



November 2019

Electric
Vehicles



Mobility-as-
a-Service



Autonomous
Infrastructure



Data &
Analytics



Trucking &
Logistics



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 bankers who are sector experts and understand our clients' industries 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 75 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 provides conflict-free advice and thoughtful, innovative solutions.

Selected Business Developments

Greentech's Take:

- > Large OEMs are shifting spending from legacy areas to EV development in order to remain competitive in the capital intensive and highly competitive EV market

- > **Audi** announced plans to cut 15% of its workforce in Germany to help finance plans to accelerate EV spending to over \$13bn aggregate by 2024 ([Electrek](#))
- > **BMW** announced it will spend \$11.1bn on battery cells from Samsung SDI and Chinese battery cell manufacturer, Contemporary Amperex Technology ([TechCrunch](#))
- > **Bosch** announced that Coup, its electric scooter-sharing service, will end operations in the midst of intense competition in the micro-mobility space ([Business Insider](#))
- > **BYD** announced the L.A. Dept. of Transportation ordered 130 battery electric buses, the largest single order of battery electric buses in the U.S. ([New Mobility](#))
- > **Daimler's** CEO announced the company would "right size" its spending level on robotaxis, acknowledging that commercial use for AVs would come first ([Reuters](#))
- > Daimler announced plans to cut at least 10,000 jobs worldwide, reducing costs by \$1.5bn, as it seeks to fund the capital intensive development of EVs ([BBC](#))
- > **Firefly**, an installer of advertising billboards on ride-hailing vehicles, announced plans to collect data points such as pollution and driver behavior ([City Lab](#))
- > **Hyundai** announced it has successfully conducted the company's first platooning of trailer trucks on the Yeosu Smart Highway in South Korea ([New Mobility](#))
- > Hyundai announced an agreement to test AVs on public roads in Seoul, facilitated by the city's smart infrastructure for connected traffic management ([TechCrunch](#))
- > **Lucid Motors** announced it started construction of an EV factory in Arizona after significant delays due to funding difficulties ([Electrek](#))
- > **Lyft** announced plans to expand its AV fleet and open a second facility in Palo Alto, adding to its existing L5 Engineering Center in the Bay Area ([TechCrunch](#))
- > **Tesla** announced plans to expand its charging infrastructure in China ahead of the expected increase in local EV sales from the new Gigafactory 3 in Shanghai ([Electrek](#))
- > Tesla announced a new \$4.4bn Gigafactory in Berlin, capable of producing 150,000 EVs per annum and employing up to 8,000 individuals ([WCCFTech](#))
- > Tesla unveiled the Cybertruck, the company's first pickup truck, with prices starting at \$39,000 and offering a maximum range of 500 miles ([Electrek](#))
- > **VW** announced plans to increase spending on EVs, AVs and other new technology by 36% to \$66bn as part of its attempt to lead in the post-ICE era ([CNBC](#))
- > **Waymo** announced its 200,000 square-foot Detroit plant, which outfits Chrysler Pacifica PHEVs with AV technology, is now in full operation ([Electrek](#))

Selected Regulatory Developments

Greentech's Take:

- > OEMs are being forced to choose sides in the battle between local and federal regulators over their right to set vehicle emissions standards

- > **23 states** and **Los Angeles, New York City** and **D.C.** filed a lawsuit against the EPA over its decision to loosen vehicle emission standards ([Smart Cities Dive](#))
- > **California** announced plans to cut its \$2,500 clean-vehicle rebate for purchases over \$60,000 and PHEVs with less than 35 miles of all-electric range ([Electrek](#))
- > California enacted a directive to stop agencies from buying vehicles made by OEMs who sided with the White House's rollback of emission regulations ([The Hill](#))
- > **Chandler, Arizona** rolled out dedicated pick-up and drop-off location guidelines for Waymo's self-driving ride-hailing service ([Smart Cities Dive](#))
- > **Chicago** approved a ride-hailing congestion tax on weekday rides downtown, which is projected to bring in \$40mm in annual revenue to the city ([Smart Cities Dive](#))
- > **China** reportedly discussed plans to further cut subsidies for EV purchases next year, following a subsidy cut earlier this year ([CNN](#))
- > **Germany** announced plans to increase cash incentives for EVs in an effort to support the country's shift away from ICE vehicles ([Green Car Reports](#))
- > **London**, Uber's largest European market, announced the ride-hailing company's license to operate in the city would not be renewed ([City Lab](#))
- > **New York City** announced a \$1.7bn plan to expand the number of protected bike lanes as part of an effort to increase bike use and reduce congestion ([NYTimes](#))
- > **Seattle** approved the "Fare Share" plan, which mandates a minimum wage for ride-hailing drivers and compensation for benefits and expenses ([Smart Cities Dive](#))

Selected Capital Raises

Greentech's Take:

- > Online car marketplaces are becoming increasingly popular with the rise of digitally savvy consumers, putting increased margin pressure on traditional dealership models

- > **ACV Auctions**, a Buffalo, New York-based online marketplace for used cars, raised \$150mm led by Wellington Management Company and Fidelity ([PRNewswire](#))
- > **Bounce**, a Bangalore-based scooter rental service and micro-mobility startup, raised \$150mm led by B Capital and Accel Partners India ([TechCrunch](#))
- > **Casstime**, a Shenzhen-based online automotive aftermarket, raised \$80mm led by Sequoia Capital China and Source Code Capital ([PR Newswire](#))
- > **CloudKitchens**, a food delivery services company led by Uber's former CEO, raised \$400mm from Saudi Arabia's Public Investment Fund ([Forbes](#))
- > **Convoy**, a digital freight network which connects truckers with shippers, raised \$400mm led by Generation IM and T.Rowe Price ([TechCrunch](#))
- > **Frontier Group**, a Berlin-based used car marketplace, raised \$400mm from OLX, a New York-based online marketplace for buying and selling goods ([TechCrunch](#))
- > **Ghost Locomotion**, a developer of AV technology for highway use, raised \$64mm led by Founders Fund, with participation from Khosla Ventures ([Venture Beat](#))
- > **IonQ**, a quantum computing startup, raised \$55mm led by Samsung Catalyst and Mubadala Ventures, with participation from Robert Bosch VC ([Green Car Congress](#))
- > **MaaS Global**, a Finnish multi-modal subscription service, raised \$33mm from BP Ventures, Mitsubishi Corporation and Nordic Ninja ([Venture Beat](#))
- > **Metawave**, a smart radar startup for AVs, raised an undisclosed amount led by DENSO, with participation from Mirae Asset Capital ([PR Newswire](#))
- > **Particle**, an IoT device platform serving the automotive and smart cities industries, raised \$40mm led by Qualcomm and Energy Impact Partners ([TechCrunch](#))
- > **Shuttl**, an app-based bus aggregator service in India backed by Amazon, raised \$36mm from Toyota Tsusho Corporation and SPARX Group ([TechCrunch](#))
- > **Sila Nanotechnologies**, a San Francisco-based battery materials technology startup, raised \$45mm from Canada Pension Plan Investment Board ([TechCrunch](#))
- > **Vayyar**, an Israeli startup building radar-imaging chips, sensors and accompanying software, raised \$109mm led by Koch Disruptive Technologies ([TechCrunch](#))
- > **Voi**, a Swedish electric scooter startup, raised \$85mm led by Vostok New Ventures, with participation from Balderton Capital and Kreos Capital ([Venture Beat](#))
- > **Wayve**, a U.K.-based developer of AV technology, raised \$20mm led by Eclipse Ventures, with participation from Balderton Capital ([Venture Beat](#))
- > **XPeng Motors**, a Chinese EV developer, raised \$400mm from Xiaomi, the Chinese consumer electronics company, among other investors ([CNBC](#))

Selected Mergers & Acquisitions

- > **EDF Group**, a French utility, acquired **Pivot Power**, a British developer of battery storage and EV charging solutions, for an undisclosed amount ([New Mobility](#))
- > **Ojo Electric**, a Canadian micro-mobility solutions provider, announced plans to acquire **Gotcha**, a South Carolina-based scooter company, for \$12mm ([The Verge](#))

Selected Partnerships

Greentech's Take:

- > OEMs historically focused on hydrogen and hybrid vehicles, are partnering to accelerate their entry into BEVs as the EV market continues to grow faster than previously expected

- > **Aira**, a navigation platform for the visually impaired, announced a partnership with **Microsoft** and **Moovit** to help users access public transport ([Intelligent Transport](#))
- > **Electrify America** announced an agreement with **Lyft** to provide free charging on its network to members of Lyft's Express Drive EV rental program ([New Mobility](#))
- > **Mobileye**, an AV systems developer owned by Intel, announced a partnership with **NIO** to develop "highly automated" EVs for consumers ([Venture Beat](#))
- > **StreetLight Data**, a provider of big data analytics for cities, announced a partnership with **Siemens** to help communities prepare for EV deployment ([PR Web](#))
- > **Toyota** announced a new joint partnership with **BYD** for the research and development of BEVs, which will be established in China in 2020 ([Electrek](#))
- > **Verra Mobility**, an ITS company, announced a partnership with **Arrive**, a mobile parking app, to combine tolling and parking into one platform ([New Mobility](#))
- > **Vulog**, a French car-sharing hardware and software provider, announced it will power **Hyundai's** car-sharing platform launching in L.A. at the end of the year ([TechCrunch](#))

Capital Raises

Date	Company	Amount Raised (\$mm)	Disclosed Investors	Company Description
11/1	IonQ	\$55	Samsung Catalyst, Mubadala Ventures, Robert Bosch Venture Capital, New Enterprise Associates, GV	Quantum computing company
11/4	Airlift Technologies	\$12	First Round Capital, Fatima Gobi Ventures, Indus Valley Capital	Pakistan-based bus transportation provider
11/4	Axilion	\$6	Angel investors	Tel Aviv-based developer of smart traffic light timing software
11/4	Casstime	\$80	Sequoia Capital China, Source Code Capital, Hua Partners	Shenzhen-based provider of an online automotive aftermarket
11/4	Particle	\$40	Qualcomm, Energy Impact Partners, Root Ventures, Bonfire Ventures, Industry Ventures, Spark Capital, Green D Ventures, Counterpart Ventures, SOSV	IoT platform serving automotive and smart city industries
11/4	Sila Nanotechnologies	\$45	CPPIB	San Francisco-based battery materials company
11/6	Metawave	ND	DENSO, Mirae Asset Capital, NTT DOCOMO Ventures, BOLD Capital Partners	Provider of smart radars for AVs
11/7	CloudKitchens	\$400	Saudi Arabia's Public Investment Fund	Provider of food delivery services
11/7	Ghost Locomotion	\$64	Founders Fund, Khosla Ventures, Sutter Hill Ventures	Developer of AI technology for autonomous driving on highways
11/7	MaaS Global	\$33	BP Ventures, Mitsubishi Corporation, Nordic Ninja	Finnish multi-modal subscription transportation provider
11/11	Kovi	\$30	Global Founders Capital, Quona Capital, Monashees, Maya Capital, Y Combinator, Broadhaven Ventures, ONEVC, angel investors	Brazilian car rental platform
11/11	Voi	\$85	Vostok New Ventures, Balderton Capital, Project A, JME Ventures, Raine Ventures, Kreos Capital, Inbox Capital, Rider Global, Black Ice Capital, Creandum	Swedish electric scooter company
11/11	Wrench	\$20	Vulcan Capital, Marubeni, Tenaya Capital, Madrona Venture Group	Seattle-based on-demand vehicle maintenance and repair service for consumers and fleets
11/12	Frontier Car Group	\$400	OLX	Berlin-based used car marketplace
11/12	Trukker	\$23	STV, International Finance Corporation, Endeavor Catalyst Fund, Middle East Venture Partners, TAQIA Fund, Oman Technology Fund, Iliad Partners, Shorooq Ventures	U.A.E.-based digital freight marketplace
11/12	XPeng Motors	\$400	Xiaomi Corp	Chinese EV manufacturer
11/13	Convoy	\$400	Generation IM, T. Rowe Price, Baillie Gifford, CapitalG, Fidelity, Durable Capital Partners, Lone Pine Capital	Digital freight network connecting truckers with shippers
11/13	DroneDeploy	\$35	Bessemer Venture Partners, Energize Ventures, AirTree, Emergence Capital, Scale Venture Partners, Uncork Capital	Cloud-based drone mapping and analytics platform
11/18	ACV Auctions	\$150	Wellington Management Company, Fidelity Management & Research Co., Bain Capital Ventures, Bessemer Venture Partners, Tribeca Venture Partners	Online marketplace for used cars
11/18	Wayve	\$20	Eclipse Ventures, Balderton Capital, Compound Ventures, Fly Ventures, First Minute Capital	U.K.-based developer of AV technology
11/19	Culdesac	\$10	Khosla Ventures, Initialized Capital, Zigg Capital, Bessemer Venture Partners, Y Combinator	Developer of car-free neighborhoods
11/20	Superpedestrian	\$20	Spark Capital, General Catalyst, Hanaco Ventures, Empire Angels	Developer of self-diagnostic scooters

Capital Raises (cont.)

Date	Company	Amount Raised (\$mm)	Disclosed Investors	Company Description
11/20	Vayyar	\$109	Koch Disruptive Technologies, Regal Four, Battery Ventures, Bessemer Venture Partners, ICV, ITI, WRVI Capital, Claltech	Israeli-based provider of radar-imaging chips, sensors and accompanying software
11/22	Carvolution	\$11	Redalpine, Armada, Mobiliar	Bannwil, Switzerland-based car subscription service
11/25	Shuttl	\$36	Toyota Tsusho Corporate, SPARX Group	App-based bus aggregator service in India
11/26	Yulu	\$8	Bajaj Auto	Bangalore-based e-bike sharing platform
11/27	Bounce	\$150	B Capital, Accel Partners India	Indian scooter rental startup
11/27	Advanced Navigation	\$13	Main Sequence Ventures, Brick & Mortar Ventures, In-Q-Tel Inc.	Australia-based robotics and sensor company

M&A

Date	Target	Acquiror	EV (\$mm)	EV / Revenue	EV / EBITDA	Target Description
11/4	Pivot Power	EDF Group	ND	ND	ND	British developer of battery storage and EV charging infrastructure
11/20	Gotcha	Ojo Electric	\$12	ND	ND	Charleston, SC-based scooter and e-bike company

Advanced Transportation Market Update

Trading Comparables

Company	Price as of 11/29/19	Market Cap (\$mm)	Firm Value (\$mm)	EV/Revenue		EV/EBITDA		P / E	
				2019E	2020E	2019E	2020E	2019E	2020E
Automotive Companies									
Toyota	¥ 7638.00	\$194,530	\$300,594	1.1x	1.1x	9.0x	9.1x	9.9x	9.2x
Volkswagen	€ 173.15	\$95,706	\$281,826	1.0x	1.0x	7.1x	7.0x	6.2x	6.1x
Daimler	€ 51.20	\$60,394	\$203,402	1.1x	1.1x	13.1x	11.7x	10.8x	9.5x
BMW	€ 73.30	\$53,190	\$163,372	1.5x	1.4x	11.6x	10.6x	9.2x	7.8x
Ford	\$ 9.06	\$36,303	\$150,919	1.0x	1.0x	13.9x	12.1x	7.3x	6.9x
General Motors	\$ 36.00	\$51,912	\$124,266	0.9x	0.9x	9.7x	7.8x	7.5x	5.6x
Honda	¥ 3067.00	\$49,280	\$88,783	0.6x	0.6x	6.9x	7.9x	6.6x	7.9x
Nissan	¥ 678.80	\$24,256	\$74,807	0.7x	0.7x	11.3x	12.8x	14.5x	11.5x
Tesla	\$ 329.94	\$60,709	\$71,216	3.0x	2.5x	25.5x	19.2x	NM	NM
Hyundai	₩ 121000.00	\$26,945	\$63,187	0.7x	0.7x	10.1x	8.4x	9.9x	7.3x
SAIC Motor	¥ 23.25	\$38,659	\$47,013	0.4x	0.4x	11.3x	9.1x	9.2x	8.3x
Renault	€ 43.46	\$13,083	\$33,266	0.5x	0.5x	5.0x	5.0x	5.9x	5.2x
BYD	HK\$ 37.15	\$12,948	\$22,199	1.2x	1.0x	10.3x	9.6x	49.0x	36.4x
Suzuki	¥ 4856.00	\$20,460	\$20,592	0.6x	0.6x	5.4x	5.2x	13.8x	13.3x
Fiat Chrysler	€ 13.42	\$23,194	\$19,514	0.2x	0.2x	1.5x	1.4x	5.1x	4.7x
Tata Motors	RS 161.45	\$7,700	\$15,709	0.4x	0.4x	3.6x	3.3x	NM	11.8x
Subaru	¥ 2866.50	\$20,072	\$14,493	0.5x	0.5x	4.7x	4.0x	12.1x	10.0x
Geely	HK\$ 14.64	\$17,073	\$14,395	1.0x	0.9x	7.9x	6.7x	13.5x	11.3x
Peugeot	€ 21.92	\$22,734	\$11,702	0.1x	0.1x	1.3x	1.2x	6.1x	5.6x
Mazda	¥ 970.00	\$5,580	\$4,522	0.1x	0.1x	3.1x	3.1x	11.7x	11.7x
Guangzhou Automobile	HK\$ 8.36	\$11,123	\$4,256	0.5x	0.5x	16.7x	9.0x	9.5x	7.9x
Mitsubishi	¥ 490.00	\$6,659	\$4,237	0.2x	0.2x	3.7x	3.6x	14.8x	15.5x
NIO	\$ 2.27	\$2,330	\$3,569	3.4x	2.3x	NM	NM	NM	NM
FAW Car Group	¥ 10.51	\$2,434	\$2,254	0.7x	0.7x	25.9x	27.3x	NM	NM
Dongfeng Motor	HK\$ 7.52	\$8,277	\$2,220	0.2x	0.2x	4.7x	4.4x	4.2x	4.0x
KIA	₩ 43250.00	\$14,681	\$990	0.0x	0.0x	0.3x	0.3x	8.4x	7.4x
Mean				0.8x	0.8x	8.9x	8.0x	11.2x	9.8x
Median				0.7x	0.7x	7.9x	7.8x	9.4x	7.9x
Truck Companies									
Daimler	€ 51.20	\$60,394	\$203,402	1.1x	1.1x	13.1x	11.7x	10.8x	9.5x
Volvo	KR 148.05	\$31,443	\$42,655	1.0x	1.1x	6.4x	8.0x	8.8x	11.9x
PACCAR	\$ 81.37	\$28,252	\$34,373	1.4x	1.7x	11.2x	13.8x	11.9x	14.8x
Traton SE	€ 24.86	\$13,705	\$20,987	0.7x	0.7x	6.6x	6.5x	8.6x	10.1x
Isuzu	¥ 1280.50	\$8,624	\$10,026	0.5x	0.5x	4.9x	4.8x	9.4x	9.1x
MAN SE	€ 43.16	\$6,997	\$9,298	0.6x	0.6x	5.8x	5.3x	NM	NM
Navistar	\$ 32.65	\$3,255	\$7,220	0.7x	0.7x	8.3x	9.3x	8.6x	11.1x
Mean				0.9x	0.9x	8.0x	8.5x	9.7x	11.1x
Median				0.7x	0.7x	6.6x	8.0x	9.1x	10.6x
Tier 1 Suppliers									
Denso	¥ 4888.00	\$34,587	\$32,882	0.7x	0.7x	5.6x	5.2x	14.4x	12.8x
Continental	€ 118.60	\$26,154	\$32,282	0.7x	0.6x	5.0x	4.8x	11.8x	10.3x
Bridgestone	¥ 4375.00	\$28,693	\$30,490	0.9x	0.9x	6.0x	5.6x	11.3x	11.3x
Aptiv	\$ 93.88	\$24,075	\$28,523	2.0x	1.9x	12.7x	11.2x	20.2x	17.2x
Michelin	€ 108.90	\$21,674	\$28,392	1.1x	1.1x	5.6x	5.3x	10.1x	9.6x
Magna	C\$ 73.18	\$17,118	\$21,841	0.6x	0.6x	5.7x	5.5x	9.2x	8.3x
Valeo	€ 35.76	\$9,421	\$12,685	0.6x	0.6x	4.8x	4.4x	20.8x	14.2x
Goodyear	\$ 15.99	\$3,742	\$10,531	0.7x	0.7x	6.3x	5.5x	10.7x	6.9x
Faurecia	€ 48.14	\$7,302	\$9,854	0.5x	0.5x	4.0x	3.8x	10.1x	8.9x
BorgWarner	\$ 42.05	\$8,675	\$9,348	0.9x	0.9x	5.8x	5.6x	10.7x	10.3x
Lear	\$ 120.31	\$7,379	\$9,219	0.5x	0.5x	5.1x	4.9x	8.9x	7.9x
Visteon	\$ 93.53	\$2,628	\$2,799	0.9x	0.9x	11.6x	9.7x	31.2x	19.1x
Delphi	\$ 12.46	\$1,083	\$2,665	0.6x	0.6x	5.0x	5.0x	5.4x	5.7x
ATS Automation Tooling Systems	C\$ 19.67	\$1,369	\$1,526	1.5x	1.4x	11.0x	9.6x	19.8x	15.8x
Veoneer	\$ 16.19	\$1,804	\$1,082	0.6x	0.5x	NM	NM	NM	NM
Stoneridge	\$ 30.14	\$838	\$903	1.1x	1.1x	10.4x	9.6x	20.1x	18.3x
Mean				0.9x	0.8x	7.0x	6.4x	14.3x	11.8x
Median				0.7x	0.7x	5.7x	5.5x	11.3x	10.3x
Mobility-as-a-Service									
Uber	\$ 29.60	\$50,320	\$44,809	3.2x	2.4x	NM	NM	NM	NM
Lyft	\$ 48.98	\$14,439	\$11,768	3.3x	2.6x	NM	NM	NM	NM
Mean				3.2x	2.5x	NM	NM	NM	NM
Median				3.2x	2.5x	NM	NM	NM	NM

Source: FactSet, SEC filings and third party providers. Values in U.S. Dollars. Share prices shown in local currencies. Multiples above 50.0x not shown.

Advanced Transportation Market Update

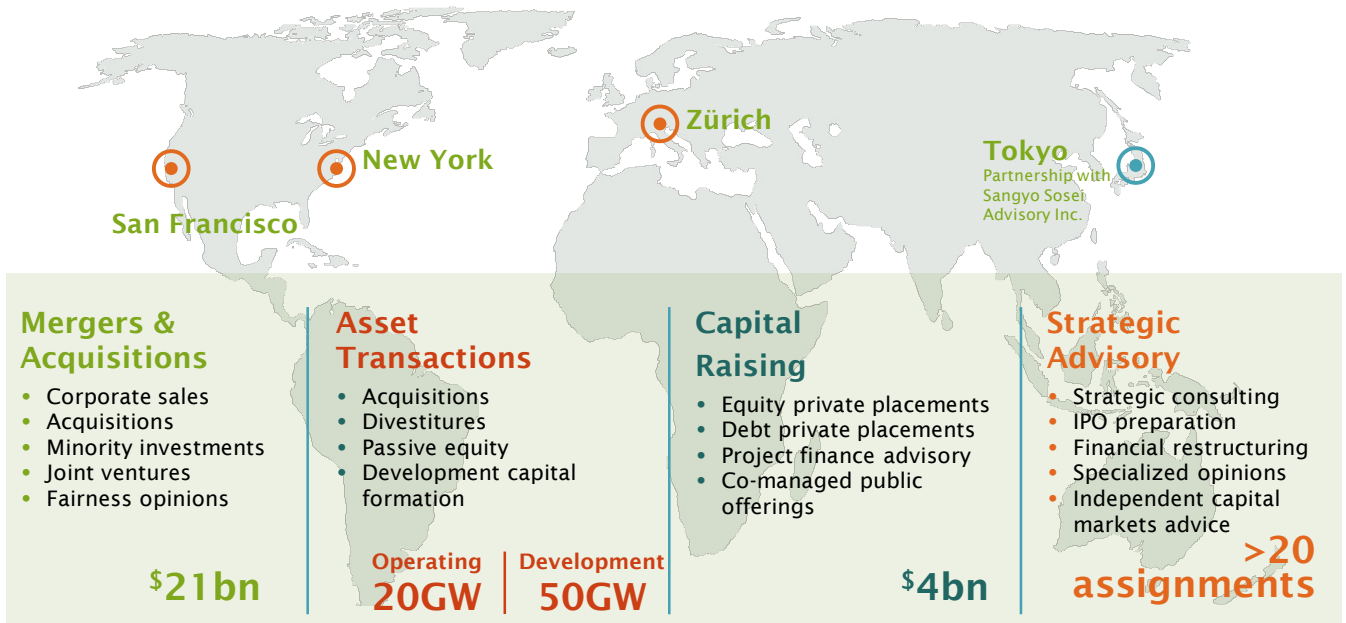
Trading Comparables (cont.)

Company	Price as of 11/29/19	Market Cap (\$mm)	Firm Value (\$mm)	EV/Revenue		EV/EBITDA		P / E	
				2019E	2020E	2019E	2020E	2019E	2020E
Autonomous Driving Chip Makers									
Intel	\$ 58.05	\$257,336	\$270,490	3.8x	3.7x	8.5x	8.1x	12.6x	12.4x
Nvidia	\$ 216.74	\$133,945	\$126,724	11.7x	10.0x	39.6x	28.5x	38.4x	30.3x
Qualcomm	\$ 83.55	\$101,179	\$104,509	4.4x	4.5x	11.8x	14.0x	22.4x	18.1x
Advanced Micro Devices	\$ 39.15	\$43,731	\$43,569	6.5x	5.1x	43.1x	27.3x	NM	36.6x
Mean				6.6x	5.9x	25.7x	19.5x	24.4x	24.3x
Median				5.5x	4.8x	25.7x	20.6x	22.4x	24.2x
Intelligent Transport									
Roper Technologies	\$ 360.37	\$37,911	\$44,072	8.2x	7.6x	23.0x	21.0x	27.7x	26.7x
FLIR Systems	\$ 53.56	\$7,287	\$7,777	4.1x	3.9x	15.8x	14.3x	23.3x	21.1x
LS Corp	₩ 44150.00	\$1,038	\$3,664	0.4x	0.4x	6.0x	5.6x	6.1x	5.3x
Conduent	\$ 6.77	\$1,419	\$3,185	0.7x	0.8x	6.5x	7.0x	10.7x	11.2x
Verra	\$ 14.97	\$2,451	\$3,180	7.1x	6.4x	13.4x	12.2x	22.3x	18.7x
Cubic Corporation	\$ 59.55	\$1,857	\$2,176	1.4x	1.3x	14.2x	11.7x	28.2x	16.6x
Vaisala	€ 28.65	\$1,142	\$1,138	2.6x	2.5x	17.5x	15.5x	34.1x	29.4x
Kapsch TrafficCom	€ 28.60	\$410	\$578	0.7x	0.7x	8.6x	7.3x	16.7x	16.0x
INIT Innovation in Traffic Systems	€ 23.00	\$254	\$270	1.6x	1.4x	18.1x	16.2x	NM	NM
Iteris	\$ 5.17	\$209	\$194	1.8x	1.6x	NM	NM	NM	NM
Q-Free	NOK 6.00	\$58	\$83	0.8x	0.7x	8.7x	5.4x	NM	12.8x
Image Sensing Systems ⁽¹⁾	\$ 4.77	\$25	\$21	1.4x	1.4x	7.4x	7.4x	NM	NM
Mean				2.6x	2.4x	12.7x	11.2x	21.1x	17.5x
Median				1.4x	1.4x	11.4x	9.5x	28.2x	16.3x
ITS / Smart Tolling									
Atlantia	€ 20.12	\$18,146	\$59,769	4.7x	4.7x	7.3x	7.2x	11.1x	10.6x
Ferrovial	€ 26.95	\$21,671	\$25,454	4.0x	4.0x	NM	40.9x	NM	49.0x
Autostrada	€ 27.76	\$2,818	\$3,623	1.5x	1.3x	3.9x	3.4x	11.2x	12.6x
Mean				3.4x	3.3x	5.6x	17.2x	11.2x	24.1x
Median				2.7x	2.7x	7.3x	8.4x	11.2x	14.5x
Telematics									
Element Fleet	C\$ 11.46	\$3,887	\$13,772	18.6x	17.6x	43.2x	40.8x	13.3x	11.0x
Descartes Systems	\$ 42.83	\$3,523	\$3,532	11.0x	9.9x	29.6x	25.9x	NM	NM
TomTom	€ 9.53	\$1,379	\$980	1.3x	1.3x	14.2x	21.6x	NM	NM
Inseego	\$ 6.35	\$505	\$639	2.9x	2.4x	NM	22.1x	NM	NM
Ituran	\$ 24.00	\$505	\$550	2.0x	2.1x	7.6x	8.4x	14.3x	13.6x
Orbcomm	\$ 4.01	\$320	\$535	2.0x	1.8x	8.5x	7.4x	NM	NM
CalAmp	\$ 10.49	\$352	\$484	1.3x	1.2x	10.8x	8.9x	16.7x	12.2x
MiX Telematics	€ 7.10	\$276	\$266	1.9x	1.7x	6.0x	5.5x	17.4x	14.8x
Quartix	£ 3.34	\$207	\$201	6.1x	6.0x	22.8x	22.2x	29.0x	27.2x
TeleNav	\$ 5.72	\$273	\$160	0.7x	0.6x	NM	NM	NM	NM
Quarterhill (fka Wi-LAN)	C\$ 1.79	\$160	\$92	0.7x	0.8x	2.9x	4.7x	5.9x	33.7x
Mean				4.4x	4.1x	16.2x	16.7x	16.1x	18.7x
Median				2.0x	1.8x	10.8x	15.3x	15.5x	14.2x
Logistics									
UPS	\$ 119.73	\$104,165	\$126,107	1.7x	1.6x	12.0x	11.2x	15.9x	14.8x
FedEX	\$ 160.05	\$41,933	\$72,338	1.0x	1.0x	9.2x	8.9x	20.0x	12.1x
Deutsche Post	€ 33.84	\$46,599	\$63,254	0.9x	0.9x	7.5x	6.7x	15.8x	13.5x
XPO Logistics	\$ 82.69	\$8,434	\$15,753	0.9x	0.9x	9.4x	8.8x	20.9x	18.5x
J.B. Hunt	\$ 115.62	\$12,451	\$13,791	1.5x	1.4x	10.4x	9.8x	21.4x	19.3x
Werner	\$ 36.76	\$2,558	\$2,913	1.2x	1.2x	6.2x	6.2x	15.7x	16.2x
Mean				1.2x	1.2x	9.1x	8.6x	18.3x	15.7x
Median				1.1x	1.1x	9.3x	8.9x	18.0x	15.5x
Communications / Infrastructure									
AT&T	\$ 37.38	\$274,967	\$466,320	2.6x	2.6x	7.8x	7.8x	10.5x	10.3x
Verizon	\$ 60.24	\$249,394	\$376,832	2.9x	2.8x	7.9x	7.7x	12.5x	12.2x
Cisco Systems	\$ 45.31	\$193,610	\$182,855	3.5x	3.5x	10.6x	9.8x	15.8x	13.7x
T-Mobile	\$ 78.55	\$67,764	\$109,068	2.4x	2.3x	8.2x	7.8x	19.7x	16.2x
Sprint	\$ 5.92	\$24,260	\$64,855	2.0x	2.0x	5.6x	5.8x	NM	NM
Hitachi	¥ 4300.00	\$37,966	\$46,030	0.6x	0.5x	4.7x	4.4x	11.6x	9.0x
Toshiba	¥ 3930.00	\$17,698	\$13,030	0.4x	0.4x	7.0x	5.6x	NM	41.3x
Xerox	\$ 38.93	\$8,995	\$11,963	1.3x	1.4x	7.6x	7.4x	9.5x	9.4x
Mean				2.0x	1.9x	7.4x	7.0x	13.2x	16.0x
Median				2.2x	2.2x	7.7x	7.5x	12.0x	12.2x

Source: FactSet, SEC filings and third party providers. Values in U.S. Dollars. Share prices shown in local currencies. Multiples above 50.0x not shown.

(1) Denotes limited equity research coverage.

Global Experts in Sustainable Technology and Infrastructure



Note: As of November 30, 2019.

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