



Advanced Transportation Market Update

November 2020

*Electric
Vehicles*



*Mobility-as-
a-Service*



*Autonomous
Infrastructure*



*Data &
Analytics*



*Trucking &
Logistics*



*Non-Road
Transportation*



Advanced Transportation

November 2020 News & Partnerships

Selected Business Updates

Nomura Greentech's Take:

- Incumbent OEMs continue to recognize the need to transition away from ICE vehicles to remain competitive, investing significant capital in electrification efforts and accelerating plans to produce new passenger EV models

- BMW** announced the iX, its new flagship EV, will launch at the end of 2021 with a range of 300 miles and rumored price of \$100,000 ([TechCrunch](#))
- Ford** revealed the E-Transit, a configurable all-electric cargo van with a range of 126 miles, which it plans to launch in 2022 at a starting price of \$45,000 ([TechCrunch](#))
- GM** announced it is adding \$7.0bn to its EV go-to-market strategy, building on the \$20bn it had previously committed, with plans to offer 30 models by 2025 ([CleanTechnica](#))
- Lilium**, a developer of personal eVTOLs, announced its first mobility hub, with plans to connect Florida residents and tourists over a 185 mile radius by 2025 ([VentureBeat](#))
- Nissan** announced it would sell only EVs in China by 2025 and release nine new models in support of China's broader aim to stop selling ICE vehicles by 2035 ([Autoweek](#))
- Proterra**, a developer of zero-emission heavy-duty vehicles, announced plans to build high-power charging stations for large-scale vehicle fleets ([CleanTechnica](#))
- Rivian** began taking pre-orders for three editions of its upcoming electric pickup truck and SUV, which will launch in June 2021 at a starting price of \$67,500 ([TechCrunch](#))
- Tesla** will be added to the S&P 500 index in a single tranche on December 21st, a milestone that will expand its investor base and its status in the public markets ([CNBC](#))
- Volvo** announced it would produce its own EV motors, ensuring it could continue to meet its previous commitment to electrify all new Volvo models ([CleanTechnica](#))

Selected Regulatory Developments

Nomura Greentech's Take:

- The incoming Biden administration provides significant tailwinds across many sustainable infrastructure and technology sectors, especially Advanced Transportation

- Austin, Texas** passed Prop A, a ballot measure to raise property taxes ~4% annually in order to boost the city's \$7.1bn transit plan for reducing emissions ([Smart Cities Dive](#))
- California** passed Prop 22, a ballot measure to classify delivery and ride-hailing drivers as independent contractors rather than employees ([CNBC](#))
- Honda** received approval in Japan to mass-produce vehicles with Level 3 autonomous capabilities beginning in March 2021, making it the first automaker to do so ([TechCrunch](#))
- Massachusetts** passed a measure that forces automakers to equip vehicles with open data platforms enabling consumers to repair their vehicles independently ([TechCrunch](#))
- Michigan** announced plans to rule on a proposed Consumers Energy program of \$12mm aimed at electrifying fleets of cars, trucks and buses in the state ([CleanTechnica](#))
- Motional**, the \$4.0bn Aptiv-Hyundai joint venture and provider of an AV services platform, received approval to test fully driverless vehicles in Nevada ([TechCrunch](#))
- The California Public Utilities Commission** approved two programs that allow permitted companies to charge for shared rides in autonomous vehicles ([TechCrunch](#))
- The SEC** proposed a pilot program to allow tech companies like Uber and Lyft to pay gig workers up to 15% of their annual compensation in equity rather than cash ([VentureBeat](#))
- The U.K.** announced plans to ban sales of ICE vehicles in 2030, part of a wider "green industrial revolution" plan to generate 250,000 jobs and combat climate change ([CNBC](#))
- U.S. President-elect Joe Biden**, plans to remove an EV tax credit cap, restore the credit for U.S.-made EVs and narrow it to buyers earning less than \$250,000 ([CleanTechnica](#))

Selected Partnerships

- Via**, a developer of a transit mobility application, partnered with **May Mobility**, a provider of an autonomous shuttle service, to implement a pilot program in Texas ([VentureBeat](#))
- Honda** announced a partnership with **Tesla** in which Honda will pay a fee to pool its sales in Europe with Tesla's to avoid paying fines on its vehicle emissions ([Electrek](#))
- Luminar Technologies** announced it will supply its LiDAR sensors to **Mobileye**, a subsidiary of Intel and provider of AV systems ([TechCrunch](#))
- Walmart** partnered with **Cruise**, GM's AV subsidiary, to test autonomous grocery delivery and to expand on its existing delivery partnerships with Waymo and Nuro ([TechCrunch](#))
- Volvo** formed a joint venture with **Daimler Truck** to develop, produce and commercialize fuel-cell systems for use in heavy-duty trucks and other applications ([Press Release](#))
- Volvo Penta**, a provider of maritime power systems, announced a pilot program to electrify crew transfer vessels for **Ørsted**, a developer of offshore wind systems ([CleanTechnica](#))

Select Private Company Capital Raises

Nomura Greentech's Take:

- More than \$1.6bn in capital was raised for autonomous solutions in November, indicating that both strategic and financial investors recognize the enormous growth opportunity for AVs amidst recent program approvals and corporate partnerships, despite uncertain timelines for commercialization

- Manbang**, a China-based developer of a truck-hailing platform, raised **\$1.7bn** led by **Softbank**, with participation from **Sequoia Capital**, **Permira** and **Fidelity** ([TechCrunch](#))
- Nuro**, a developer of autonomous delivery bots for grocery delivery, raised **\$500mm** led by **T. Rowe Price**, with participation from **Fidelity**, **Baillie Gifford**, **SoftBank** ([TechCrunch](#))
- TuSimple**, a provider of autonomous trucks will raise up to **\$350mm** led by **VectoIQ**, with participation from **Navistar** and **Volkswagen's Traton Group** ([Forbes](#))
- Tier Mobility**, a provider of shared electric scooters, raised **\$250mm** led by **SoftBank**, with participation from **Mubadala Capital** and **Northzone** ([Press Release](#))
- Pony.ai**, a China-based AV company, raised **\$267mm** led by **TIP**, with participation from **Fidelity China Special Situation**, **5Y Capital** and **ClearVue Partners** ([TechCrunch](#))
- Cars 24**, an India-based car buying platform, raised **\$200mm** led by **DST Global**, with participation from **Exor Seeds** and **Unbound** ([Firstpost](#))
- Gojek**, an Indonesia-based developer of an on-demand mobile ride-hailing app, raised **\$150mm** from **Telkomsel** ([TechCrunch](#))
- Inceptio Technology**, a China-based developer of autonomous trucks, raised **\$120mm** led by **CATL**, with participation from **G7** and **Nio Capital** ([Reuters](#))
- Xpressbees**, a developer of a same-day delivery e-commerce logistics platform, raised **\$110mm** led by **Investcorp**, **Norwest Venture Partners** and **Gaja Capital** ([TechCrunch](#))
- Loadsmart**, a developer of an on-demand marketplace for shipping and freight, raised **\$90mm** led by **BlackRock** and **Chromo Invest** ([TechCrunch](#))
- Ather Energy**, an India-based developer of electric two-wheelers, raised **\$35mm** led by Flipkart founder **Sachin Bansal**, with participation from **Hero MotoCorp** ([DealStreetAsia](#))
- Gatik**, a provider of autonomous vehicles for B2B short-haul logistics, raised **\$25mm** led by **Wittington Ventures** and **Innovation Endeavors** ([Venture Beat](#))
- Onfleet**, a San Francisco-based developer of last mile delivery management software, raised **\$14mm** from **Kennet Partners** ([Press Release](#))
- Envoy Technologies**, a provider of EV sharing services, raised **\$11mm** led by **Building Ventures** and **Shell Ventures**, with participation from **DENSO** ([Press Release](#))

Selected Public Equity Deals

- Arrival**, a U.K.-based manufacturer of electric vans and buses, announced plans to merge with **CIIG Merger Corp.**, a SPAC¹, at a valuation of **\$5.4bn** ([TechCrunch](#))
- Aeva**, a developer of autonomous vehicle sensors, announced plans to merge with **InterPrivate Acquisition Corp.**, a SPAC¹, at a valuation of **\$1.8bn** ([Business Insider](#))
- Lion Electric**, a manufacturer of electric buses and trucks, announced plans to merge with **Northern Genesis Acquisition Corp.**, a SPAC¹, at a valuation of **\$1.5bn** ([Press Release](#))
- Metromile**, a provider of a platform for pay-per-mile insurance, announced plans to merge with **INSU Acquisition Corp II**, a SPAC¹, at a valuation of **\$956mm** ([Press Release](#))
- Nuvve**, a provider of electric-vehicle-to-grid (V2G) technology, announced plans to merge with **Newborn Acquisition Corp.**, a SPAC¹, at a valuation of **\$132mm** ([Press Release](#))
- Plug Power** (NASDAQ: PLUG), a provider of hydrogen engines and fueling solutions, raised **\$1.0bn** in a follow on equity offering ([Press Release](#))

Selected Mergers & Acquisitions

- Traton**, a Volkswagen subsidiary focused on commercial vehicles, acquired the remaining shares of **Navistar**, a provider of trucks and vehicle engines, for **\$3.7bn** ([Press Release](#))
- V99**, a corporation led by HP Jin, co-founder of Telenav, acquired **Telenav** (NASDAQ: TNAV), a provider of connected car services, for **\$241mm** ([Global Legal Chronicle](#))
- Descartes Systems**, a developer of shipping communication software, acquired **ShipTrack**, a developer of Excel add-ins to track shipments, for **\$19mm** ([Press Release](#))
- SPI Energy**, a provider of EV solutions, acquired **Phoenix Motorcars**, a provider of EVs for fleet and transit markets, for **\$27mm** ([Press Release](#))
- Total** acquired **Charging Solutions**, a subsidiary of **Digital Energy Solutions** and provider of EV charging infrastructure, for an undisclosed amount ([Press Release](#))

Source: Nomura Greentech Analysis, Public Disclosures, Pitchbook.

1. The special purpose acquisition vehicles (SPACs), **InterPrivate Acquisition Corp.** (NYSE: IPV), **CIIG Merger Corp.** (NASDAQ: CIIC), **Northern Genesis Acquisition Corp.** (NYSE: NAG), **INSU Acquisition Corp. II** (NYSE: INAQ) and **Newborn Acquisition Corp.** (NYSE: NBAC) announced they will acquire **Aeva**, **Arrival**, **Lion Electric**, **Metromile** and **Nuvve** respectively. These transactions have not yet closed. Upon close, these companies will become publicly listed.

Capital Raises

Date	Company	Amount Raised (\$mm)	Disclosed Investors	Company Description
Nov. 25	TuSimple	\$350	Navistar, Traton Group, VectoIQ	California-based developer of autonomous trucks
Nov. 25	Cars24	\$200	DST Global, EXOR Seeds, Moore Strategic Ventures, Unbound	India-based car buying platform
Nov. 24	Manbang	\$1,700	Fidelity International, GGV Capital, Hillhouse Capital Group, Lightspeed China Partners, Permira, Sequoia Capital China, SoftBank Investment Advisers, Tencent, Yunfeng Capital	China-based developer of a truck-hailing platform
Nov. 24	Plug Power	\$1,000	Public market offering	New York-based provider of hydrogen engines and fueling solutions
Nov. 24	Dija	\$20	Blossom Capital	U.K.-based developer of a fresh food delivery services platform
Nov. 23	Gatik	\$25	AngelPad, Dynamo Ventures, FM Capital, Fontinalis Partners, Innovation Endeavors, Intact Ventures, Wittington Ventures	California-based provider of autonomous vehicles for B2B short-haul logistics
Nov. 20	Loadsmart	\$90	Blackrock Innovation Capital Group, Bramalea Partners, Chromo Invest, Maersk Growth, Perry Capital Partners, TFI International	New York-based developer of an on-demand marketplace for shipping and freight
Nov. 18	Fenix	\$4	Maniv Mobility	U.A.E.-based operator of a micromobility platform
Nov. 17	Gojek	\$150	Telkomsel	Indonesia-based developer of an on-demand mobile ride-hailing app
Nov. 16	Ride Vision	\$7	Metagal, Mobilian Ventures, OurCrowd, YL Ventures	Israel-based developer of collision-aversion technology for motorcycles
Nov. 12	Envoy Technologies	\$11	Building Ventures, DENSO, Goodyear Ventures, GroundBreak Ventures, LA Cleantech Incubator Impact Fund, Shell Ventures	California-based provider of EV sharing services
Nov. 11	Sense Photonics	\$6	Acadia Woods Partners, Congruent Ventures, Hemi Ventures, IDEA Fund Partners, IPD Capital, Prelude Ventures, Samsung Venture Investment, SGINnovate, Shell Ventures	North Carolina-based developer of AV technology
Nov. 10	Tier Mobility	\$250	Goodwater Capital, Mubdala Capital, Northzone, Novator, RTP Global, SoftBank, White Star Capital	Germany-based provider of shared electric scooters
Nov. 9	Nuro	\$500	Baillie Gifford, Fidelity Management & Research, Greylock Partners, SoftBank Investment Advisers, T. Rowe Price	California-based developer of autonomous delivery bots for grocery delivery
Nov. 9	Inceptio Technology	\$120	CATL, G7, GLP, NIO Capital	China-based developer of autonomous trucks
Nov. 9	Xpressbees	\$30	Gaja Capital Partners, Investcorp Bank, Norwest Venture Partners	India-based developer of a same-day delivery e-commerce logistics platform
Nov. 7	Ather Energy	\$35	Hero MotoCorp, Sachin Bansal	India-based developer of electric two-wheelers
Nov. 6	Pony.ai	\$267	5Y Capital, ClearVue Partners, Fidelity China Special Situations, TIP	China-based developer of AV technology
Nov. 5	Provizio	\$6	Act Venture Capital, David Moloney, Robert Hambrick, Sean Mitchell	Ireland-based developer of AI-based accident prevention technology
Nov. 3	Logisly	\$6	Monk's Hill Ventures	Indonesia-based developer of a B2B tech-enabled logistics platform
Nov. 2	Onfleet	\$14	Kennet Partners	California-based developer of last mile delivery management software

M&A

Date	Target	Acquiror	EV (\$mm)	Revenue	EV / EBITDA	Target Description
Nov. 13	Phoenix Motorcars	SPI Energy	\$27	ND	ND	California-based provider of EVs for fleet and transit markets
Nov. 12	Charging Solutions	Total	ND	ND	ND	U.K.-based provider of EV charging infrastructure
Nov. 7	Navistar	Traton	\$3,700	0.5x	6.5x	Illinois-based provider of trucks and vehicle engines
Nov. 6	Telenav	V99	\$241	1.0x	24.6x	California-based provider of connected car and location-based services
Nov. 6	ShipTrack	Descartes Systems	\$19	ND	ND	Canada-based developer of Excel add-ins to track shipments

Special Purpose Acquisition Corporation (SPAC¹) Transactions

Date	Company	SPAC	Offer Price	Implied EV (\$mm)	Revenue	EV / 2023E EBITDA	Company Description
Nov. 30	Lion Electric	Northern Genesis Acquisition Corp	ND	\$1,505	0.9x	5.1x	Canada-based manufacturer of electric buses and trucks
Nov. 24	Metromile	INSU Acquisition Corp II	ND	\$956	28.4x	NM	California-based provider of a digital platform for pay-per-mile insurance
Nov. 18	Arrival	CIIG Merger Corp	ND	\$5,390	1.1x	4.8x	U.K.-based manufacturer of electric vans and buses
Nov. 12	Nuvve	Newborn Acquisition Corp	ND	\$132	ND	ND	California-based provider of electric-vehicle-to-grid (V2G) technology
Nov. 2	Aeva	InterPrivate Acquisition Corp	ND	\$1,803	24.0x	NM	California-based developer of autonomous vehicle sensors

Source: FactSet, PitchBook, Public Disclosures.

1. Upon closing on the transactions, the companies will become publicly listed.

Advanced Transportation Trading Comparables

Company	Price as of	% 52-Week	Market	Firm	EV/Revenue		EV/EBITDA		P / E	
	11/30/20	High	Cap (\$mm)	Value (\$mm)	2020E	2021E	2020E	2021E	2020E	2021E
Automotive Companies										
Tesla	\$ 567.6	96.9%	\$627,198	\$629,125	20.4x	14.0x	NM	NM	NM	NM
Toyota	¥ 6,999	88.4%	\$187,667	\$330,924	1.3x	1.2x	12.7x	11.9x	12.8x	11.0x
Volkswagen	€ 155.50	84.9%	\$93,245	\$274,768	1.0x	0.9x	7.7x	6.5x	16.7x	6.9x
Daimler	€ 56.45	97.4%	\$72,239	\$212,234	1.2x	1.1x	13.6x	10.1x	22.5x	9.2x
BMW	€ 73.04	95.3%	\$57,565	\$166,879	1.4x	1.4x	13.1x	10.6x	13.6x	8.7x
Ford	\$ 9.08	95.2%	\$36,365	\$143,690	1.1x	0.9x	24.8x	12.1x	NM	8.3x
General Motors	\$ 43.84	94.4%	\$63,086	\$138,904	1.1x	1.0x	11.0x	9.2x	9.2x	7.2x
Honda	¥ 2,872	89.1%	\$47,548	\$87,667	0.7x	0.7x	8.1x	8.9x	11.6x	9.3x
Hyundai	₩ 181,500	97.1%	\$42,688	\$86,409	0.9x	0.8x	13.8x	8.7x	23.3x	8.2x
BYD	HK\$ 182.10	91.1%	\$64,082	\$73,870	3.3x	2.8x	25.0x	23.3x	NM	NM
Nissan	¥ 493	71.6%	\$18,482	\$67,154	0.8x	0.8x	31.6x	22.7x	NM	NM
NIO	\$ 50.53	91.2%	\$61,172	\$60,208	24.8x	12.1x	NM	NM	NM	NM
SAIC Motor	¥ 26.51	93.3%	\$46,951	\$56,794	0.5x	0.5x	14.3x	10.9x	13.4x	10.7x
Renault	€ 33.36	75.9%	\$10,812	\$45,339	0.9x	0.8x	14.1x	7.3x	NM	24.6x
Li Auto	\$ 35.99	81.9%	\$30,100	\$27,548	20.6x	10.8x	NM	NM	NM	NM
Suzuki	¥ 5,604	98.5%	\$26,087	\$26,341	0.9x	0.8x	8.5x	7.4x	23.7x	19.3x
Geely	HK\$ 21.55	90.0%	\$25,843	\$22,539	1.6x	1.4x	12.5x	9.6x	24.4x	17.6x
Xpeng	\$ 58.76	81.4%	\$25,036	\$22,356	27.9x	10.7x	NM	NM	NM	NM
Fiat Chrysler	€ 13.07	95.7%	\$24,687	\$21,744	0.2x	0.2x	2.3x	1.6x	38.2x	5.9x
Peugeot	€ 19.77	88.2%	\$22,310	\$19,054	0.3x	0.2x	2.6x	1.9x	11.1x	5.6x
Tata Motors	₹ 180.25	90.0%	\$8,818	\$18,692	0.6x	0.5x	5.7x	4.3x	NM	NM
KIA ¹	₩ 57,800	96.7%	\$20,942	\$17,244	0.3x	0.3x	4.6x	3.2x	16.1x	6.9x
Arrival ²	\$ 22.00	81.0%	\$13,393	\$12,724	NM	NM	NM	NM	NM	NM
Dongfeng Motor ¹	HK\$ 7.98	90.7%	\$8,869	\$11,968	0.8x	0.7x	NM	43.2x	6.2x	5.0x
Subaru	¥ 2,073	70.9%	\$15,245	\$9,927	0.3x	0.3x	3.8x	3.5x	15.6x	11.7x
FAW Car Group	¥ 13	84.6%	\$8,985	\$5,920	0.4x	0.4x	7.1x	5.5x	13.4x	11.7x
Fisker	\$ 19.38	89.7%	\$5,915	\$4,875	NM	NM	NM	NM	NM	19.0x
Guangzhou Automobile	HK\$ 8.34	83.7%	\$11,014	\$4,781	0.5x	0.5x	30.7x	15.2x	11.0x	8.2x
Mazda	¥ 617	60.7%	\$3,726	\$3,686	0.1x	0.1x	4.8x	3.6x	NM	NM
Lordstown	\$ 24.60	78.3%	\$4,223	\$3,548	NM	30.1x	NM	NM	NM	18.4x
Canoo ²	\$ 13.00	100.0%	\$3,219	\$2,612	NM	21.8x	NM	NM	NM	NM
Mitsubishi	¥ 188	37.9%	\$2,683	\$2,306	0.1x	0.1x	NM	5.5x	NM	NM
XL Fleet ²	\$ 14.04	96.2%	\$2,049	\$1,699	NM	22.6x	NM	NM	NM	NM
Mean		88.9%			4.1x	4.5x	12.4x	10.3x	16.6x	11.1x
Median		90.0%			0.9x	0.8x	11.8x	8.8x	13.6x	9.2x
Heavy Duty Commercial Vehicle OEMs										
Daimler	€ 56.45	97.4%	\$72,239	\$212,234	1.2x	1.1x	13.6x	10.1x	22.5x	9.2x
Volvo	KR 194.80	95.8%	\$46,331	\$55,087	1.4x	1.3x	11.2x	8.7x	22.3x	14.7x
PACCAR	\$ 87.06	94.0%	\$30,262	\$36,116	2.1x	1.7x	21.8x	14.8x	23.3x	15.9x
Traton SE	€ 21.95	86.6%	\$13,125	\$22,236	0.9x	0.7x	14.1x	6.8x	NM	11.5x
MAN SE	€ 44.10	84.0%	\$7,757	\$10,111	0.6x	0.6x	5.9x	5.6x	NM	NM
Isuzu	¥ 1,018	73.0%	\$7,200	\$9,252	0.5x	0.5x	6.1x	5.6x	18.9x	12.7x
Nikola	\$ 20.41	25.6%	\$8,106	\$7,193	NM	NM	NM	NM	NM	NM
Lion Electric ²	\$ 14.00	100.0%	\$2,742	\$2,299	NM	NM	NM	NM	NM	NM
Mean		82.1%			1.1x	1.0x	12.1x	8.6x	21.7x	12.8x
Median		90.3%			1.0x	0.9x	12.4x	7.8x	22.4x	12.7x
Tier 1 Suppliers										
Denso	¥ 4,929	93.1%	\$36,628	\$39,036	0.8x	0.8x	9.3x	6.7x	43.7x	17.0x
Continental	€ 114.20	94.5%	\$27,322	\$33,353	0.7x	0.7x	8.1x	5.3x	NM	13.6x
Aptiv	\$ 118.70	97.4%	\$32,094	\$32,406	2.6x	2.1x	21.0x	13.7x	NM	29.3x
Bridgestone	¥ 3,644	82.4%	\$24,606	\$28,465	1.0x	0.9x	7.3x	5.6x	NM	13.3x
Michelin	€ 104.45	92.6%	\$22,303	\$28,248	1.1x	1.0x	7.1x	5.5x	24.0x	12.0x
Knorr-Bremse	€ 107.28	98.5%	\$20,687	\$22,109	3.0x	2.7x	17.2x	14.4x	36.0x	27.6x
Magna	CS 79.64	96.7%	\$18,400	\$21,812	0.7x	0.6x	8.1x	5.6x	20.1x	9.9x
QuantumScape	\$ 47.00	100.0%	\$21,037	\$19,882	NM	NM	NM	NM	NM	NM
Valeo	€ 32.52	91.2%	\$9,307	\$14,298	0.7x	0.6x	9.0x	5.0x	NM	20.7x
Faurecia	€ 41.70	82.3%	\$6,829	\$11,469	0.7x	0.6x	6.4x	4.3x	NM	11.8x
Lear	\$ 142.95	95.1%	\$8,624	\$10,498	0.6x	0.5x	9.4x	5.8x	28.7x	10.2x
Goodyear	\$ 10.42	98.2%	\$2,438	\$8,932	0.7x	0.6x	15.5x	6.4x	NM	17.4x
BorgWarner	\$ 38.85	86.0%	\$8,054	\$8,625	0.9x	0.6x	6.3x	4.2x	16.3x	10.1x
Gentex	\$ 32.60	98.1%	\$7,916	\$7,491	4.6x	3.9x	15.3x	11.6x	24.0x	16.7x
Luminar Technologies ³	\$ 18.40	100.0%	\$6,267	\$5,779	NM	NM	NM	NM	NM	NM
Dana	\$ 16.84	88.8%	\$2,445	\$4,598	0.7x	0.6x	8.0x	5.2x	34.4x	8.1x
American Axle & Manufacturing Holdings	\$ 7.96	72.1%	\$902	\$3,949	0.9x	0.7x	5.9x	4.6x	NM	7.3x
Visteon	\$ 120.85	97.5%	\$3,384	\$3,539	1.4x	1.1x	18.3x	12.1x	NM	26.9x
Hyllion	\$ 20.08	36.0%	\$3,410	\$2,891	0.2x	0.0x	NM	0.0x	NM	NM
Nexteer	HK\$ 8.23	94.6%	\$2,662	\$2,626	0.9x	0.7x	7.6x	5.1x	24.8x	11.8x
Velodyne	\$ 15.92	52.3%	\$2,746	\$2,556	25.1x	16.8x	NM	NM	NM	NM
Romeo Systems ²	\$ 17.75	100.0%	\$2,445	\$2,104	NM	15.0x	NM	NM	NM	NM
Aeva ²	\$ 11.05	100.0%	\$2,354	\$2,026	NM	NM	NM	NM	NM	NM
Gentherm	\$ 56.86	99.8%	\$1,874	\$1,861	2.1x	1.9x	15.2x	11.5x	31.8x	22.2x
Veoneer	\$ 19.93	94.1%	\$2,224	\$1,632	1.2x	1.0x	NM	NM	NM	NM
Stoneridge	\$ 26.86	83.9%	\$731	\$817	1.3x	1.1x	24.0x	11.2x	NM	31.6x
Advent Technologies ²	\$ 13.00	100.0%	\$615	\$632	NM	48.6x	NM	NM	NM	NM
Mean		88.0%			2.4x	4.3x	11.5x	7.2x	28.4x	16.7x
Median		93.8%			0.9x	0.8x	9.0x	5.6x	26.7x	13.6x

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. Firm value excludes investments in unconsolidated subsidiaries.
2. Upon closing on the transactions, the companies will become publicly listed. For transactions which have not yet closed, the share price reflects that of the acquiring SPAC.
3. Luminar Technologies announced transaction close on 12/02/2020.

Advanced Transportation Trading Comparables (cont.)

Company	Price as of	% 52-Week	Market	Firm	EV/Revenue		EV/EBITDA		P / E	
	11/30/20	High	Cap (\$mm)	Value (\$mm)	2020E	2021E	2020E	2021E	2020E	2021E
Mobility-as-a-Service										
Uber	\$ 49.66	96.9%	\$84,422	\$86,890	6.9x	5.0x	NM	NM	NM	NM
Lyft	\$ 38.17	70.8%	\$12,006	\$10,575	4.5x	3.2x	NM	NM	NM	NM
Mean		83.8%			5.7x	4.1x	NM	NM	NM	NM
Median		83.8%			5.7x	4.1x	NM	NM	NM	NM
Autonomous Driving Chip Makers										
Nvidia	\$ 536.06	92.0%	\$337,718	\$335,260	20.9x	17.2x	45.2x	37.0x	NM	47.0x
Intel	\$ 48.35	70.6%	\$203,602	\$218,714	2.9x	3.1x	6.3x	6.9x	9.9x	10.5x
Qualcomm	\$ 147.17	98.7%	\$168,951	\$173,937	6.9x	5.7x	20.6x	15.7x	28.6x	20.4x
Texas Instruments	\$ 161.25	100.0%	\$149,801	\$151,053	10.8x	10.1x	23.3x	21.3x	29.4x	28.1x
Advanced Micro Devices	\$ 92.66	100.0%	\$112,582	\$111,325	11.7x	9.3x	NM	42.4x	NM	NM
Analog Devices	\$ 139.08	100.0%	\$51,783	\$56,200	9.9x	8.9x	23.0x	20.1x	37.8x	24.1x
Infineon	€ 29.52	99.7%	\$45,976	\$52,215	4.8x	4.0x	21.3x	14.6x	NM	28.5x
NXP	\$ 158.42	99.7%	\$44,273	\$50,483	5.9x	5.2x	18.7x	14.8x	26.4x	19.7x
STMicro	€ 32.82	98.8%	\$36,177	\$35,583	3.6x	3.2x	16.7x	13.1x	36.4x	24.5x
Renesas	¥ 928	97.4%	\$15,628	\$20,707	3.0x	2.8x	10.2x	9.7x	30.7x	23.9x
ON Semi	\$ 28.75	100.0%	\$12,026	\$14,783	2.9x	2.6x	14.7x	11.5x	37.8x	21.5x
Mean		96.1%			7.6x	6.6x	20.0x	18.8x	29.6x	24.8x
Median		99.7%			5.9x	5.2x	19.6x	14.8x	30.0x	24.0x
Intelligent Transport / ITS / Smart Tolling										
Atlantia	€ 15.28	66.3%	\$14,952	\$63,825	6.4x	5.2x	12.4x	8.4x	NM	16.0x
Roper Technologies	\$ 427.00	94.2%	\$45,219	\$54,621	9.8x	8.7x	27.6x	23.6x	33.8x	29.1x
FLIR Systems	\$ 38.24	65.0%	\$5,036	\$5,547	2.9x	2.9x	12.1x	12.1x	16.5x	16.1x
LS Corp	₩ 63,200	97.7%	\$1,586	\$4,222	0.5x	0.4x	6.7x	6.2x	14.7x	9.8x
Autostrada	€ 20.90	73.6%	\$3,309	\$3,887	1.6x	1.4x	5.2x	3.8x	17.4x	11.0x
Verra Mobility	\$ 12.20	71.6%	\$1,983	\$2,728	7.1x	6.6x	15.1x	13.3x	24.4x	17.9x
Cubic Corporation	\$ 58.56	83.8%	\$1,835	\$2,601	1.7x	1.6x	14.9x	14.2x	NM	17.2x
Conduent	\$ 4.22	62.1%	\$883	\$2,471	0.6x	0.6x	5.2x	5.5x	6.9x	8.3x
Vaisala	€ 37.20	91.5%	\$1,611	\$1,644	3.6x	3.5x	20.2x	19.6x	38.9x	34.8x
INIT Innovation in Traffic Systems	€ 31.10	82.7%	\$371	\$396	1.8x	1.6x	12.0x	10.4x	24.9x	21.3x
Kapsch TrafficCom	€ 12.50	41.1%	\$194	\$367	0.5x	0.6x	NM	14.6x	NM	NM
Iteris	\$ 4.88	83.7%	\$205	\$180	1.6x	1.4x	29.7x	17.3x	26.9x	27.5x
Q-Free	NOK 4.86	70.9%	\$49	\$75	0.8x	0.7x	8.2x	6.4x	NM	34.7x
Image Sensing Systems	\$ 4.53	76.6%	\$24	\$18	1.2x	1.2x	6.7x	6.6x	NM	NM
Mean		75.7%			2.9x	2.6x	13.5x	11.6x	22.7x	20.3x
Median		73.6%			1.7x	1.5x	12.1x	11.3x	24.4x	17.6x
Telematics										
Descartes Systems	\$ 59.29	95.0%	\$5,084	\$5,016	14.7x	13.4x	37.0x	32.8x	NM	NM
Inseego	\$ 9.93	67.4%	\$973	\$1,104	3.5x	3.0x	NM	27.0x	NM	NM
TomTom	€ 6.85	64.0%	\$1,400	\$1,026	1.6x	1.5x	NM	NM	NM	NM
Orbcomm	\$ 5.72	88.7%	\$446	\$637	2.6x	2.4x	11.8x	9.9x	NM	NM
CalAmp	\$ 9.12	76.9%	\$312	\$441	1.3x	1.3x	18.2x	10.9x	NM	23.8x
Ituran	\$ 18.39	70.0%	\$383	\$397	1.6x	1.4x	8.6x	5.3x	12.7x	11.2x
Quartix	£ 3.86	87.5%	\$248	\$236	6.8x	7.1x	22.4x	29.4x	29.5x	38.2x
Mix Telematics	R 5.79	67.2%	\$209	\$178	1.5x	1.5x	5.8x	6.3x	28.5x	27.3x
Quarterhill	C\$ 2.66	94.3%	\$238	\$138	1.1x	1.4x	4.3x	8.2x	21.3x	19.0x
TeleNav ¹	\$ 4.75	75.2%	\$227	\$134	0.5x	0.5x	10.0x	6.4x	37.9x	NM
Mean		78.6%			3.5x	3.3x	14.7x	15.1x	26.0x	23.9x
Median		76.0%			1.6x	1.5x	10.9x	9.9x	28.5x	23.8x
Logistics										
UPS	\$ 171.07	96.9%	\$149,173	\$168,697	2.0x	1.9x	15.7x	14.0x	22.3x	20.1x
FedEX	\$ 286.58	98.3%	\$5,731	\$106,446	1.4x	1.4x	13.3x	11.1x	25.5x	17.4x
Deutsche Post	€ 40.50	96.5%	\$61,606	\$78,705	1.0x	1.0x	7.8x	7.2x	17.6x	14.9x
AP Moeller Maersk	DKK 12,735	100.0%	\$39,788	\$49,733	1.3x	1.2x	5.9x	5.9x	14.4x	14.1x
Hapag Lloyd	€ 65.20	34.9%	\$13,711	\$19,491	1.3x	1.3x	6.6x	6.7x	15.4x	16.6x
XPO Logistics	\$ 106.68	100.0%	\$10,881	\$17,932	1.1x	1.1x	13.3x	10.4x	NM	28.6x
J.B. Hunt	\$ 135.28	94.7%	\$14,448	\$15,432	1.6x	1.5x	12.6x	10.7x	29.1x	22.6x
C.H. Robinson	\$ 93.97	88.5%	\$12,886	\$14,132	0.9x	0.9x	18.9x	15.9x	26.1x	22.4x
Knight-Swift Trucking	\$ 41.29	88.2%	\$7,062	\$7,545	1.6x	1.5x	6.9x	6.1x	15.3x	12.5x
Schneider Trucking	\$ 20.90	75.3%	\$3,714	\$3,207	0.7x	0.7x	5.5x	4.7x	17.4x	13.9x
Werner	\$ 39.99	85.0%	\$2,777	\$2,923	1.2x	1.1x	6.0x	5.3x	16.0x	13.3x
Mean		87.1%			1.3x	1.2x	10.2x	8.9x	19.9x	17.9x
Median		94.7%			1.3x	1.2x	7.8x	7.2x	17.5x	16.6x
Infrastructure										
AT&T	\$ 28.75	73.0%	\$206,224	\$397,997	2.3x	2.3x	7.2x	7.1x	9.1x	8.9x
Verizon	\$ 60.41	97.3%	\$250,218	\$378,295	3.0x	2.8x	8.1x	7.8x	12.4x	12.1x
T-Mobile	\$ 132.94	100.0%	\$166,148	\$262,164	3.8x	3.4x	10.8x	9.8x	NM	NM
Cisco Systems	\$ 43.02	86.2%	\$182,577	\$166,758	3.4x	3.4x	10.0x	9.4x	15.1x	13.3x
Hitachi	¥ 3,966	84.8%	\$36,782	\$55,462	0.7x	0.6x	6.3x	5.8x	13.0x	9.8x
ChargePoint ²	\$ 33.61	90.5%	\$11,623	\$10,975	NM	NM	NM	NM	NM	NM
Toshiba	¥ 2,922	73.4%	\$12,710	\$10,159	0.3x	0.3x	5.2x	4.3x	43.0x	9.8x
Blink Charging	\$ 25.25	75.1%	\$10,502	\$9,797	NM	36.5x	NM	NM	NM	NM
Nuvve ²	\$ 14.89	66.9%	\$315	\$245	NM	NM	NM	NM	NM	NM
Mean		83.0%			2.3x	7.0x	7.9x	7.4x	18.5x	10.8x
Median		84.8%			2.6x	2.8x	7.7x	7.4x	13.0x	9.8x

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. TeleNav is under offer to be taken private by V99.

2. Upon closing on the transactions, the companies will become publicly listed. For transactions which have not yet closed, the share price reflects that of the acquiring SPAC.

Advanced Transportation Trading Comparables (cont.)

Company	Price as of	% 52-Week	Market	Implied	EV/Revenue		EV/EBITDA	
	11/30/20	High	Cap (\$mm)	EV (\$mm)	2023E	2024E	2023E	2024E
Recent SPACs								
QuantumScape	\$ 47.00	100.0%	\$21,037	\$19,882	NM	NM	NM	NM
Arrival ¹	\$ 22.00	81.0%	\$13,393	\$12,724	47.1x	16.3x	NM	3.9x
ChargePoint ¹	\$ 33.61	90.5%	\$11,623	\$10,975	31.7x	18.2x	NM	NM
Nikola	\$ 20.41	25.6%	\$8,106	\$7,193	6.8x	2.9x	NM	NM
Luminar Technologies ²	\$ 18.40	100.0%	\$6,267	\$5,779	46.6x	13.8x	NM	45.9x
Fisker	\$ 19.38	89.7%	\$5,915	\$4,875	1.5x	0.5x	NM	11.0x
Lordstown	\$ 24.60	78.3%	\$4,223	\$3,548	1.0x	0.6x	11.9x	5.9x
Hyllion	\$ 20.08	36.0%	\$3,410	\$2,891	0.0x	0.0x	0.0x	0.0x
Canoo ¹	\$ 13.00	100.0%	\$3,219	\$2,612	3.1x	1.8x	NM	13.9x
Velodyne	\$ 15.92	52.3%	\$2,746	\$2,556	6.2x	3.7x	45.1x	17.2x
Lion Electric ¹	\$ 14.00	100.0%	\$2,742	\$2,299	NM	NM	NM	3.3x
Romeo Systems ¹	\$ 17.75	100.0%	\$2,445	\$2,104	2.7x	1.8x	23.1x	10.7x
Aeva ¹	\$ 11.05	100.0%	\$2,354	\$2,026	27.0x	7.1x	NM	NM
XL Fleet ¹	\$ 14.04	96.2%	\$2,049	\$1,699	2.6x	1.3x	14.5x	5.5x
Metromile ¹	\$ 12.80	94.0%	\$1,603	\$1,306	2.4x	1.4x	NM	13.5x
CarLotz	\$ 10.20	97.3%	\$1,171	\$850	0.5x	0.3x	9.4x	5.5x
Eos	\$ 15.07	97.5%	\$861	\$659	0.9x	0.7x	11.3x	4.4x
Advent Technologies ¹	\$ 13.00	100.0%	\$615	\$632	10.5x	5.1x	NM	NM
Shift Technologies	\$ 9.39	67.2%	\$686	\$379	0.2x	0.1x	NM	NM
Nuvve ¹	\$ 14.89	66.9%	\$315	\$245	NM	NM	NM	NM
Mean		79.4%			11.2x	4.5x	16.5x	10.8x
Median		90.5%			2.7x	1.8x	11.9x	5.9x

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. Upon closing on the transactions, the companies will become publicly listed. For transactions which have not yet closed, the share price reflects that of the acquiring SPAC.
2. Luminar Technologies announced transaction close on 12/02/2020.

Nomura Greentech Offices



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 November 30th, 2020.

Highly Experienced Senior Leadership Supported by a Global Team of Professionals

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

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