agency** announced it will reconsider, and most likely roll back, Obama-era rules requiring automakers to hit ambitious emissions and mileage standards by 2025 ([NY Times](#)); In response, California and 16 other states sued the Trump Administration ([CBS News](#))
- > The **Institute of Electrical and Electronics Engineers** announced it has signed a memorandum of understanding with the **American Center for Mobility** to help accelerate development and deployment of voluntary technical standards for connected and autonomous vehicles ([Business Wire](#))

Selected Capital Raises

Greentech's Take:

- > As connected vehicles generate and collect significant amounts of data, cybersecurity will be paramount to vehicle safety

- > **Allianz**, a large German insurance company, has invested \$35 million in **Go-Jek**, an Indonesia-based ride-hailing and local services company ([TechCrunch](#))
- > **Cluno**, a Munich-based start up offering a car subscription service, raised €7 million in Series A funding from Acton Capital and Atlantic Labs ([TechCrunch](#))
- > **Comma.ai**, a provider of telematics retro fits, raised \$5 million ([TechCrunch](#))
- > Real-time perception software company, **DeepScale**, raised \$15 million from Point72, Next47, Autotech Ventures, and Trucks Venture Capital ([PR Newswire](#))
- > **Dellfer**, an autonomous vehicle cybersecurity company, received a \$2 million seed investment from Denso and Sand Hill Angels ([Global Newswire](#))
- > China's state-owned automaker **FAW Group** agreed to invest a "significant amount of money" in Chinese-funded electric vehicle startup **Byton** ([Reuters](#))
- > **Manbang**, a mobile app platform that matches truck drivers with shippers looking to transport cargo raised \$1.9 billion in an oversubscribed round ([WSJ](#))
- > **Karamba Security**, a provider of automotive cybersecurity solutions, raised \$10 million from Western Technology Investment ([Venture Beat](#))
- > **Leishen LiDAR** raised \$15.8 million from Fortune Capital ([China Money](#))
- > **Mapillary**, a startup developing an independent mapping data system for autonomous vehicles, raised \$15 million led by BMW i Ventures ([Venture Beat](#))
- > **Savari**, a provider of V2X software and hardware technologies, raised \$12 million in Series B Funding from Aviva Ventures, SAIC Capital and Flex ([PE Hub](#))
- > **Turo**, a peer-to-peer car-sharing marketplace, has raised an additional \$12 million from American Express Ventures and Sumitomo ([TechCrunch](#))

Selected Mergers & Acquisitions

- > **BlaBlaCar**, a French long-distance carpooling service, has acquired **Less**, a short-distance ride-sharing service, for an undisclosed amount ([Skift](#))
- > **Clearlake Capital**, **HarbourVest Partners**, **PSP Investments**, and **Guggenheim Investments** have invested over \$700 million in **Lytix**, a video telematics company, at an enterprise value of over \$1.5 billion ([PR Newswire](#))
- > **Ola**, India's version of Uber, has acquired **Ridlr**, an Indian transportation startup which allows users to buy tickets for public transport and also monitors traffic congestion using IoT devices ([TechCrunch](#))
- > **Federal-Mogul**, an auto parts company owned by Carl Icahn, was purchased by **Tenneco**, also an auto parts company, for \$5.4 billion and plans to split the company into two parts, both to be publicly traded ([Detroit Free Press](#))

Selected Partnerships

Greentech's Take:

- > Didi's plan to develop cheap, electrified vehicles for new mobility will strengthen the Company's market position outside China against rival Uber

- > **Alibaba** announced it has partnered with **Audi**, **Daimler**, and **Volvo** to bring Tmall Genie, its voice assistant, to their vehicles ([TechCrunch](#))
- > **BMW** has partnered with **Innoviz** to incorporate their solid-state LiDAR into their Level 3-5 autonomous vehicles ([TechCrunch](#))
- > **Didi Chuxing** forged an alliance with 31 auto industry companies - including **Toyota**, **Volkswagen**, and the **Renault-Nissan-Mitsubishi Alliance** - to have 10 million electric vehicles in Didi's network by 2028 ([AutoNews](#))
- > **NTT Docomo**, Japan's predominant mobile phone operator, and **Valeo** have agreed to jointly develop and offer connected-car and mobility services ([Valeo](#))
- > The trucking units of Toyota and Volkswagen, **Hino Motors** and **Volkswagen Truck & Bus**, formed a partnership to develop lower-emission vehicles and automated driving capabilities to reduce R&D costs ([Reuters](#))
- > **Waymo** is nearing a deal with **Honda** to develop a driverless vehicle without a steering wheel or brakes for the delivery and logistics market ([Bloomberg](#))

Capital Raises

Date	Company	Invested (\$mm)	Investors	Company Description
4/3	DeepScale	\$15.0	Point72, Next47, Autotech Ventures, Trucks Venture Capital	Developer of artificial intelligence based visual perception systems designed to help automakers develop cars with advanced driver-assistance systems.
4/4	Dellfer	\$2.0	Denso, Sand Hill Angels	The company's online platform secures connected cars and other IoT devices from cybersecurity attacks.
4/9	Comma.AI	\$5.0	Undisclosed	The company's technology platform specializes in providing machine learning services that can turn artificial intelligence into smart features like lane-keeping and emergency braking assistance, enabling users to add more safety while driving cars and reduce the chance of an accident.
4/9	Leishen LiDAR	\$15.8	Fortune Capital	Developer and manufacturer of laser radar products and technologies. The company's advanced LiDAR products include anti-collision devices, mosquito killing devices, fiber-optic equipment, laser scanning radar, displace sensors, special robots, special fiber lasers and three dimensional scanners.
4/10	Karamba Security	\$10.0	Western Technology Investment	Developer of cybersecurity technology for connected and autonomous vehicles. The company provides software for securing connected and autonomous vehicles, and IoT controllers from hacker.
4/11	Go-Jek	\$35.0	Allianz	Provider of motorcycle transportation services designed to improve the welfare of workers in a variety of informal sectors in Indonesia.
4/11	Cluno	€7.0	Acton Capital Partners, Atlantic Capital Partners	Provider of an online car subscription platform created to provide a flexible mobility concept.
4/12	Mapillary	\$15.0	BMW i Ventures, Samsung Catalyst Fund, NavInfo, Atomico, Sequoia Capital	Provider of a street-level imagery platform intended to build technology and tools to help understand the world's places through images and make this data available.
4/16	Turo	\$12.0	Sumitomo, American Express Ventures	The company provides online car-rental services enabling travelers to rent any car they want, wherever they want it, from a community of local car owners.
4/19	Byton	n.a	FAW Group	Chinese electric vehicle manufacturer.
4/23	Manbang	\$1,900.0	Google, Softbank, China Reform Fund, Faralio Capital, GGV Capital, GSR Ventures, Hillhouse Capital, Sequoia Capital, Tencent, Ward Ferry	Developer of a mobile app platform that connects truck drivers with distributors. The company's platform matches truck drivers with shippers who have cargo to move.
4/24	Savari	\$12.0	Aviva Ventures, SAIC Capital, Flex	The company's intelligent transportation platform offers vehicle awareness devices and software products that provide information regarding roadway features, hazard locations, parking locations and traffic restrictions, thus enabling drivers to improve safety and mobility, reduce roadway congestion and simplify in-vehicle transactions.

Mergers & Acquisitions

Date	Target	Acquiror	EV	EV		Target Description
			(\$mm)	Revenue	EBITDA	
4/27	Less	BlaBlaCar	n.a.	n.a.	n.a.	Ride-sharing service for commuters and other short distance rides. Less matches existing drivers going from A to B with other people looking for a ride on the way.
4/6	Lytix	Clearlake Capital and Affiliates	n.a.	n.a.	n.a.	Provides video-based driver safety and predictive analytics solutions.
4/10	Tenneco	Federal Mogul	\$5,400.0	n.a.	n.a.	Global supplier of quality products, trusted brands and creative solutions to manufacturers of automotive, light commercial, heavy-duty and off-highway vehicles, as well as in power generation, aerospace, marine, rail and industrial.
4/2	Ridlr	Ola	n.a.	n.a.	n.a.	Operator of a personal transport portal that allowed users buy tickets for public transport in Indian cities and also monitor traffic congestion using IOT devices.

Advanced Mobility Market Update

Trading Comparables

Company	Price as of 4/30/2018	Market Cap	Firm Value	EV / Revenue		EV / EBITDA		P / E	
				2018E	2019E	2018E	2019E	2018E	2019E
Automotive Companies									
Toyota	¥ 7181.0	\$214,134	\$358,046	1.3x	1.3x	11.6x	11.0x	9.9x	9.7x
Volkswagen	€ 169.40	103,208	270,048	0.9x	0.9x	6.2x	5.9x	6.4x	6.0x
Daimler	€ 65.50	84,664	212,710	1.0x	1.0x	8.9x	8.6x	7.0x	6.8x
BMW	€ 92.47	72,597	173,872	1.4x	1.4x	9.7x	9.2x	8.2x	7.9x
Ford	\$ 11.24	44,793	163,190	1.1x	1.1x	13.1x	12.5x	7.2x	7.3x
General Motors	\$ 36.74	51,775	127,674	0.9x	0.9x	8.5x	8.1x	5.8x	5.7x
Nissan	¥ 1151.50	44,415	116,049	1.1x	1.0x	10.5x	9.9x	7.5x	7.4x
Honda	¥ 3767.0	62,359	106,619	0.8x	0.7x	8.5x	8.1x	8.3x	8.6x
Hyundai	₩ 160000.0	39,682	83,269	0.9x	0.9x	11.0x	10.0x	10.0x	8.5x
Renault	€ 89.84	32,099	73,620	1.0x	1.0x	8.9x	8.5x	5.6x	5.3x
SAIC Motor	¥ 31.93	58,796	71,792	0.5x	0.5x	11.5x	10.1x	9.8x	9.0x
Tesla	\$ 293.90	49,646	59,648	3.2x	2.3x	36.2x	16.0x	NM	NM
Fiat Chrysler	€ 18.57	43,729	49,566	0.4x	0.3x	2.9x	2.8x	5.7x	5.4x
BYD	HK\$ 55.15	21,563	32,639	1.6x	1.3x	11.6x	10.0x	22.3x	17.4x
Suzuki	¥ 5891.0	26,434	25,799	0.7x	0.7x	5.1x	4.8x	12.3x	11.6x
Geely	HK\$ 21.0	24,014	22,208	1.2x	1.0x	7.9x	6.6x	11.1x	8.7x
Tata Motors	₹ 340.20	16,177	20,130	0.4x	0.4x	3.0x	2.6x	9.5x	7.4x
Peugeot	€ 20.42	22,323	19,552	0.2x	0.2x	2.4x	2.2x	7.8x	7.0x
Subaru	¥ 3679.0	25,861	17,965	0.6x	0.6x	3.9x	3.7x	10.8x	9.5x
Guangzhou Automobile	HK\$ 14.50	18,609	14,070	1.0x	0.9x	11.2x	9.7x	6.2x	5.5x
KIA	₩ 33100.0	12,563	11,416	0.2x	0.2x	3.4x	3.1x	7.2x	6.1x
Dongfeng Motor	HK\$ 8.73	9,584	9,792	0.5x	0.5x	24.6x	22.2x	4.3x	4.2x
Mazda	¥ 1521.50	8,785	7,954	0.2x	0.2x	3.9x	3.6x	8.9x	8.3x
Mitsubishi	¥ 816.0	11,113	6,691	0.3x	0.3x	4.2x	3.5x	12.1x	11.1x
Mean				0.9x	0.8x	9.6x	8.1x	9.8x	8.8x
Median				0.9x	0.9x	8.9x	8.5x	8.2x	7.7x
Truck Companies									
Daimler	€ 65.50	\$84,664	\$212,710	1.0x	1.0x	8.9x	8.6x	7.0x	6.8x
Volvo	₩ 149.20	36,404	47,482	1.1x	1.1x	8.2x	8.0x	12.1x	11.6x
PACCAR	\$ 63.67	22,418	27,826	1.3x	1.3x	10.3x	10.3x	11.3x	11.1x
MAN SE	€ 95.50	16,964	19,855	1.1x	1.1x	10.1x	9.4x	37.8x	31.0x
Isuzu	¥ 1674.0	12,979	14,178	0.7x	0.7x	6.3x	5.9x	11.1x	10.3x
Navistar	\$ 34.81	3,435	7,551	0.8x	0.8x	10.0x	8.9x	15.4x	10.7x
Mean				1.0x	1.0x	9.0x	8.5x	15.8x	13.6x
Median				1.1x	1.0x	9.4x	8.8x	11.7x	10.9x
Tier 1 Suppliers									
Continental	€ 221.20	\$53,452	\$56,621	1.0x	1.0x	6.5x	6.0x	13.3x	12.0x
Denso	¥ 5756.0	41,770	40,550	0.8x	0.8x	6.3x	5.8x	13.8x	12.8x
Bridgestone	¥ 4589.0	31,937	29,948	0.9x	0.8x	5.0x	4.8x	11.2x	10.6x
Michelin	€ 116.55	25,279	26,331	1.0x	1.0x	5.1x	4.8x	11.3x	10.3x
Aptiv	\$ 84.58	22,468	25,208	1.8x	1.7x	10.8x	9.9x	16.3x	14.7x
Magna	C\$ 75.83	21,120	24,274	0.6x	0.6x	5.9x	5.7x	8.8x	7.9x
Valeo	€ 55.44	16,053	18,972	0.8x	0.7x	6.0x	5.4x	13.0x	11.2x
Lear	\$ 186.97	12,400	13,112	0.6x	0.6x	5.6x	5.4x	9.5x	8.8x
Autoliv	\$ 134.05	11,675	12,426	1.1x	1.0x	8.5x	7.4x	17.9x	15.0x
BorgWarner	\$ 48.94	10,282	12,303	1.1x	1.1x	6.7x	6.4x	11.1x	10.2x
Faurecia	€ 67.80	11,307	12,182	0.6x	0.5x	4.9x	4.6x	12.8x	11.6x
Goodyear	\$ 25.11	6,022	11,618	0.7x	0.7x	4.9x	4.4x	6.9x	5.9x
Delphi	\$ 48.41	4,297	5,657	1.1x	1.1x	6.7x	6.3x	10.0x	9.2x
Visteon	\$ 124.44	3,677	3,642	1.1x	1.1x	9.5x	8.8x	17.9x	15.7x
ATS Automation Tooling Systems	C\$ 17.57	1,288	1,285	1.5x	1.4x	11.6x	10.6x	22.4x	19.3x
Stoneridge	\$ 26.33	743	806	1.0x	0.9x	7.4x	6.9x	13.4x	12.2x
Mean				1.0x	0.9x	7.0x	6.5x	13.1x	11.7x
Median				1.0x	0.9x	6.4x	5.9x	12.9x	11.4x
Autonomous Driving Chip Makers									
Intel	\$ 51.62	\$240,549	\$253,765	3.8x	3.6x	8.6x	8.3x	13.5x	12.8x
Nvidia	\$ 224.90	136,522	131,419	10.6x	9.3x	26.5x	23.2x	37.2x	32.0x
Qualcomm	\$ 51.01	75,527	59,050	2.7x	2.6x	10.3x	7.7x	15.1x	14.1x
Advanced Micro Devices	\$ 10.88	10,544	10,887	1.6x	1.5x	15.4x	13.2x	24.2x	18.7x
Mean				4.7x	4.3x	15.2x	13.1x	22.5x	19.4x
Median				3.2x	3.1x	12.9x	10.8x	19.7x	16.4x

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

Advanced Mobility Market Update

Trading Comparables (cont.)

Company	Price as of 4/30/2018	Market Cap	Firm Value	EV / Revenue		EV / EBITDA		P / E	
				2018E	2019E	2018E	2019E	2018E	2019E
Intelligent Transport									
Roper Technologies	\$ 264.19	\$27,166	\$31,421	6.3x	6.0x	18.4x	17.3x	23.6x	22.0x
FLIR Systems	\$ 53.55	7,439	7,408	4.1x	3.9x	17.7x	15.6x	25.0x	23.2x
LS Corp	W 77900.0	2,349	5,821	0.6x	0.6x	7.3x	7.2x	9.6x	9.0x
Conduent	\$ 19.46	4,096	5,632	1.0x	1.0x	7.8x	7.4x	18.6x	16.1x
Gosuncn Technology Group	Y 14.42	2,670	2,569	4.8x	3.7x	NM	NM	29.6x	22.9x
Beijing E-Hualu IT	Y 33.78	1,999	2,485	3.8x	2.8x	NM	15.7x	36.2x	25.8x
Cubic Corporation	\$ 61.75	1,681	1,908	1.6x	1.5x	19.0x	13.4x	66.8x	NM
Vaisala	€ 20.40	898	797	1.9x	1.8x	12.9x	11.0x	21.8x	18.5x
Kapsch TrafficCom	€ 36.85	579	549	0.7x	0.6x	6.1x	5.6x	12.2x	10.4x
Beijing Wanji Technology ⁽¹⁾	Y 24.85	424	405	NM	NM	NM	NM	NM	NM
INIT Innovation in Traffic Systems	€ 19.80	240	267	1.5x	1.4x	NM	10.5x	26.3x	20.1x
Iteris, Inc	\$ 5.07	168	151	1.4x	1.1x	NM	16.7x	NM	43.6x
Q-Free	NOK 8.06	90	117	1.0x	0.9x	NM	8.1x	64.5x	16.0x
Image Sensing Systems ⁽¹⁾	\$ 4.55	24	21	NM	NM	NM	NM	NM	NM
Mean				2.4x	2.1x	12.8x	11.7x	30.4x	20.7x
Median				1.6x	1.5x	12.9x	11.0x	25.0x	20.1x
ITS / Smart Tolling									
Atlantia	€ 27.50	\$27,437	\$44,940	6.0x	5.8x	9.7x	9.2x	18.3x	17.0x
Abertis Infraestructuras	€ 18.26	21,850	43,610	6.6x	6.5x	9.9x	9.4x	17.6x	16.1x
Ferrovial	€ 17.74	15,691	21,037	1.5x	1.5x	20.6x	18.7x	37.0x	30.4x
Autostrada ⁽¹⁾	€ 22.85	2,733	5,984	NM	NM	NM	NM	9.3x	8.6x
Mean				4.7x	4.6x	13.4x	12.4x	20.6x	18.0x
Median				6.0x	5.8x	9.9x	9.4x	18.0x	16.6x
Telematics									
Descartes Systems	\$ 29.55	\$2,271	\$2,273	8.3x	7.6x	24.0x	20.9x	62.7x	49.1x
TomTom	€ 8.19	2,327	2,224	2.3x	2.3x	10.4x	9.1x	25.0x	20.3x
Orbcomm	\$ 9.02	705	918	3.1x	2.8x	16.2x	11.3x	NM	NM
CalAmp	\$ 19.75	704	702	1.8x	1.7x	11.8x	10.1x	15.6x	13.8x
Ituran ⁽¹⁾	\$ 31.35	657	624	2.4x	2.2x	8.1x	7.5x	14.6x	12.7x
MiX Telematics	R 8.44	409	387	2.7x	2.5x	9.7x	8.7x	28.0x	25.9x
Quartix	£ 3.80	250	240	7.1x	7.3x	23.2x	26.4x	30.0x	34.5x
Inseego	\$ 2.14	126	237	1.1x	1.1x	10.0x	7.1x	53.5x	12.2x
TeleNav	\$ 5.15	229	135	1.3x	0.6x	NM	NM	NM	NM
Kerlink	€ 19.80	122	108	2.5x	1.8x	NM	NM	NM	25.4x
Quarterhill (fka Wi-LAN)	C\$ 1.93	179	102	0.9x	0.9x	5.6x	4.5x	10.5x	7.9x
Mean				3.0x	2.8x	13.2x	11.7x	30.0x	22.4x
Median				2.4x	2.2x	10.4x	9.1x	26.5x	20.3x
Logistics									
UPS	\$ 113.50	\$97,837	\$114,067	1.6x	1.5x	11.1x	10.1x	15.7x	14.4x
FedEx	\$ 247.20	66,056	80,847	1.2x	1.1x	8.1x	7.3x	15.1x	13.0x
Deutsche Post	€ 36.10	53,826	56,588	0.7x	0.7x	6.3x	5.9x	15.5x	14.1x
Fortive	\$ 70.31	24,507	27,506	3.7x	3.6x	15.6x	14.6x	20.2x	18.7x
J.B. Hunt	\$ 117.43	12,889	13,882	1.7x	1.5x	11.1x	9.8x	22.3x	18.6x
Penske	\$ 45.10	3,832	9,799	0.4x	0.4x	12.1x	12.5x	8.7x	8.4x
Mean				1.6x	1.5x	10.7x	10.0x	16.2x	14.5x
Median				1.4x	1.3x	11.1x	9.9x	15.6x	14.3x
Communications / Infrastructure									
Verizon	\$ 49.35	\$203,914	\$322,612	2.5x	2.5x	6.8x	6.7x	10.8x	10.5x
AT&T	\$ 32.70	201,040	316,370	2.0x	2.0x	6.2x	6.1x	9.6x	9.4x
Cisco Systems	\$ 44.29	213,368	179,051	3.6x	3.5x	10.4x	10.1x	16.4x	15.0x
T-Mobile	\$ 60.51	51,701	81,391	1.9x	1.8x	6.9x	6.4x	18.1x	14.8x
Sprint	\$ 5.61	22,457	54,775	1.7x	1.7x	4.8x	4.6x	14.6x	NM
Hitachi	¥ 801.60	35,408	49,902	0.6x	0.6x	4.8x	4.7x	9.7x	9.0x
Toshiba	¥ 293.0	17,460	23,937	0.7x	0.7x	14.0x	13.3x	1.6x	4.1x
Conduent	\$ 19.46	4,096	5,632	1.0x	1.0x	7.8x	7.4x	18.6x	16.1x
Mean				1.8x	1.7x	7.7x	7.4x	12.4x	11.3x
Median				1.8x	1.7x	6.8x	6.5x	12.7x	10.5x
Aggregate Mean				1.8x	1.6x	10.0x	9.1x	17.0x	14.1x
Aggregate Median				1.1x	1.1x	8.9x	8.4x	13.0x	11.6x

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

(1) Denotes limited equity research coverage.

Global Experts in Sustainable Technology and 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

\$13bn

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

\$630mm

Highly Experienced Partners Supported by 55 Professionals

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- > 30+ years of experience
- > >150 completed transactions
- > Founder and head of advisory business
- > Large industrials and energy companies
- > Broad coverage of senior leaders

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- > Distributed generation Water

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- > Distributed energy production
- > Energy efficiency and services

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- > Smart grid

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- > Renewable energy value chain
- > Smart grid

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- > Chief Compliance Officer

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- > Industrial IoT & software
- > Environmental services
- > Advanced building products
- > Water

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