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The Future of E-Mobility and Energy Transition

State of The Advanced EV and
Autonomous Mobility Industry 2021

JANUARY 13TH, 2021

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2021



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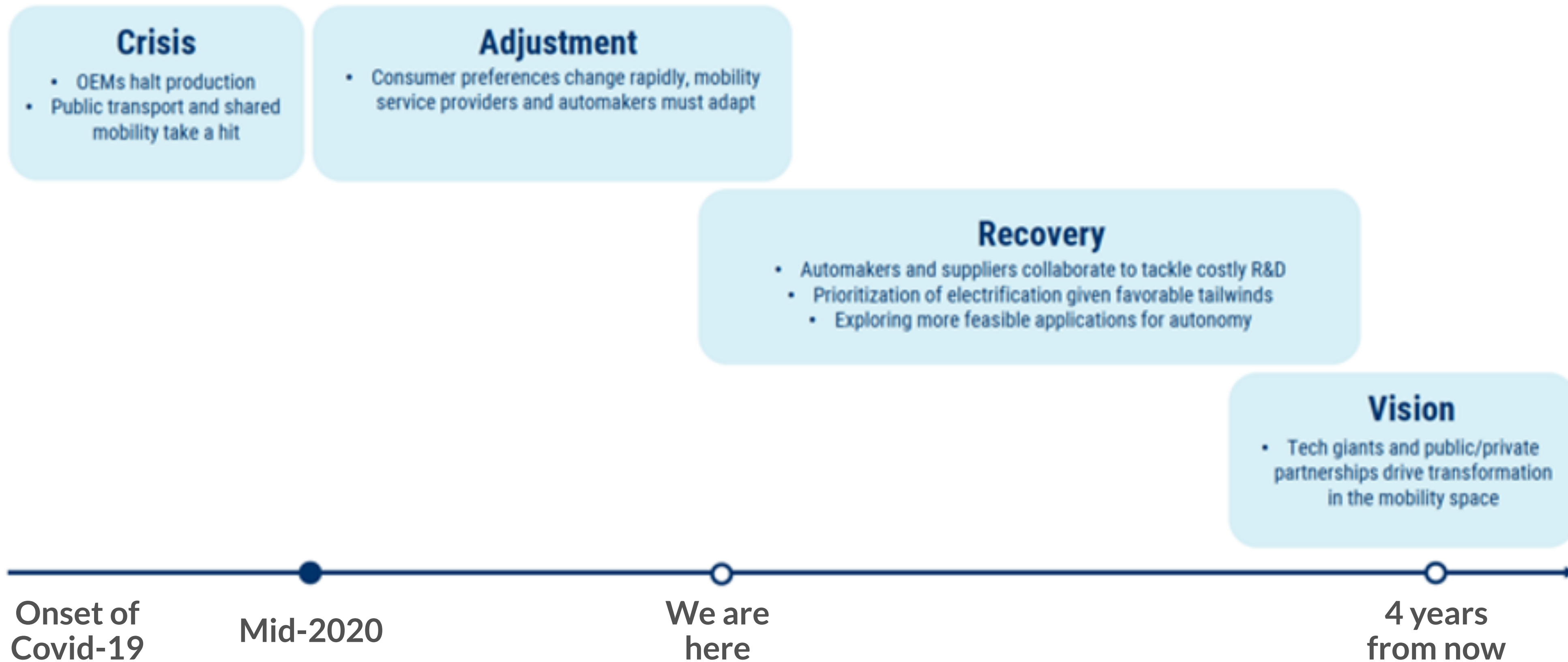
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The Pandemic's Impact on the Auto Industry

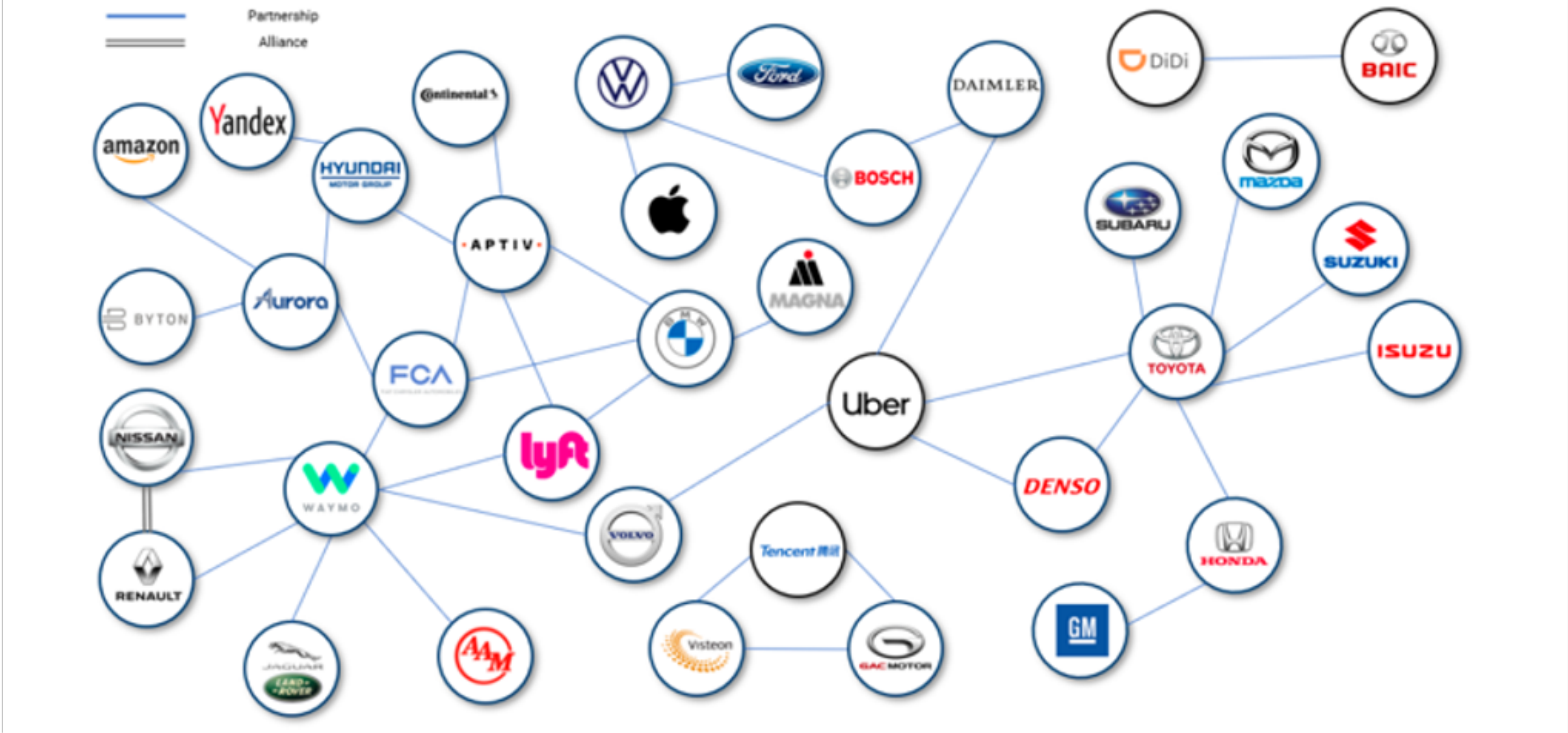


4 stages: Emerging trends based on each state



Industry Consolidation is Accelerating

Auto giants are partnering with tech firms and mobility service providers

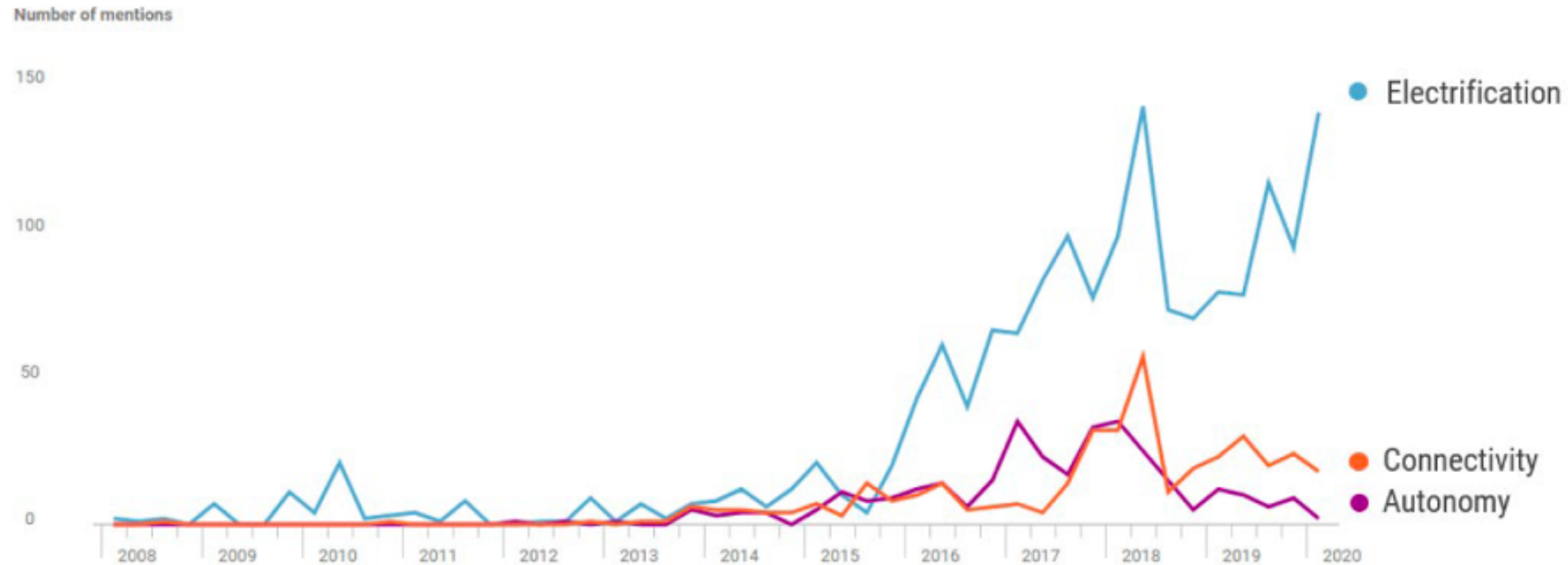


Source: CBInsights
https://www.motorauthority.com/news/1127984_audi-gives-up-on-level-3-autonomous-driver-assist-system-in-a8
<https://techcrunch.com/2018/06/20/automakers-electric-autonomous-spending/>
<https://techcrunch.com/2020/08/05/chargepoint-raises-127m-as-electric-vehicle-adoption-grows-among-fleet-operators/>

*Not an exhaustive list

OEMs Shift Priorities Towards Electrification

Mentions of terms related to electrification, autonomy, and connectivity on Tier 1 supplier earnings calls



¹Terms include "electrification," "EV," "electric vehicle"; ²Terms include "autonomous," "AV," "self-driving," "driverless"; ³Terms include "connected," "connectivity"; ⁴Auto suppliers include American Axle & Manufacturing, Autoliv, Aptiv, BorgWarner, Continental, Cummins, Faurecia, Infineon, Lear Corporation, Magna International, Visteon

Tech Companies Could Shape Future of Transportation

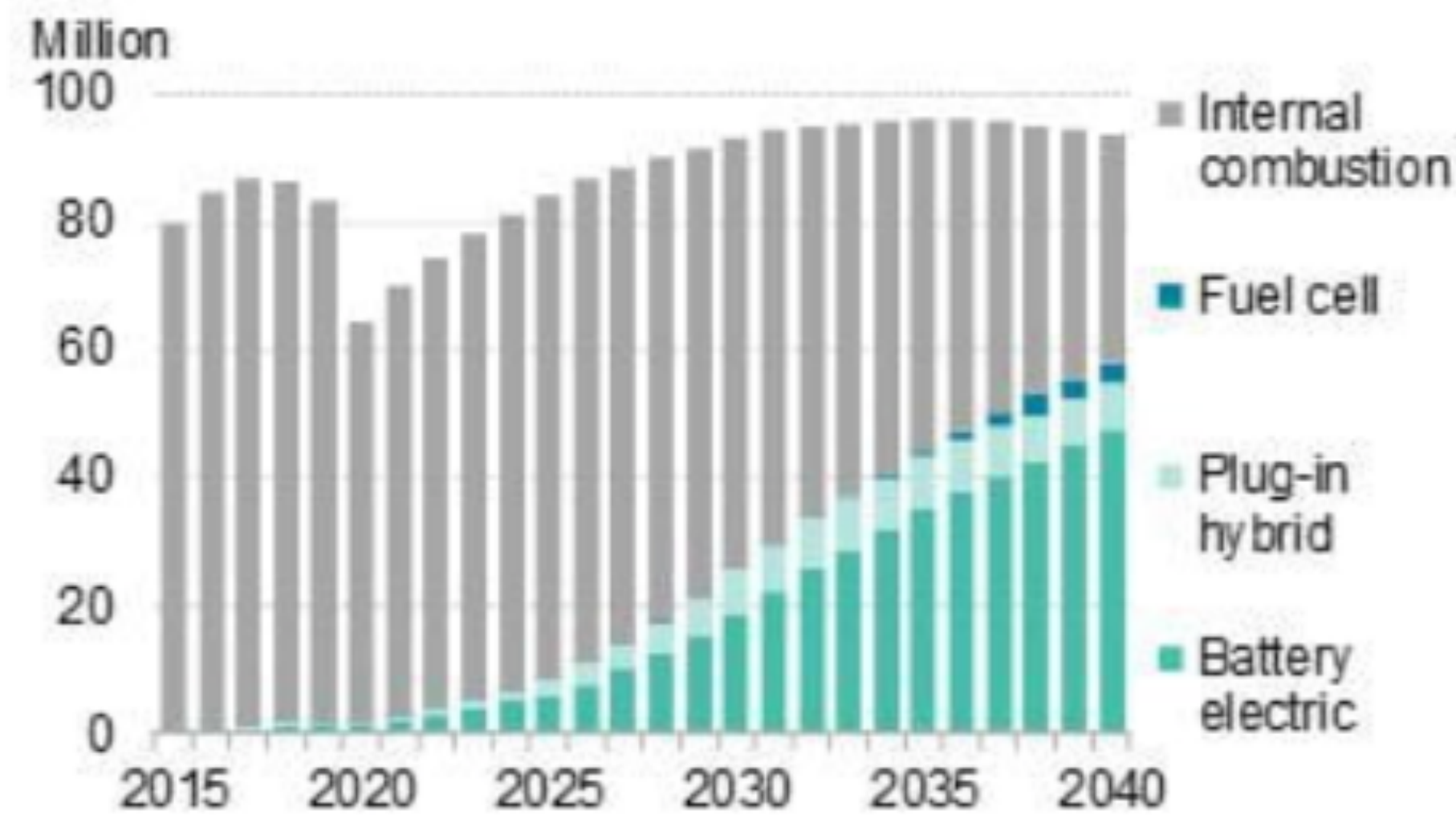


Parent Co / Acquirer	Subsidiary / Target	Date	Deal size (\$M)	Lead investor
Amazon	Zoox	June 2020	1,300	Amazon
Alphabet	Waymo	May 2020	3,000	Silver Lake, CPPIB, Mubadala
Omnitracs	VisTracks	May 2020	N/A	Omnitracs
Intel	Moovit	May 2020	900	Intel
General Motors	Cruise	July 2019	3,400	SoftBank, GM
Intel	Mobileye	July 2018	14,900	Intel

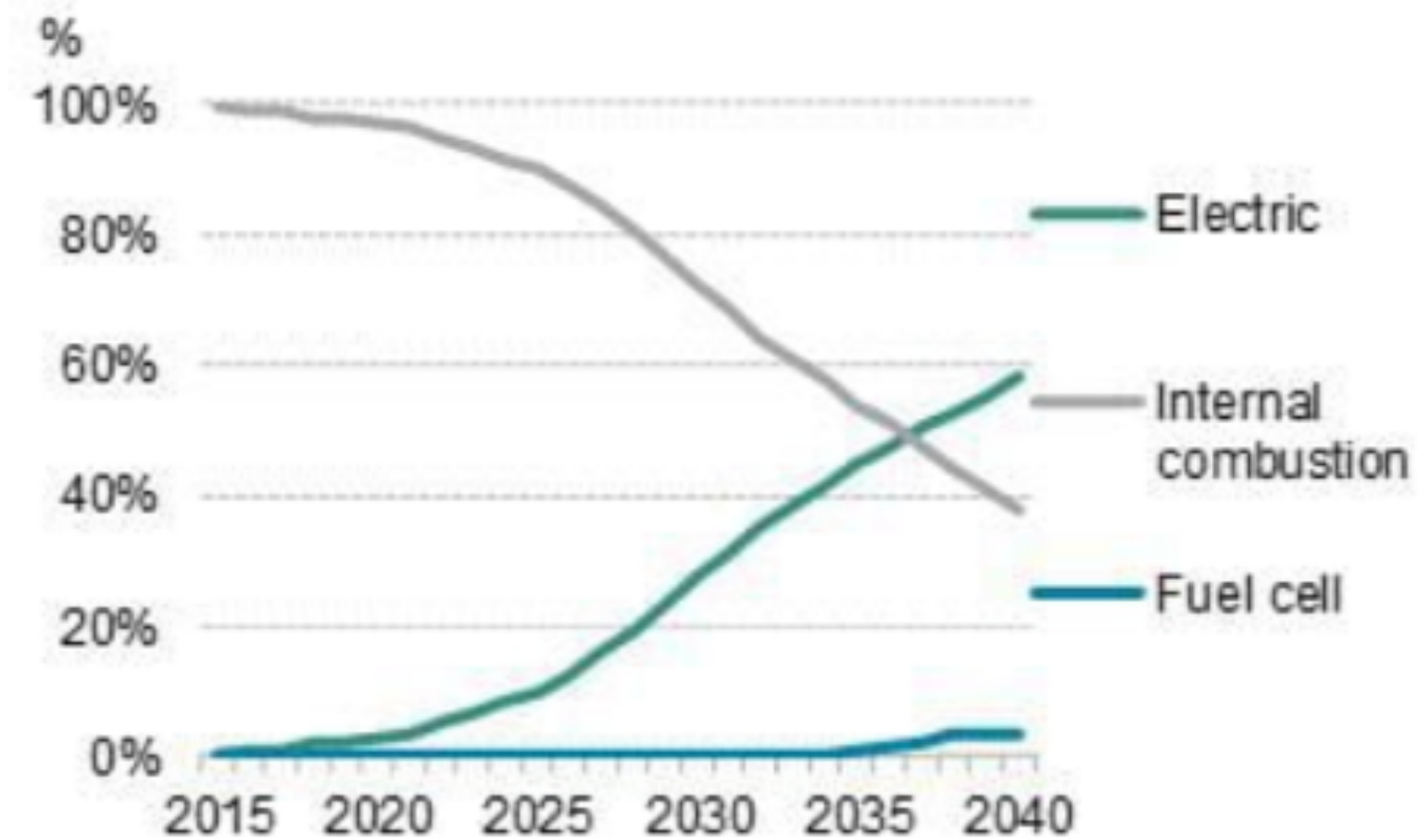
The EV Tipping Point



Global Annual Passenger Vehicle Sales by Drivetrain



Global Share of Total Annual Passenger Vehicle Sales by Drivetrain

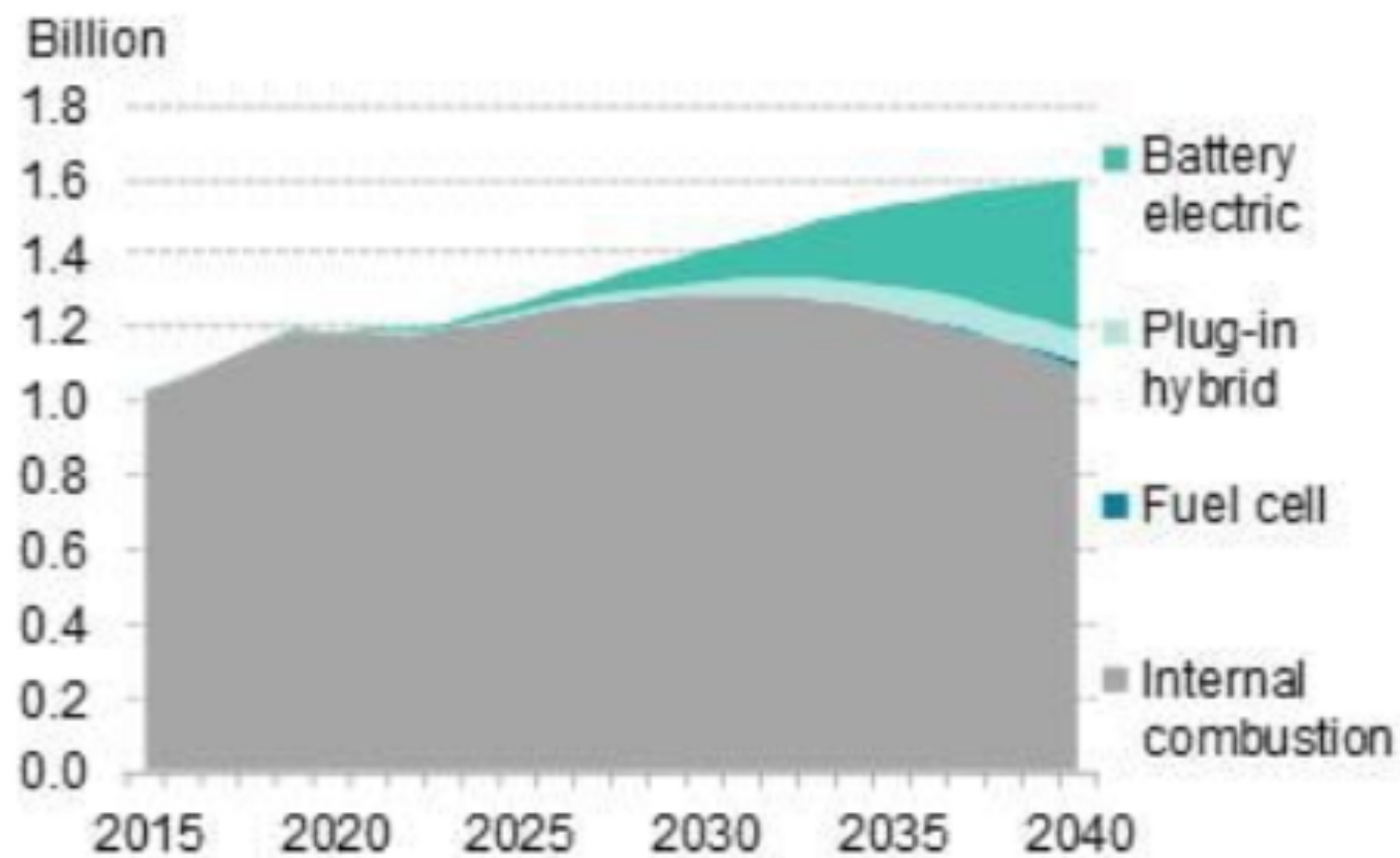


Source: BNEF. Note: Electric share of annual sales includes battery electric and plug-in hybrid.

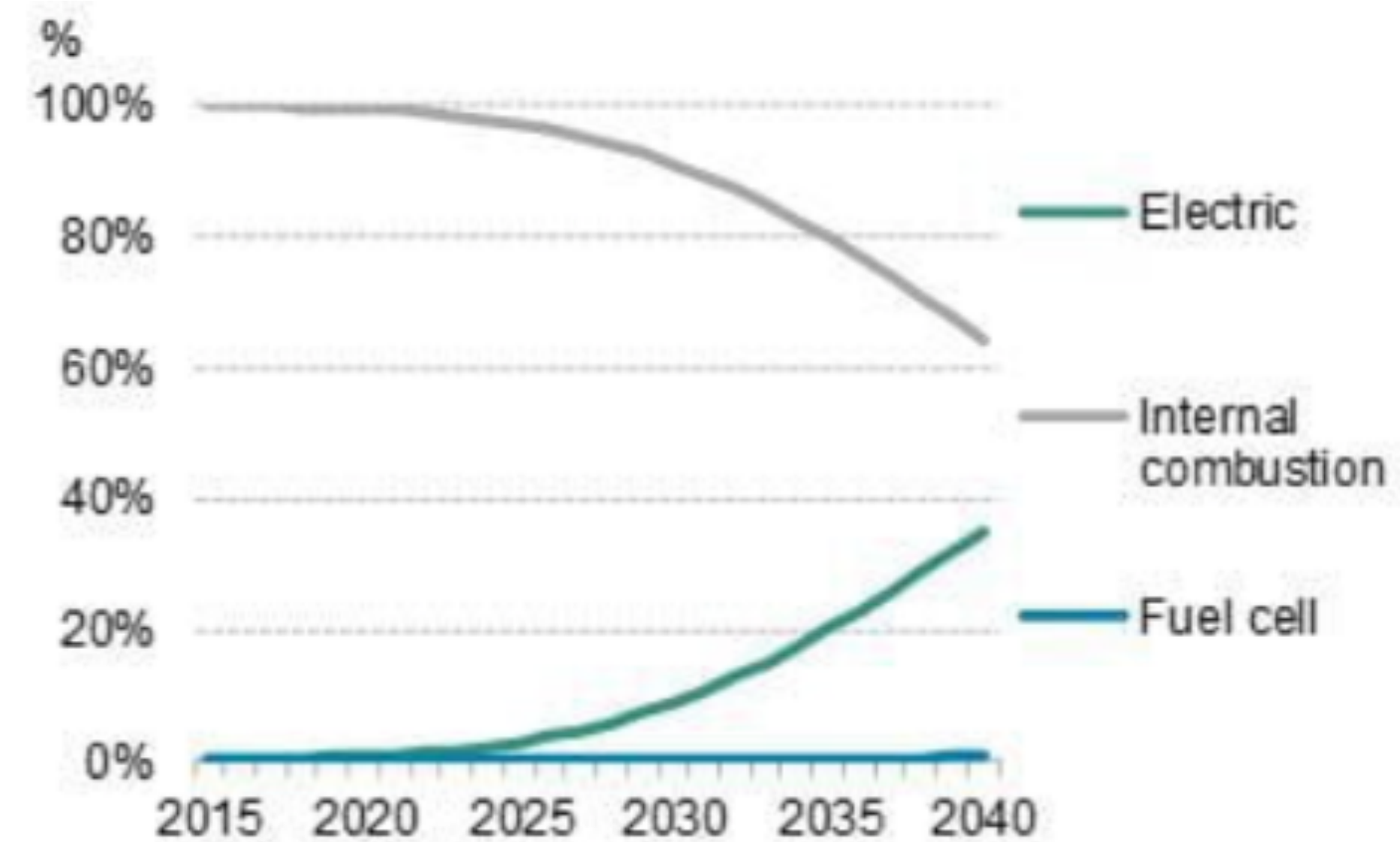
The EV Tipping Point



Global Passenger Vehicle Fleet by Drivetrain



Global Share of Annual Passenger Vehicle Distance Traveled by Drivetrain

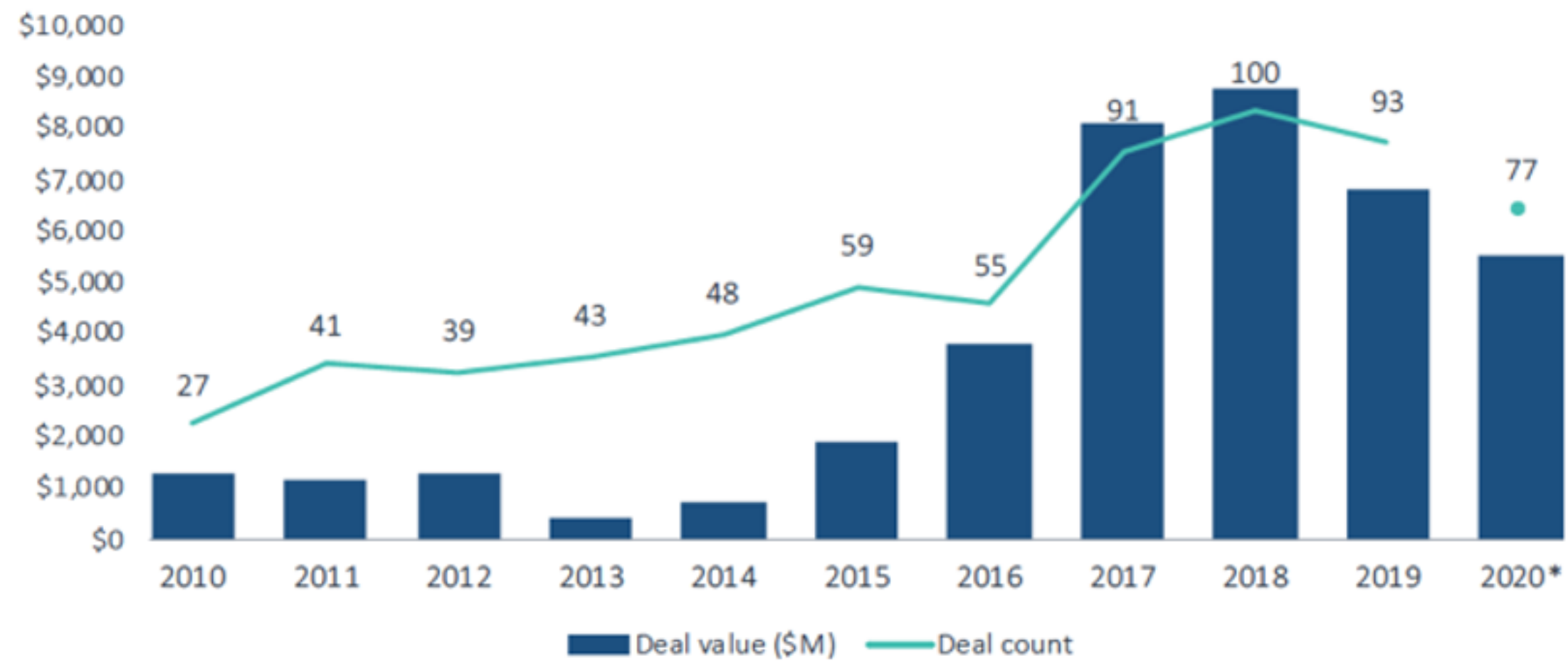


Source: BNEF. Note: Electric kilometers includes battery electric kilometers and electric share of plug-in hybrids.

VC Activity in the EV Space

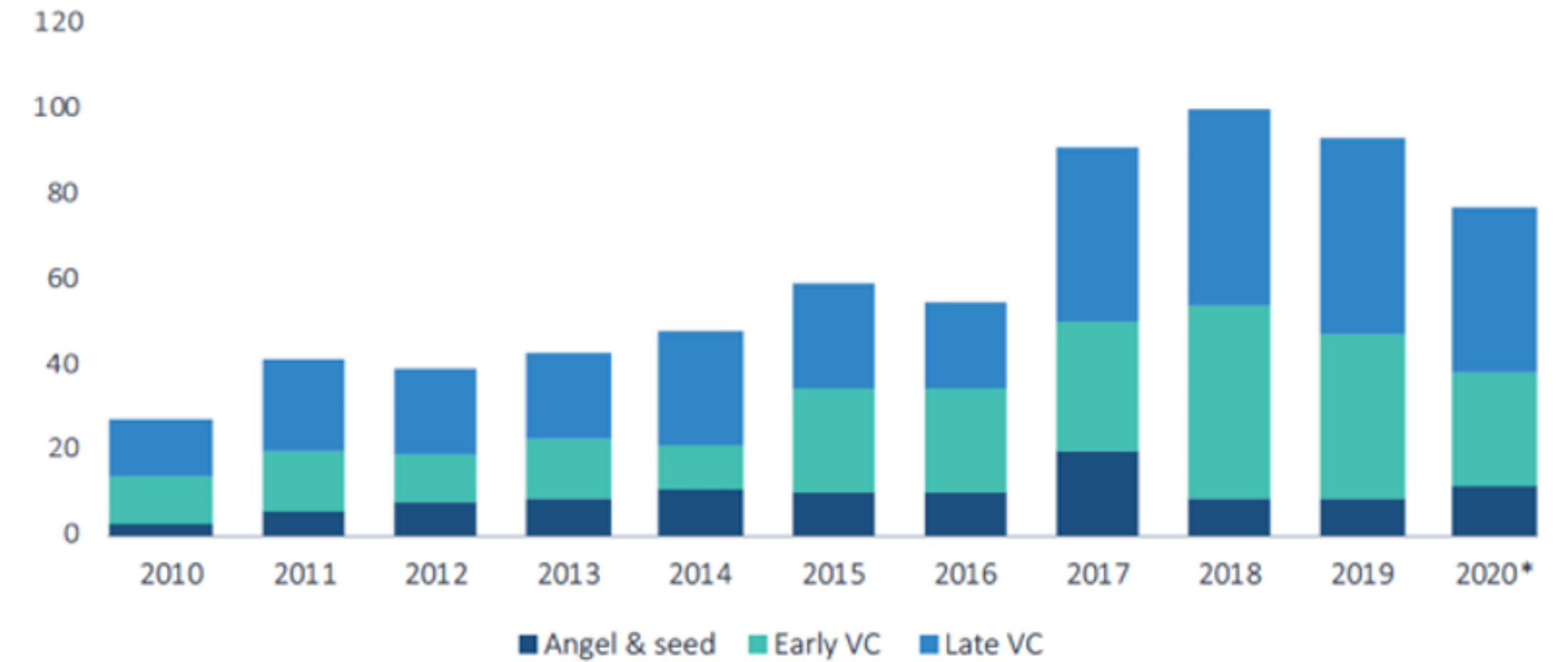


Figure 62. ELECTRIC VEHICLES VC DEAL ACTIVITY



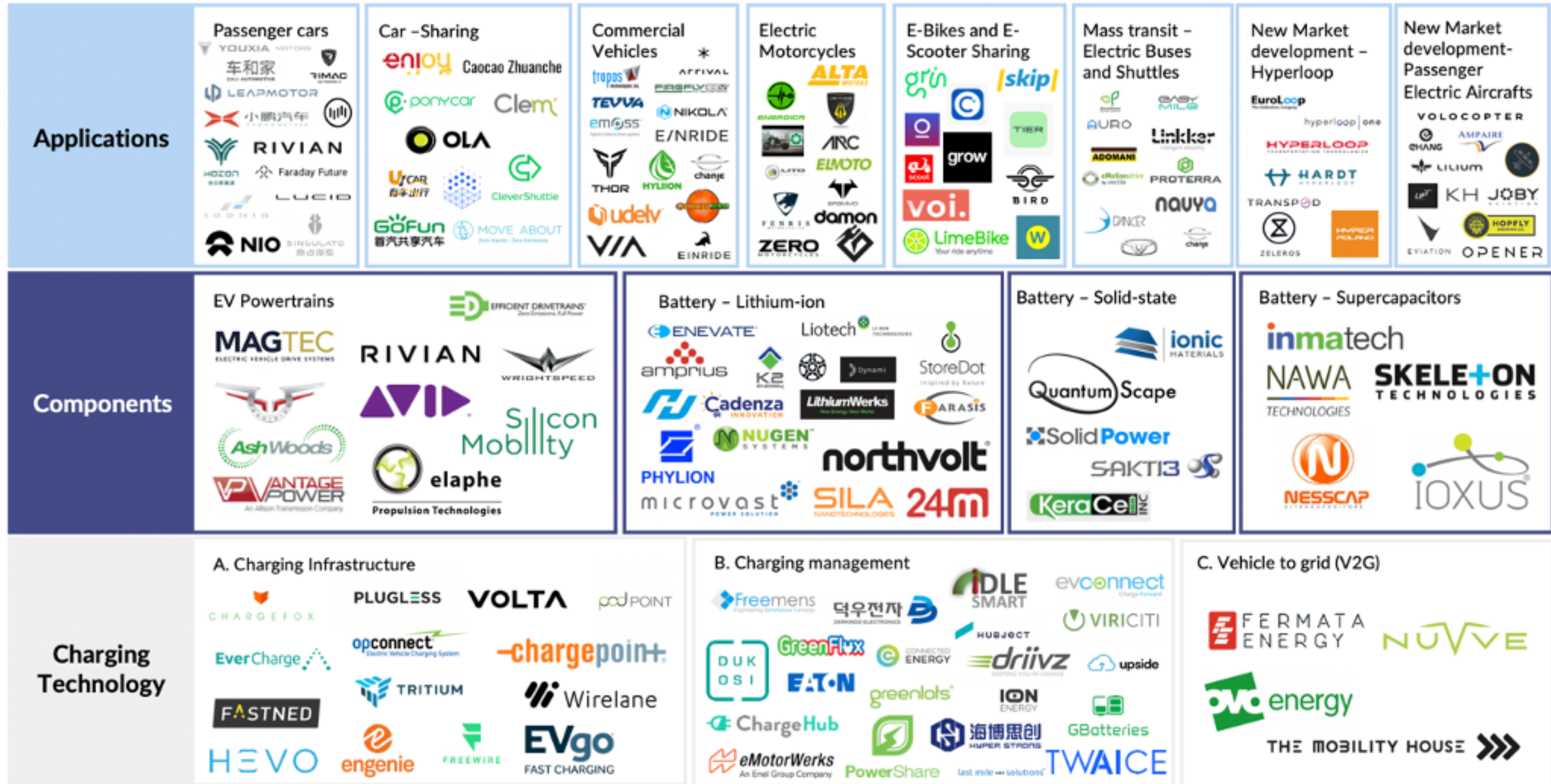
Source: PitchBook | Geography: Global | *As of September 30, 2020

Figure 63. ELECTRIC VEHICLES VC DEALS (#) BY STAGE



Source: PitchBook | Geography: Global | *As of September 30, 2020

The EV Technology Stack



An Overview of the Autonomous Vehicle Market



An Overview of the Autonomous Vehicle Market



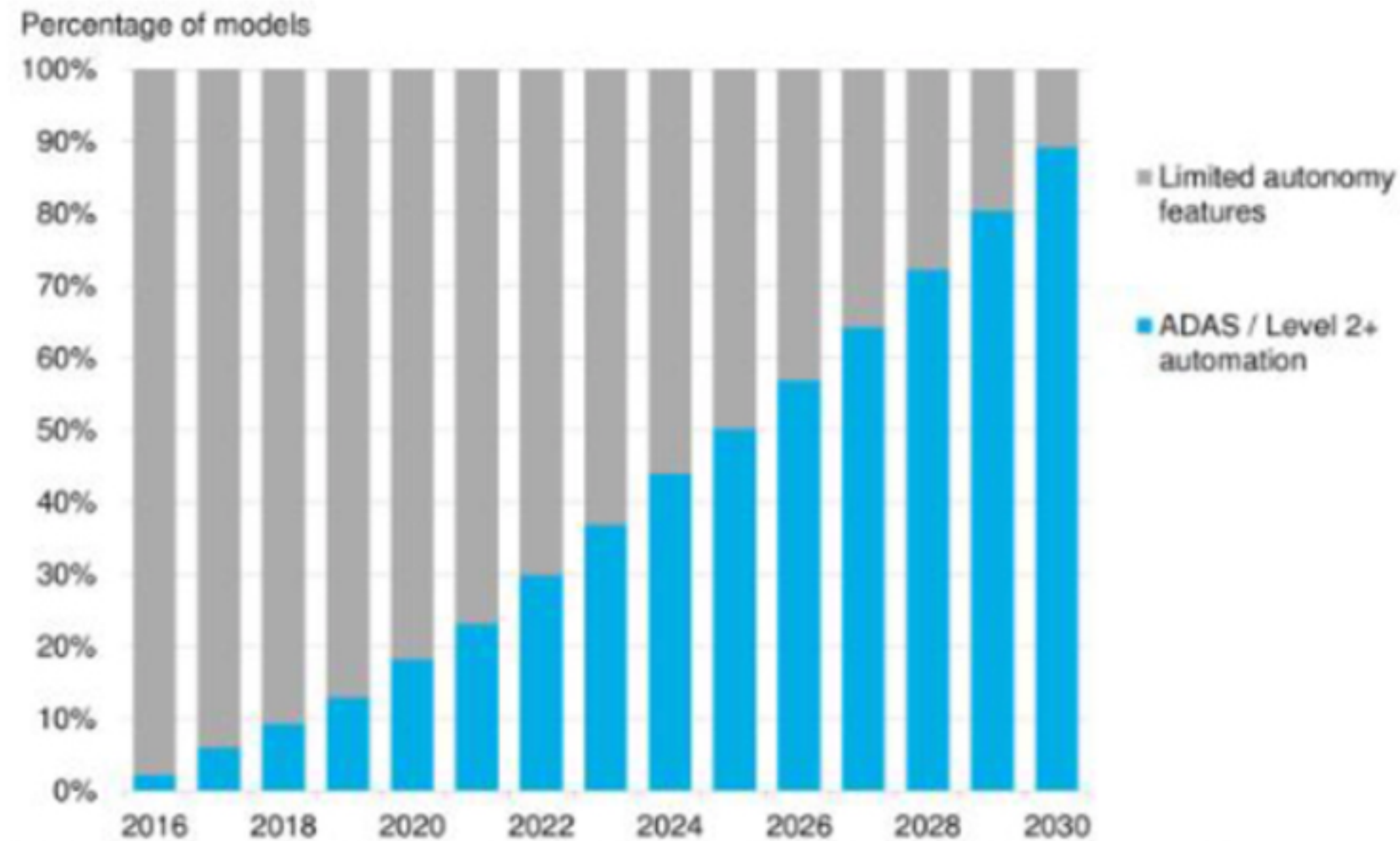
Use Case Priorities Reshuffled



9 of 10 cars may offer advanced safety systems by 2030

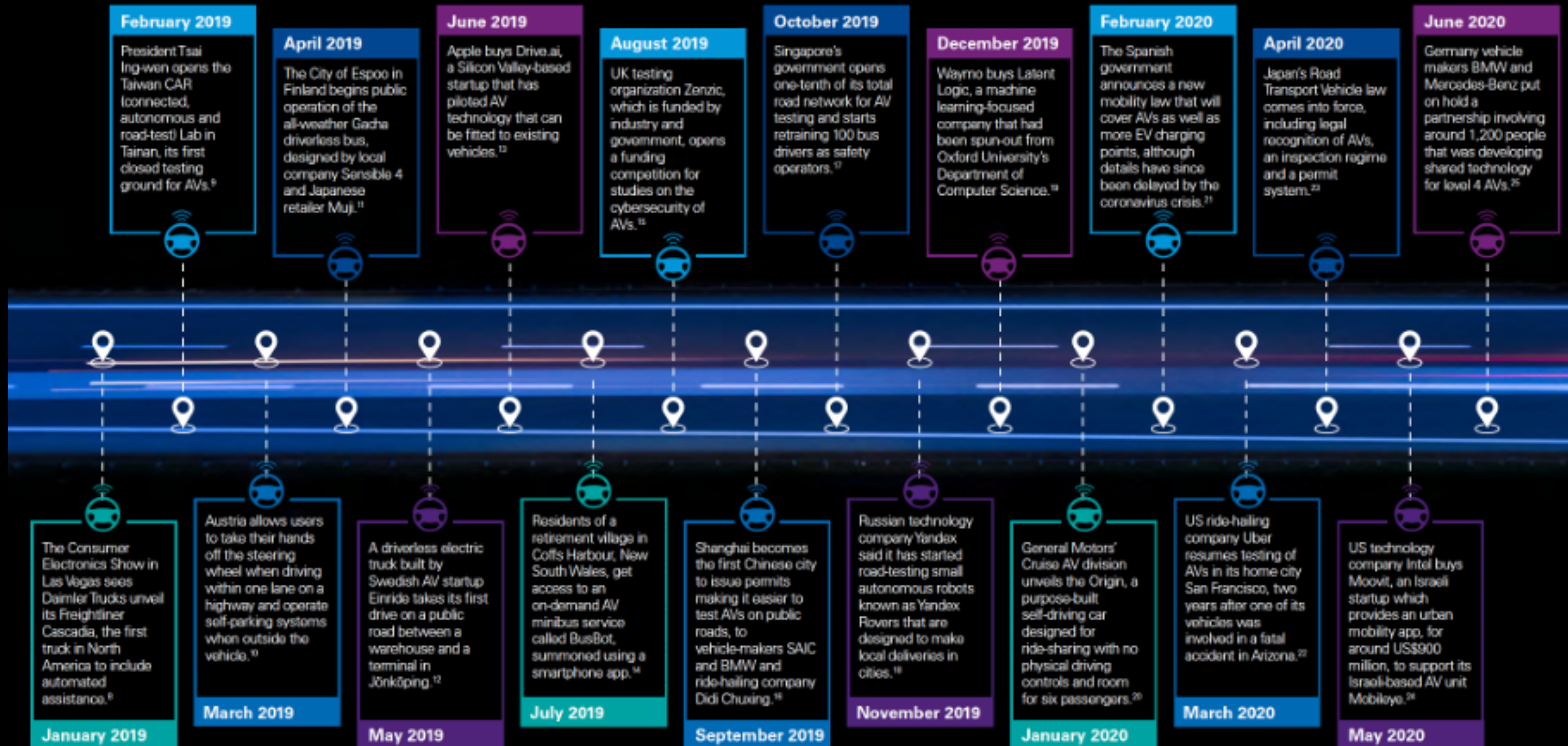


BNEF's Outlook for Advanced Driver Assistance System (ADAS) Adoption



Source: BloombergNEF. Note: 'Limited autonomy features' refers to vehicle models without the combination of advanced emergency braking and lane keeping assist while ADAS / Level2+ automation refers to vehicles that do offer that feature combination.

The Long-Term View on Autonomy is Bullish

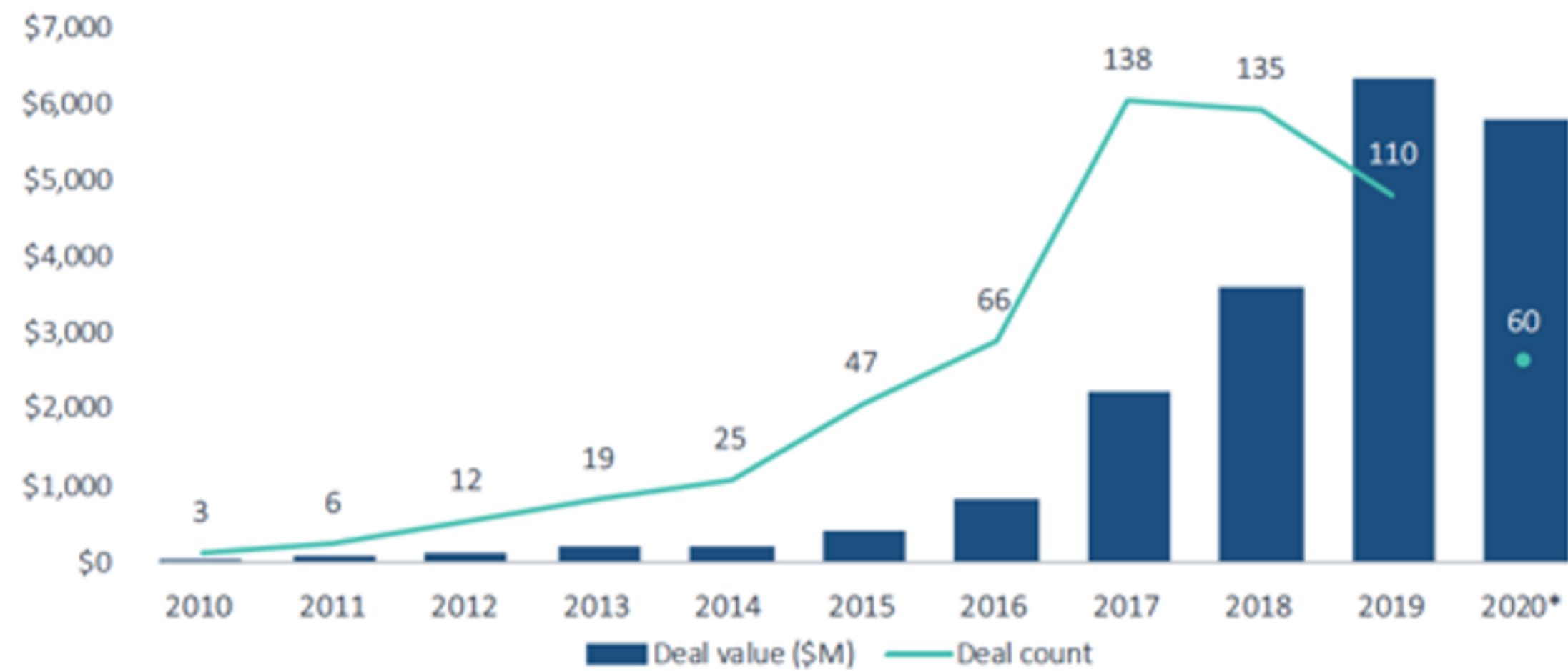


Source: Bloomberg Hyperdrive. (2020). The State of the Self-Driving Car Race 2020. Marc Amblard, Orsay Consulting. (2020). The Crisis Reshuffles the Deck in the AV Space. KPMG. (2020). 2020 Autonomous Vehicles Readiness Index.

VC Activity in the AV Space

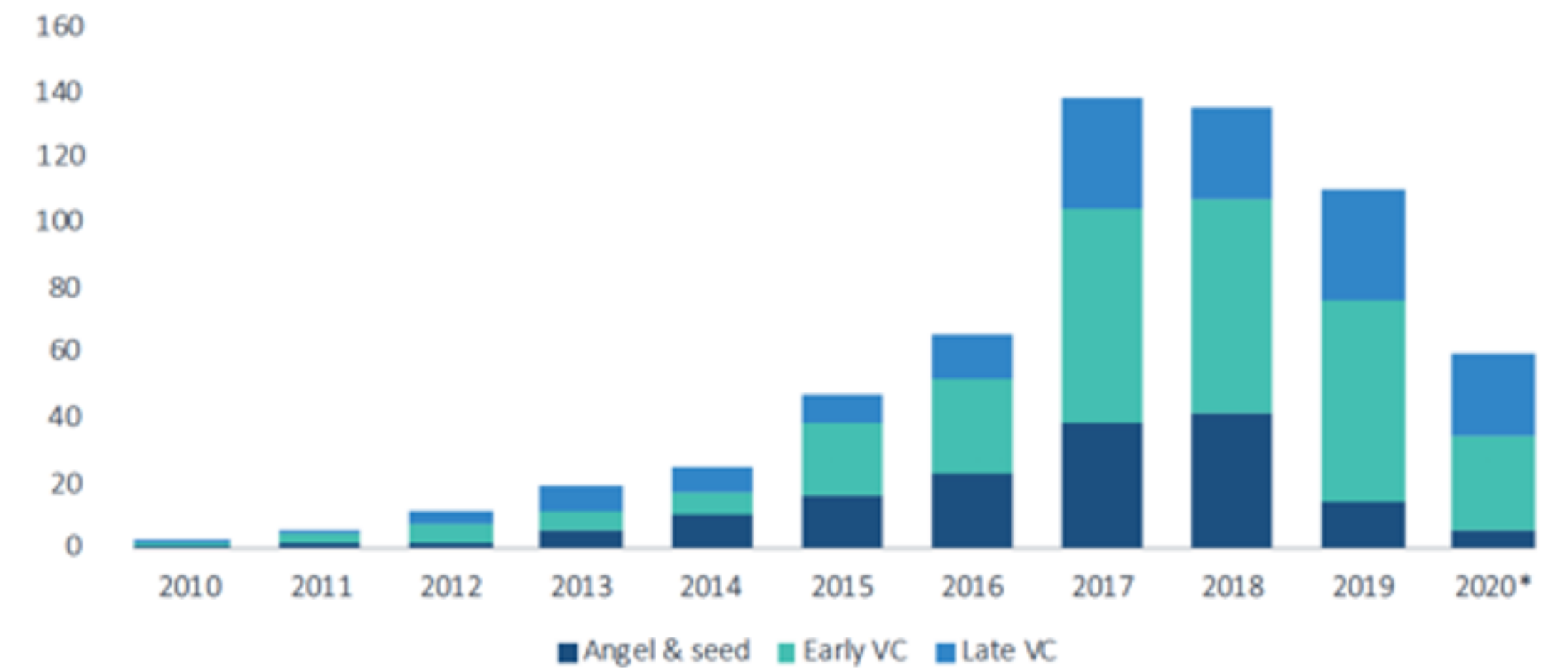


Figure 10. AUTONOMOUS VEHICLES VC DEAL ACTIVITY



Source: PitchBook | Geography: Global | *As of September 30, 2020

Figure 11. AUTONOMOUS VEHICLES VC DEALS (#) BY STAGE



Source: PitchBook | Geography: Global | *As of September 30, 2020

The Autonomous Vehicle Technology Stack



Large Tech Focused M&A Advisory Firm

26 senior partners
100+ team focused on TMC
50% US / 50% Europe
Over 370+ transactions

Leaders

#1 in TMC cross-border midcap
#2 in TMC global midcap
11 Awards 2018-2020

Global Presence

9 offices in 6 countries
Plus partnerships in:
Dubai, Israel, Japan, and Singapore
70% of deals cross-border

Mobility & New Energy

Team of 23 Focused on
Mobility & New Energy
Senior Advisory Board
Deep Relationships
with Leaders and investors

BELIEVE IN INNOVATION - CHANGE THE WORLD



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The Advisor of Choice in Mobility and Energy Transition





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