



# Advanced Transportation Market Update June 2020

*Electric  
Vehicles*



*Mobility-as-  
a-Service*



*Autonomous  
Infrastructure*



*Data &  
Analytics*



*Trucking &  
Logistics*



*Non-Road  
Transportation*



### Selected Business Updates

#### Nomura Greentech's Take:

- Leading ride-hailing providers continue to explore new, potentially higher margin segments, as they aim to reach profitability in their core business

- **BMW** announced the BMW Digital Key, which allows users to set up a car key on a compatible iPhone and share the key with up to five individuals ([Press Release](#))
- **Didi Chuxing** announced it plans to operate over 1mm self-driving cars on its ride-hailing platform by 2030 using AV technology built by the company ([VentureBeat](#))
- **Einride**, a start-up building driverless electric trucks, launched a freight mobility platform for shippers and drivers to enable smart routing and data analytics on emissions ([TechCrunch](#))
- **Electrify America** announced it completed its first cross-country route allowing EV drivers to travel from Washington D.C. to Los Angeles using its DC fast charging network ([Electrek](#))
- **Fiat Chrysler** announced a pilot program in Turin, in which its hybrid plug-in cars will automatically switch to electric-only mode upon entering city centers ([AutoBlog](#))
- **GM** is developing an electric commercial van as part of its new fleet of EVs ([Reuters](#))
- **Grab** announced a new B2B service, GrabMerchant, which enables small businesses to acquire supplies at wholesale rates and build online stores in the application ([Tech in Asia](#))
- **Honeywell** announced the launch of an autonomous aviation unit, focused on developing both hardware and software for drones, air taxis and cargo delivery vehicles ([VentureBeat](#))
- **Lyft** announced all vehicles on the company's platform will be electric by 2030 and is working with the Environmental Defense Fund to achieve this goal ([Smart Cities Dive](#))
- Lyft announced its Level 5 self-driving car program is using data collected from its ride-hailing drivers to build 3D maps as part of its autonomous driving efforts ([TechCrunch](#))
- **Spin**, a micro-mobility company owned by Ford, announced it has launched its scooter sharing business in Germany as the first step in its European expansion plan ([TechCrunch](#))
- **Tesla** acquired \$5mm worth of land outside Austin to build its new Gigafactory ([Electrek](#))
- **Uber** rolled out a SaaS product that enables travelers in Marin County, California to book on-demand service from the Transportation Authority of Marin ([TechCrunch](#))

### Selected Regulatory Developments

#### Nomura Greentech's Take:

- Following a similar announcement from France last month, Germany is using a COVID stimulus package to expedite the electrification of its automotive industry

- **California** announced a new rule which will require that more than half of trucks sold within the state be zero-emissions vehicles by 2035 ([New York Times](#))
- **China** reclassified hybrid electric vehicles as low fuel consumption vehicles, making it easier for automakers to meet environment quotas under its new clean car rules ([Reuters](#))
- **Florida** signed the Essential State Infrastructure bill, which requires the DoT to coordinate the development of EV charging infrastructure along the State Highway System ([Electrek](#))
- **Germany** announced a \$147bn COVID stimulus package, which doubled EV car subsidies, lowered VAT and added incentives for EV charging infrastructure development ([Reuters](#))
- **New York City** approved a dockless bike and scooter program at the city and state level, requiring New York to launch a pilot program by March 2021 ([Smart Cities Dive](#))
- **Paris** reelected mayor Anne Hidalgo, who ran on a campaign to remove cars and continue to develop bicycling and walking infrastructure throughout the city ([Forbes](#))
- The **U.S. DoT** announced eight States and nine companies, including Cruise, Uber and Waymo, will participate in the AV TEST Initiative, a federal program tasked with improving safety and testing transparency around autonomous driving systems ([NHTSA](#))

### Selected Partnerships

- **BMW** and **Mercedes** announced they will place their autonomous driving partnership on hold with optionality to resume the efforts at a future date ([Reuters](#))
- **Mercedes** announced a partnership with **NVIDIA**, a developer of graphic processing units, to create an in-vehicle computing system and AI computing infrastructure ([Press Release](#))
- **Nuro**, an autonomous last-mile delivery company, announced a partnership with **CVS Pharmacy** to test autonomous delivery of prescriptions in Houston ([Smart Cities Dive](#))
- **Toyota** announced partnerships with five Chinese companies, including **Beijing Automobile Group** and **FAW Group**, to develop fuel cells for commercial vehicles ([Automotive News](#))
- **Waymo**, a developer of self-driving software, and **Volvo** announced a partnership to integrate Waymo's software into a new vehicle platform with Level 4 autonomy ([TechCrunch](#))

### Selected Capital Raises

#### Nomura Greentech's Take:

- Autonomous technology is garnering significant investment focus across both automotive and industrial applications, illustrating investor appetite for and versatility of autonomy enabling software

#### Nomura Greentech's Take:

- SPACs are increasingly becoming an attractive alternative to an IPO following the successful process by Nikola

### Selected Public Equity & Debt Deals

### Selected Mergers & Acquisitions

#### Nomura Greentech's Take:

- Amazon's acquisition of Zoox creates a formidable player in the race for automated vehicle technology for both passenger and commercial vehicles

- DoorDash** raised **\$400mm** led by Fidelity and Durable Partners with participation from T. Rowe Price, PV Seed Fund and Dragoneer Investment Group ([TechCrunch](#))
- Xingsheng Youxuan**, a Chinese grocery delivery start-up, raised **\$300mm** led by Tencent Holdings and Primavera Capital, valuing the company at over \$3bn ([PYMNTS](#))
- Lilium**, a German developer of electric vertical takeoff and landing (EVTOL) vehicles, raised **\$275mm** in a round led by Tencent Holdings, valuing the company at \$1.0bn ([TechCrunch](#))
- QuantumScape**, a developer of solid-state batteries, raised an additional **\$200mm** from Volkswagen, with whom it has an existing joint venture ([TechCrunch](#))
- Geek+**, a developer of robotics technology designed to improve automation for logistics and warehouses, raised **\$200mm** from China V Fund and Redview Capital ([TechCrunch](#))
- Cazoo**, a British online car retailer, raised **\$156mm** led by dmg ventures with participation from Draper Esprit, General Catalyst, and more, valuing the firm at \$1.25bn ([FINSMES](#))
- BYD Semiconductor**, a subsidiary of Chinese automobile manufacturer, BYD, raised **\$113mm** from Sequoia China, SK Group, Xiaomi and Lenovo Group ([JumpStart](#))
- Xiaolinggou**, a Chinese developer of an electric vehicle rental platform, raised **\$97mm** from Ningbo Yincheng Group and Hangzhou Zhaopu ([Deal Street Asia](#))
- Tembici**, Brazilian provider of micro-mobility integration services for bicycles in urban settings, raised **\$47mm** led by Valor Capital Group and Redpoint eventures ([TechCrunch](#))
- Otto Motors**, a Canadian developer of self-driving robot technology and services for the industrial industry, raised **\$29mm** led by Kensington Private Equity Fund ([VentureBeat](#))
- Almotive**, a Hungarian developer of autonomous vehicle software, raised **\$20mm** led by Lead Ventures with participation from Robert Bosch Venture Capital ([Venture Beat](#))
- Ontruck**, a Spanish developer of a digital freight platform, raised **\$19mm** led by OGCI Climate Investments with participation from Cathay Innovation and Atomico ([FINSMES](#))
- Beacon**, a British provider of enterprise platform offering logistics and trade finance, raised **\$15mm** in a round led by 8VC and Jeff Bezos ([Press Release](#))
- Wise Systems**, a developer of an autonomous dispatch and routing platform, raised **\$15mm** led by Valo Ventures with participation from Gradient Ventures ([Forbes](#))
- Viaduct**, a developer of an end-to-end machine learning platform for vehicle data collection, raised **\$11mm** from Innovation Endeavors and EXOR Seeds ([Freight Waves](#))
- Infineon**, a manufacturer of semiconductors, issued **\$3.27bn** of debt, using proceeds to repay loans incurred in its acquisition of Cypress Semiconductor ([Press Release](#))
- Vroom**, a developer of a platform for used car sales, filed for an IPO on the NASDAQ at **\$22 per share** and an implied enterprise value of **\$2.7bn** ([Press Release](#))
- Hyllion**, a manufacturer of electrified powertrain solutions for Class 8 vehicles, announced it would go public via a SPAC<sup>(2)</sup>, with an implied enterprise value of **\$1.1bn** ([Business Wire](#))
- Shift Technologies**, a provider of an e-commerce platform for used auto sales, announced it would go public via a SPAC<sup>(2)</sup>, with an implied enterprise value of **\$416mm** ([The Street](#))
- ZF** completed its acquisition of **WABCO**, a German supplier of commercial vehicle technology, for **\$7.1bn**; the deal was first announced in February 2019 ([Freight Waves](#))
- Just Eat Takeaway.com** acquired **Grubhub**, an American developer of an online and mobile delivery marketplace, for **\$7.1bn** ([The Verge](#))
- Amazon** acquired **Zoox**, a developer of an autonomous mobility ecosystem including self-driving cars, control systems and ride-sharing services, for **\$1.2bn** ([Forbes](#))
- Cruise**, a developer of self-driving cars which is majority owned by General Motors, acquired **Asytx**, a German producer of radar sensors for automobiles ([The Information](#))
- Facebook** acquired **Mapillary**, a Swedish developer of a crowdsourced database of street-level imagery for use in mapping applications, for an undisclosed sum ([TechCrunch](#))
- Yandex**, a Russian technology firm, is considering acquiring Uber Technologies' stake in their joint ride-hailing unit, Yandex.Taxi, rather than seeking an IPO ([The National](#))

Source: Nomura Greentech Analysis, Public Disclosures.

1. SPAC is a Special Purpose Acquisition Vehicle. Upon closing, Hyllion and Shift Technologies will become a publicly listed entity. The acquiring SPAC is Tortoise Acquisition Corp (NYSE: SHLL) and Insurance Acquisition Corp (NASDAQ: INSU).

## Capital Raises

Date	Company	Amount Raised (\$mm)	Disclosed Investors	Company Description
6/1	Beacon	\$15	8VC, Jeff Bezos	United Kingdom based provider of an enterprise platform offering logistics and trade finance
6/1	Otto Motors	\$29	Kensington Private Equity Fund, BMO Capital Partners, Export Development Canada (EDC), iNovia Capital, RRE Ventures	Canada based developer of self-driving robot technology and services for industrial companies
6/2	Gojek	ND	Facebook, PayPal	Indonesia based developer of on-demand ride-hailing services
6/3	Tembici	\$47	Valor Capital Group, Redpoint eventures, International Finance Corporation, Joa Investimentos	Brazil based provider of micro-mobility services for integration of bicycles in urban transport networks
6/8	Lilium	\$275	Tencent Holdings, Baillie Gifford, LGT Group, Atomico	Germany based developer of electric vertical takeoff and landing (EVTOL) vehicles
6/9	Upstream	ND	Alliance Venture Capital, Hyundai, Nationwide Insurance, Volvo Group	Israel based developer of cloud based end-to-end data services for automotive ecosystem
6/9	Navmatic	\$4	Lear Innovation Ventures, UpWest, Next Gear Ventures	San Jose based provider of end-to-end high accuracy positioning solutions for micro-mobility, robotics and mobile phones
6/9	Xiaolinggou	\$97	Ningbo Yincheng Group, Hangzhou Zhaopu	China based developer of a new EV rental platform
6/10	Viaduct	\$11	Innovation Endeavors, EXOR Seeds, BoxGroup	San Francisco based developer of end-to-end machine learning platform for enhancing vehicle data collection
6/11	Ontruck	\$19	OGCI Climate Investments, Cathay Innovation, Atomico, Idinvest Partners, Total Carbon Neutrality Ventures, Endeavor Catalyst	Spain based developer of a digital freight platform
6/15	Buymie	\$7	ACT Venture Capital, Wheatsheaf Group, Enterprise Ireland, Business Venture Partners, Sure Valley Ventures, Haatch, Ahlo Business Angel Network	Ireland based developer of grocery delivery platform
6/16	QuantumScape	\$200	Volkswagen	San Jose based developer of solid-state batteries for electric vehicles
6/16	Dumpling	\$7	Forerunner Ventures, Floodgate, FUEL Capital	San Francisco based developer of an app which enables individuals to launch, run and grow independent grocery delivery businesses
6/16	BYD Semiconductor	\$113	SK Group, Sequoia China, Xiaomi, Lenovo Group, Shenzhen Capital Group, CICC Capital	Subsidiary of China based BYD, a manufacturer of automobiles, which manufactures semiconductors
6/17	GoFor	\$7	Builders VC, CEMEX Ventures, Mucker Capital, Plug and Play Ventures, Panache Ventures, I2BF Global Ventures, Capital Angel Network	Canada based on-demand last-mile delivery service for the construction industry
6/17	Geek+	\$200	China V Fund, Redview Capital, Vertex Ventures China	China based developer of robotics technology designed to improve automation for logistics and warehouses
6/17	DroneBase	\$8	SZ DJI Technology Company, Razi Ventures, Valor Equity Partners, Union Square Ventures, Upfront Ventures, Hearst Ventures, Pritzker Group Venture Capital	Santa Monica based operator of aerial data analytics company enabled by unmanned drones
6/18	Splyt	\$20	Softbank, American Express Ventures	United Kingdom based developer of transportation integration platform
6/18	Wise Systems	\$15	Valo Ventures, Gradient Ventures, Prologis Ventures, E14 Fund Management	Boston based developer of an autonomous dispatch and routing platform
6/18	DoorDash	\$400	Fidelity Investments, PV Seed Fund, Durable Capital Partners, T. Rowe Price, Dragonair Investment Group	San Francisco based developer of on-demand food delivery application
6/22	Almotive	\$20	Lead Ventures, Robert Bosch Venture Capital, B Capital Group, Prime Ventures, Inventure, Samsung Catalyst, Draper Associates	Hungary based developer of software for autonomous vehicles
6/23	Third Wave Automation	\$15	Innovation Endeavors, Toyota AI Ventures, Homebrew, Eclipse Ventures, Heartland Ventures	San Francisco based developer of autonomous forklift technology
6/23	Cazoo	\$156	Draper Espirit, dmg ventures, General Catalyst, Eight Roads, Mubadala Ventures, Octopus Ventures, Stride.VC, Compagnie Nationale a Portefeuille	United Kingdom based online car retail platform

## Capital Raises (Cont.)

Date	Company	Amount Raised (\$mm)	Disclosed Investors	Company Description
6/29	Xingsheng Youxuan	\$300	Tencent Holdings, Primavera Capital	China based grocery delivery start-up

## M&A

Date	Target	Acquiror	EV (\$mm)	Revenue	EV / EBITDA	Target Description
6/3	Asytx	Cruise	ND	ND	ND	Germany based producer of radar sensors for the automotive industry
6/4	e-motionlabs	BOND Mobility	ND	ND	ND	Belgium based developer of micro-mobility electric vehicles
6/11	Grubhub	Just Eat Takeaway.com	\$7,104	5.3x	91.8x	Chicago based operator of online and mobile food-ordering company
6/16	Marble Robot	Caterpillar	ND	ND	ND	San Francisco based developer of robot and autonomy technology solutions
6/18	Mapillary	Facebook	ND	ND	ND	Sweden based developer of a crowdsourced database of street-level imagery for use in mapping applications
6/26	Zoox	Amazon	\$1,200	ND	ND	San Francisco based developer of an autonomous mobility ecosystem including self-driving cars, control system and ride-sharing service

## IPO / New Equity Issuance

Date	Company	Offer Price	Implied EV (\$mm)	Revenue	EV / EBITDA	Company Description
6/8	Vroom	\$22.00	\$2,720	ND	ND	Operator of online used vehicle retail platform
6/19	Hyllion <sup>1</sup>	ND	\$1,097	ND	ND	Manufacturer of electrified powertrain solutions for Class 8 commercial vehicles
6/29	Shift Technologies <sup>1</sup>	ND	\$416	ND	ND	Provider of an end-to-end e-commerce platform for used auto sales

## Public Debt Offerings<sup>2</sup>

Date	Company	Debt Amount (\$mm)	Coupon	Offering Price % of Par	Maturity Date	Company Description
6/8	Magna International	\$750	2.45%	99.60	6/15/2030	Tier 1 automotive supplier
6/16	BorgWarner	\$1,100	2.65%	99.72	7/1/2027	Tier 1 automotive supplier for powertrain products
6/16	AT&T	\$1,050	3.75%	100.00	9/1/2050	Global telecommunications company
6/17	Infineon	\$3,270	0.75% <sup>3</sup>	99.83 <sup>3</sup>	6/24/2023	Manufacturer of semiconductors
6/22	Roper Technologies	\$600	2.00%	98.88	6/30/2030	Industrial manufacturer and technology company offering industrial controls, water metering and management software

Source: FactSet, PitchBook, Public Disclosures.

- The special purpose acquisition vehicles (SPAC), Tortoise Acquisition Corp and Insurance Acquisition Corp announced they will acquire Hyllion and Shift Technologies respectively. Upon transaction close, Hyllion and Shift Technologies will become a publicly listed company.
- Inclusive of only corporate debt offerings and excludes any debt offerings made by subsidiaries. Excludes debt issuances below \$500mm.
- Denotes figures only representative of issuance of shortest maturity. Total \$3.27bn issuance was made in 4 parts of varying maturities, coupon rates and prices.

# Advanced Transportation Trading Comparables

Company	Price as of	% 52-Week	Market	Firm	EV/Revenue		EV/EBITDA		P / E	
	6/30/20	High	Cap (\$mm)	Value (\$mm)	2020E	2021E	2020E	2021E	2020E	2021E
<b>Automotive Companies</b>										
Toyota	¥ 6,762	85.3%	\$173,377	\$286,407	1.2x	1.1x	11.6x	11.1x	13.5x	11.5x
Volkswagen	€ 143.30	78.3%	\$80,682	\$260,813	1.1x	1.0x	8.6x	6.2x	15.4x	6.6x
Tesla	\$ 1,079.81	100.0%	\$214,882	\$223,308	8.4x	6.1x	NM	37.4x	NM	NM
Daimler	€ 36.15	67.0%	\$43,430	\$190,263	1.2x	1.0x	20.7x	12.5x	NM	9.2x
BMW	€ 56.82	74.9%	\$42,047	\$157,321	1.5x	1.4x	14.6x	11.8x	16.0x	8.7x
Ford	\$ 6.08	57.8%	\$24,095	\$142,747	1.2x	1.0x	NM	13.8x	NM	15.2x
General Motors	\$ 25.30	61.9%	\$36,432	\$110,273	1.0x	0.9x	13.0x	8.5x	46.0x	6.7x
Honda	¥ 2,756	85.3%	\$44,358	\$88,346	0.7x	0.7x	8.8x	9.4x	12.5x	9.1x
Nissan	¥ 399	50.6%	\$14,479	\$75,891	0.9x	0.9x	19.0x	18.5x	NM	30.1x
Hyundai	₩ 97,700	69.0%	\$21,184	\$62,011	0.7x	0.7x	10.3x	8.4x	10.1x	6.1x
SAIC Motor	¥ 16.99	63.0%	\$28,060	\$36,356	0.3x	0.3x	9.6x	7.3x	8.9x	7.1x
Renault	€ 22.58	38.9%	\$7,384	\$30,372	0.6x	0.6x	9.8x	5.0x	NM	9.0x
BYD	HK\$ 59.85	98.0%	\$21,067	\$30,175	1.6x	1.4x	13.2x	11.9x	NM	47.6x
Suzuki	¥ 3,657	68.4%	\$17,104	\$17,732	0.6x	0.6x	6.3x	5.5x	17.0x	14.6x
Fiat Chrysler	€ 8.94	60.9%	\$15,751	\$14,684	0.2x	0.1x	2.2x	1.3x	NM	6.3x
Tata Motors	₹ 98.25	49.1%	\$4,714	\$12,325	0.4x	0.3x	4.3x	2.9x	NM	NM
Geely	HK\$ 12.20	74.7%	\$14,529	\$11,627	0.9x	0.8x	6.7x	5.6x	12.8x	10.2x
Subaru	¥ 2,242	71.5%	\$15,932	\$10,928	0.4x	0.4x	4.5x	4.1x	16.6x	12.6x
NIO	\$ 7.72	100.0%	\$8,009	\$9,799	5.2x	3.7x	NM	NM	NM	NM
KIA <sup>1</sup>	₩ 32,050	69.1%	\$10,683	\$9,183	0.2x	0.2x	3.0x	2.4x	9.6x	5.9x
Dongfeng Motor <sup>1</sup>	HK\$ 4.63	54.7%	\$5,147	\$8,484	0.7x	0.6x	25.0x	20.4x	3.4x	2.8x
Peugeot	€ 14.48	55.6%	\$15,340	\$6,498	0.1x	0.1x	1.0x	0.8x	13.0x	5.0x
FAW Car Group	¥ 11	91.4%	\$6,998	\$4,845	0.4x	0.4x	13.0x	9.5x	18.2x	12.8x
Mazda	¥ 646	56.4%	\$3,771	\$3,118	0.1x	0.1x	5.1x	3.6x	NM	NM
Mitsubishi	¥ 266	49.9%	\$3,670	\$1,917	0.1x	0.1x	4.2x	2.8x	NM	NM
Guangzhou Automobile	HK\$ 5.59	56.1%	\$7,384	\$340	0.0x	0.0x	12.1x	1.2x	7.1x	5.7x
<b>Mean</b>		<b>68.8%</b>			<b>1.1x</b>	<b>0.9x</b>	<b>9.8x</b>	<b>8.9x</b>	<b>14.7x</b>	<b>11.6x</b>
<b>Median</b>		<b>67.7%</b>			<b>0.7x</b>	<b>0.7x</b>	<b>9.6x</b>	<b>7.3x</b>	<b>13.0x</b>	<b>9.0x</b>
<b>Truck Companies</b>										
Volvo	KR 145.90	84.1%	\$31,844	\$42,420	1.2x	1.1x	11.7x	8.9x	26.2x	14.2x
PACCAR	\$ 74.85	90.2%	\$25,995	\$32,714	2.1x	1.8x	22.7x	15.6x	27.2x	17.0x
Nikola	\$ 67.53	84.7%	\$24,372	\$25,077	NM	NM	NM	NM	NM	NM
Traton SE	€ 17.39	63.8%	\$9,765	\$18,122	0.8x	0.7x	13.1x	6.7x	NM	10.3x
MAN SE	€ 46.60	81.9%	\$7,696	\$9,602	0.6x	0.6x	5.9x	5.7x	NM	NM
Isuzu	¥ 973	69.8%	\$6,654	\$7,722	0.5x	0.4x	5.6x	4.8x	14.5x	10.8x
Navistar	\$67.53	84.7%	\$2,812	\$6,734	0.9x	0.7x	17.2x	10.7x	NM	19.9x
<b>Mean</b>		<b>79.1%</b>			<b>1.0x</b>	<b>0.9x</b>	<b>12.7x</b>	<b>8.7x</b>	<b>22.6x</b>	<b>14.5x</b>
<b>Median</b>		<b>83.0%</b>			<b>0.8x</b>	<b>0.7x</b>	<b>12.4x</b>	<b>7.8x</b>	<b>26.2x</b>	<b>14.2x</b>
<b>Tier 1 Suppliers</b>										
Denso	¥ 4,205	81.6%	\$30,202	\$30,029	0.7x	0.7x	7.7x	5.7x	32.1x	15.6x
Bridgestone	¥ 3,469	74.7%	\$22,676	\$27,198	0.9x	0.8x	5.8x	5.1x	14.3x	10.8x
Aptiv	\$ 77.92	79.6%	\$19,934	\$24,447	2.1x	1.7x	18.3x	10.9x	NM	19.6x
Continental	€ 87.16	65.7%	\$19,579	\$24,249	0.6x	0.5x	6.3x	4.2x	42.5x	11.5x
Michelin	€ 92.34	79.0%	\$18,649	\$23,735	1.0x	0.9x	6.6x	4.9x	19.1x	10.4x
Knorr-Bremse	€ 90.23	89.4%	\$16,336	\$17,409	2.7x	2.4x	17.9x	13.1x	39.5x	25.0x
Magna	€ 60.46	80.9%	\$13,437	\$16,271	0.5x	0.5x	7.5x	4.9x	24.6x	9.3x
Valeo	€ 23.36	63.9%	\$6,304	\$9,551	0.5x	0.4x	5.1x	3.5x	NM	14.5x
Goodyear	\$ 8.95	52.4%	\$2,093	\$8,390	0.7x	0.6x	16.1x	5.8x	NM	19.4x
Lear	\$ 109.02	77.0%	\$6,615	\$8,270	0.5x	0.4x	8.8x	5.2x	44.5x	9.7x
BorgWarner	\$ 35.30	76.2%	\$7,279	\$8,212	1.0x	0.8x	7.7x	5.5x	19.9x	10.3x
Faurecia	€ 34.77	68.7%	\$5,368	\$7,933	0.5x	0.4x	4.9x	3.4x	NM	9.0x
Gentex	\$ 25.77	82.7%	\$6,381	\$6,048	3.7x	3.1x	13.0x	10.0x	20.6x	15.2x
Hyllion <sup>2</sup>	\$ 27.44	86.2%	\$4,645	\$4,126	NM	NM	NM	NM	NM	NM
Dana	\$ 12.19	60.9%	\$1,765	\$4,030	0.6x	0.5x	7.8x	5.1x	34.8x	6.8x
American Axle & Manufacturing Holdings	\$ 7.60	60.0%	\$857	\$3,910	0.9x	0.7x	7.9x	5.2x	NM	11.6x
Delphi	\$ 14.21	72.5%	\$1,224	\$2,769	0.8x	0.7x	8.8x	6.2x	NM	10.0x
Visteon	\$ 68.50	71.5%	\$1,911	\$2,099	0.8x	0.7x	16.9x	8.0x	NM	19.6x
Nexteer	HK\$ 5.32	52.5%	\$1,722	\$1,470	0.5x	0.4x	3.3x	2.7x	9.9x	7.1x
Gentherm	\$ 38.90	79.2%	\$1,279	\$1,303	1.7x	1.4x	15.2x	9.5x	41.6x	18.1x
Stoneridge	\$ 20.66	60.8%	\$570	\$656	1.1x	1.0x	30.0x	10.1x	NM	22.0x
Veoneer	\$ 10.69	58.2%	\$1,192	\$419	0.3x	0.2x	NM	NM	NM	NM
<b>Mean</b>		<b>71.5%</b>			<b>1.1x</b>	<b>0.9x</b>	<b>10.8x</b>	<b>6.5x</b>	<b>28.6x</b>	<b>13.8x</b>
<b>Median</b>		<b>73.6%</b>			<b>0.8x</b>	<b>0.7x</b>	<b>7.9x</b>	<b>5.4x</b>	<b>28.3x</b>	<b>11.6x</b>
<b>Mobility-as-a-Service</b>										
Uber	\$ 31.08	69.8%	\$52,836	\$52,583	4.1x	2.9x	NM	NM	NM	NM
Lyft	\$ 33.01	48.9%	\$10,052	\$7,913	2.8x	1.9x	NM	NM	NM	NM
<b>Mean</b>		<b>59.4%</b>			<b>3.5x</b>	<b>2.4x</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>
<b>Median</b>		<b>59.4%</b>			<b>3.5x</b>	<b>2.4x</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>

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.

Note: Few of the companies in the comparables set have, at the time of publication of this Monthly, updated their 2020E guidance to take into account COVID-19 Impacts. Therefore, the above 2020E multiples should be reviewed in that context.

1. Firm value excludes investments in unconsolidated subsidiaries.
2. Hyllion was acquired by Tortoise Acquisition Corp (NYSE: SHELL) on June 19, 2020. Upon closing on the transaction, Hyllion will become a publicly listed company.

# Advanced Transportation Trading Comparables (cont.)

Company	Price as of	% 52-Week	Market	Firm	EV/Revenue		EV/EBITDA		P / E	
	6/30/20	High	Cap (\$mm)	Value (\$mm)	2020E	2021E	2020E	2021E	2020E	2021E
<b>Autonomous Driving Chip Makers</b>										
Intel	\$ 59.83	87.4%	\$257,987	\$273,586	3.7x	3.7x	7.8x	8.0x	12.5x	12.1x
Nvidia	\$ 379.91	99.7%	\$236,304	\$227,528	15.8x	13.5x	39.9x	32.4x	48.4x	38.9x
Texas Instruments	\$ 126.97	94.6%	\$119,733	\$121,517	9.8x	8.8x	23.4x	19.6x	31.9x	26.8x
Qualcomm	\$ 91.21	95.1%	\$104,983	\$111,163	5.0x	4.1x	15.7x	12.0x	21.4x	15.3x
Advanced Micro Devices	\$ 52.61	89.3%	\$64,395	\$63,647	7.6x	6.3x	42.5x	29.5x	NM	36.3x
Analog	\$ 122.64	98.4%	\$45,537	\$50,659	9.5x	8.7x	22.4x	19.6x	27.8x	23.7x
NXP	\$ 114.04	82.2%	\$31,924	\$38,652	5.0x	4.4x	16.7x	12.5x	24.1x	16.9x
Infineon	€ 20.88	91.3%	\$29,237	\$27,398	2.8x	2.3x	11.6x	8.8x	33.6x	21.3x
STMicro	€ 24.20	82.4%	\$24,916	\$24,840	2.7x	2.4x	14.5x	9.9x	36.1x	19.1x
Renesas	¥ 551	67.1%	\$8,889	\$14,586	2.4x	2.2x	8.9x	7.8x	NM	23.6x
ON Semi	\$ 19.82	77.4%	\$8,138	\$11,027	2.2x	2.0x	11.9x	9.0x	38.6x	15.6x
<b>Mean</b>		<b>87.7%</b>			<b>6.0x</b>	<b>5.3x</b>	<b>19.6x</b>	<b>15.4x</b>	<b>30.5x</b>	<b>22.7x</b>
<b>Median</b>		<b>89.3%</b>			<b>5.0x</b>	<b>4.1x</b>	<b>15.7x</b>	<b>12.0x</b>	<b>31.9x</b>	<b>21.3x</b>
<b>Intelligent Transport / ITS / Smart Tolling</b>										
Atlanta	€ 14.30	57.9%	\$13,138	\$53,524	5.5x	4.6x	9.6x	7.3x	NM	12.2x
Roper Technologies	\$ 388.26	95.7%	\$40,884	\$45,161	8.3x	8.0x	23.7x	22.4x	31.8x	29.6x
FLIR Systems	\$ 40.57	69.0%	\$5,474	\$6,044	3.2x	3.1x	14.0x	12.8x	19.4x	17.6x
Autostrada	€ 20.34	64.4%	\$2,982	\$3,401	1.6x	1.4x	4.9x	3.9x	17.2x	11.1x
LS Corp	₩ 34,800	68.6%	\$803	\$3,399	0.4x	0.4x	6.4x	5.9x	8.5x	5.9x
Cubic Corporation	\$ 48.03	64.1%	\$1,503	\$2,253	1.5x	1.4x	14.2x	11.8x	15.5x	12.8x
Conduent	\$ 2.39	24.2%	\$505	\$2,201	0.6x	0.6x	6.1x	5.5x	10.4x	6.1x
Vaisala	€ 33.35	90.4%	\$1,353	\$1,351	3.1x	3.0x	19.8x	17.5x	37.9x	32.6x
Kapsch TrafficCom	€ 17.20	50.0%	\$251	\$413	0.5x	0.5x	9.8x	6.5x	NM	12.9x
INIT Innovation in Traffic Systems	€ 33.60	100.0%	\$377	\$388	1.9x	1.6x	13.0x	11.0x	26.1x	21.5x
Iteris	\$ 4.76	72.7%	\$198	\$186	1.6x	1.5x	NM	22.5x	NM	48.8x
Q-Free	NOK 4.32	55.4%	\$40	\$63	0.6x	0.5x	8.3x	7.6x	NM	NM
<b>Mean</b>		<b>67.7%</b>			<b>2.4x</b>	<b>2.2x</b>	<b>11.8x</b>	<b>11.2x</b>	<b>20.9x</b>	<b>19.2x</b>
<b>Median</b>		<b>66.5%</b>			<b>1.6x</b>	<b>1.4x</b>	<b>9.8x</b>	<b>9.3x</b>	<b>18.3x</b>	<b>12.9x</b>
<b>Telematics</b>										
Descartes Systems	\$ 52.90	100.0%	\$4,521	\$4,487	13.2x	12.1x	33.5x	29.3x	NM	NM
Inseego	\$ 11.60	82.4%	\$1,054	\$1,122	3.7x	3.2x	NM	22.2x	NM	41.4x
TomTom	€ 7.04	61.0%	\$1,041	\$600	1.0x	0.9x	NM	42.4x	NM	NM
Orbcomm	\$ 3.85	47.5%	\$302	\$515	2.1x	1.8x	10.2x	7.5x	NM	NM
CalAmp	\$ 8.01	67.3%	\$273	\$404	1.2x	1.2x	16.4x	9.7x	NM	18.8x
Ituran	\$ 16.02	52.0%	\$333	\$372	1.5x	1.4x	6.6x	5.9x	14.6x	11.1x
Quartix	£ 3.22	73.0%	\$192	\$184	5.7x	5.7x	22.3x	21.9x	NM	NM
MIX Telematics	R 6.06	65.5%	\$191	\$181	1.5x	1.4x	7.8x	6.6x	NM	29.8x
TeleNav	\$ 5.49	47.5%	\$263	\$147	0.6x	0.6x	28.6x	NM	NM	NM
Quarterhill	C\$ 2.09	94.1%	\$182	\$108	1.1x	1.0x	12.2x	6.2x	NM	NM
<b>Mean</b>		<b>69.0%</b>			<b>3.2x</b>	<b>2.9x</b>	<b>17.2x</b>	<b>16.9x</b>	<b>14.6x</b>	<b>25.3x</b>
<b>Median</b>		<b>66.4%</b>			<b>1.5x</b>	<b>1.4x</b>	<b>14.3x</b>	<b>9.7x</b>	<b>14.6x</b>	<b>24.3x</b>
<b>Logistics</b>										
UPS	\$ 111.18	89.4%	\$96,615	\$118,789	1.6x	1.5x	14.2x	11.6x	20.2x	15.9x
FedEX	\$ 140.22	79.7%	\$36,738	\$68,414	1.0x	0.9x	9.1x	8.9x	22.1x	12.6x
Deutsche Post	€ 32.55	93.3%	\$45,938	\$62,255	0.9x	0.8x	7.4x	6.4x	17.8x	13.2x
AP Moeller Maersk	DKK 7,728	75.0%	\$23,261	\$33,977	0.9x	0.9x	6.5x	6.0x	NM	27.6x
Hapag Lloyd	€ 51.90	27.8%	\$10,248	\$16,606	1.3x	1.2x	8.7x	7.6x	49.1x	34.6x
XPO Logistics	\$ 77.25	77.9%	\$7,957	\$15,192	1.0x	0.9x	12.1x	9.4x	NM	21.3x
J.B. Hunt	\$ 120.34	98.6%	\$12,870	\$14,125	1.6x	1.5x	12.1x	10.7x	29.0x	22.2x
C.H. Robinson	\$ 79.06	87.3%	\$10,750	\$12,225	0.8x	0.8x	18.9x	15.2x	27.7x	21.7x
Knight-Swift Trucking	\$ 41.71	98.2%	\$7,144	\$7,840	1.8x	1.7x	9.0x	7.9x	24.5x	19.0x
Schneider Trucking	\$ 24.67	100.0%	\$4,376	\$4,063	0.9x	0.9x	7.7x	6.5x	24.0x	19.0x
Werner	\$ 43.53	94.2%	\$3,030	\$3,219	1.4x	1.3x	7.4x	6.6x	23.2x	18.6x
<b>Mean</b>		<b>83.8%</b>			<b>1.2x</b>	<b>1.1x</b>	<b>10.3x</b>	<b>8.8x</b>	<b>26.4x</b>	<b>20.5x</b>
<b>Median</b>		<b>89.4%</b>			<b>1.0x</b>	<b>0.9x</b>	<b>9.0x</b>	<b>7.9x</b>	<b>24.0x</b>	<b>19.0x</b>
<b>Communications / Infrastructure</b>										
AT&T	\$ 30.23	76.3%	\$218,079	\$411,309	2.4x	2.4x	7.3x	7.1x	9.3x	9.2x
Verizon	\$ 55.13	88.8%	\$228,293	\$360,161	2.8x	2.7x	7.7x	7.6x	11.6x	11.2x
Cisco Systems	\$ 46.64	80.3%	\$197,894	\$185,147	3.8x	3.7x	10.3x	10.3x	14.8x	14.3x
T-Mobile	\$ 104.15	94.5%	\$90,361	\$131,270	2.0x	1.7x	5.9x	5.6x	NM	NM
Hitachi	¥ 3,403	72.8%	\$30,498	\$42,540	0.6x	0.5x	4.9x	4.3x	10.3x	7.4x
Toshiba	¥ 3,435	86.3%	\$15,440	\$18,631	0.6x	0.6x	10.0x	8.1x	49.6x	13.5x
<b>Mean</b>		<b>83.2%</b>			<b>2.0x</b>	<b>1.9x</b>	<b>7.7x</b>	<b>7.2x</b>	<b>19.1x</b>	<b>11.1x</b>
<b>Median</b>		<b>83.3%</b>			<b>2.2x</b>	<b>2.0x</b>	<b>7.5x</b>	<b>7.3x</b>	<b>11.6x</b>	<b>11.2x</b>

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. Note: Few of the companies in the comparables set have, at the time of publication of this Monthly, updated their 2020E guidance to take into account COVID-19 Impacts. Therefore, the above 2020E multiples should be reviewed in that context.

## Nomura Greentech Offices

San Francisco    Chicago    New York    Zürich

## Nomura Greentech Transactions

### Mergers & Acquisitions

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

**\$33bn**

### Asset Transactions

- Acquisitions
- Divestitures
- Passive equity
- Development capital formation

Operating **27GW** | Development **50GW**

### 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

**>25 assignments**

Note: As of June 30<sup>th</sup>, 2020.

## Highly Experienced Senior Leadership Supported by 65 Professionals

<p><b>Jeff McDermott</b></p> <p>Managing Director, Group Head New York</p> <p><a href="mailto:jeff.mcdermott@nomura.com">jeff.mcdermott@nomura.com</a></p> <ul style="list-style-type: none"> <li>■ 30+ years of experience</li> <li>■ &gt;150 completed transactions</li> <li>■ Founder and head of advisory business</li> <li>■ Large industrials and energy companies</li> <li>■ Broad coverage of senior leaders</li> </ul>	<p><b>Derek Bentley</b></p> <p>Managing Director New York</p> <p><a href="mailto:derek.bentley@nomura.com">derek.bentley@nomura.com</a></p> <ul style="list-style-type: none"> <li>■ 20+ years of experience</li> <li>■ &gt;35 completed transactions</li> <li>■ Renewable energy assets</li> <li>■ Energy storage</li> <li>■ Distributed generation</li> <li>■ Water</li> </ul>	<p><b>Laurent Dallet</b></p> <p>Managing Director Zürich</p> <p><a href="mailto:laurent.dallet@nomura.com">laurent.dallet@nomura.com</a></p> <ul style="list-style-type: none"> <li>■ 15+ years of experience</li> <li>■ &gt;30 completed transactions</li> <li>■ Renewable energy assets</li> <li>■ Distributed energy production</li> <li>■ Energy efficiency and services</li> </ul>	<p><b>PJ Deschenes</b></p> <p>Managing Director New York</p> <p><a href="mailto:pj.deschenes@nomura.com">pj.deschenes@nomura.com</a></p> <ul style="list-style-type: none"> <li>■ 15+ years of experience</li> <li>■ &gt;30 completed transactions</li> <li>■ Renewable energy assets</li> <li>■ Power infrastructure services</li> <li>■ Renewable energy value chain</li> <li>■ Environmental services</li> </ul>	<p><b>Michael Horwitz</b></p> <p>Managing Director San Francisco</p> <p><a href="mailto:michael.horwitz@nomura.com">michael.horwitz@nomura.com</a></p> <ul style="list-style-type: none"> <li>■ 20+ years of experience</li> <li>■ &gt;40 completed transactions</li> <li>■ Energy efficiency</li> <li>■ Energy software and services</li> <li>■ Energy storage</li> <li>■ Renewable energy</li> <li>■ Smart grid</li> <li>■ Blockchain</li> </ul>	<p><b>Olav Junttila</b></p> <p>Managing Director Chicago</p> <p><a href="mailto:olav.junttila@nomura.com">olav.junttila@nomura.com</a></p> <ul style="list-style-type: none"> <li>■ 20+ years of experience</li> <li>■ &gt;30 completed transactions</li> <li>■ Energy software and services</li> <li>■ Energy efficiency</li> <li>■ Renewable energy</li> <li>■ Utilities</li> </ul>	<p><b>John McClure</b></p> <p>Managing Director San Francisco</p> <p><a href="mailto:john.mcclure@nomura.com">john.mcclure@nomura.com</a></p> <ul style="list-style-type: none"> <li>■ 25+ years of experience</li> <li>■ &gt;20 completed transactions</li> <li>■ Advanced transportation</li> <li>■ Edge computing</li> <li>■ Semi-conductors</li> <li>■ Industrial sensors</li> </ul>
<p><b>Steve Megyery</b></p> <p>Managing Director New York</p> <p><a href="mailto:steve.megyery@nomura.com">steve.megyery@nomura.com</a></p> <ul style="list-style-type: none"> <li>■ 15+ years of experience</li> <li>■ &gt;30 completed transactions</li> <li>■ Head of Private Placements</li> <li>■ Cleantech</li> <li>■ Power infrastructure</li> </ul>	<p><b>Frank Nicklaus</b></p> <p>Managing Director New York</p> <p><a href="mailto:frank.nicklaus@nomura.com">frank.nicklaus@nomura.com</a></p> <ul style="list-style-type: none"> <li>■ 15+ years of experience</li> <li>■ &gt;25 completed transactions</li> <li>■ Renewable energy assets</li> <li>■ Power infrastructure services</li> <li>■ Renewable energy value chain</li> </ul>	<p><b>Diego Pignatelli</b></p> <p>Managing Director Zürich</p> <p><a href="mailto:diego.pignatelli@nomura.com">diego.pignatelli@nomura.com</a></p> <ul style="list-style-type: none"> <li>■ 30+ years of experience</li> <li>■ &gt;60 completed transactions</li> <li>■ European coverage</li> <li>■ Industrials and energy companies</li> <li>■ Utilities</li> </ul>	<p><b>Damien Sauer</b></p> <p>Managing Director Zürich</p> <p><a href="mailto:damien.sauer@nomura.com">damien.sauer@nomura.com</a></p> <ul style="list-style-type: none"> <li>■ 20+ years of experience</li> <li>■ &gt;50 completed transactions</li> <li>■ Energy efficiency</li> <li>■ Power infrastructure</li> <li>■ Renewable energy value chain</li> <li>■ Smart grid</li> </ul>	<p><b>Alex Stein</b></p> <p>Managing Director Zürich</p> <p><a href="mailto:alex.stein@nomura.com">alex.stein@nomura.com</a></p> <ul style="list-style-type: none"> <li>■ 10+ years of experience</li> <li>■ &gt;20 completed transactions</li> <li>■ Energy transition</li> <li>■ Industry 4.0</li> <li>■ Environmental technology and services</li> </ul>	<p><b>Duncan Williams</b></p> <p>Managing Director San Francisco</p> <p><a href="mailto:duncan.williams@nomura.com">duncan.williams@nomura.com</a></p> <ul style="list-style-type: none"> <li>■ 25+ years of experience</li> <li>■ &gt;40 completed transactions</li> <li>■ Advanced Transportation</li> <li>■ Sustainable Food &amp; AgTech</li> <li>■ Industrial IoT &amp; software</li> <li>■ Environmental services</li> <li>■ Water</li> </ul>	



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