



M & A  
WORLDWIDE

# GREEN MOBILITY SECTOR

INDUSTRY REPORT

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## 1 Executive summary

The green mobility movement is the biggest revolution in human road transportation since the advent of internal combustion engine (ICE) cars in the early 1900s, and hinges primarily on the timely success of electric vehicles (EVs) and related technologies.



The confluence of several concurrent global trends such as the growing awareness about sustainability, consistently elevated oil prices, onshoring of supply chains due to post-pandemic jitters and geopolitical stresses, supportive legislations and evolving consumer preferences have heralded a new age of electrification worldwide, with China leading the charge followed by Europe and the US, with the rest of the world a distant fourth.

Thus, this report is focused on activity in Asia-Pacific, Europe and North America and will give you a comprehensive overview of how companies are using M&A to drive the EV ecosystem forward, with a special focus on three subsectors with enormous potential: charging infrastructure, EVs (manufacturers) and batteries.

Some highlights from our analysis

- M&A in the sector remains above pre-pandemic levels, bucking the broader slowdown in dealmaking
- Charging infrastructure has dominated deal volumes in most years since 2018
- Geopolitical tensions have put the focus back on domestic M&A
- Private equity participation in the sector has bounced back after dipping slightly in 2022 and is expected to grow further as a recurring revenue model solidifies in the charging infrastructure space and targets also increasingly look out for stable, long-term capital amid fickle public markets
- As the ecosystem is nascent and rapidly developing, lower mid-market deals (<=€250 million) have dominated over the past 5 years
- European M&A volumes have been higher than American and Chinese volumes for most years since 2018, a reflection of Europe's leading, proactive approach to the sector
- Scope deals have outnumbered scale deals for most of the past 5 years as more and more companies look for a piece of the rapidly expanding EV pie
- Valuation wise, charging infrastructure companies have an average EV/LTM revenue multiple of 3.5x, while EV companies trade at 2.7x and battery companies at 2.2x

The capital-intensive nature of the industry, combined with rising interest rates, high inflation, macroeconomic uncertainty have resulted in greater restraint from the venture capital industry, which has suppressed valuations relative to their 2021/2022 peaks. Given the ample cash available for investment to both strategic and financial acquirers, all these conditions coalesce to provide fertile ground for highly accretive acquisitions for the shrewd investor. Emerging companies are also more open to a variety of investors, be it strategic or controlling, as the story and the structural tailwinds are all still firmly there and it is just a matter of sourcing sufficient capital, executing intelligently and reaping its rewards.

## 2 Industry landscape

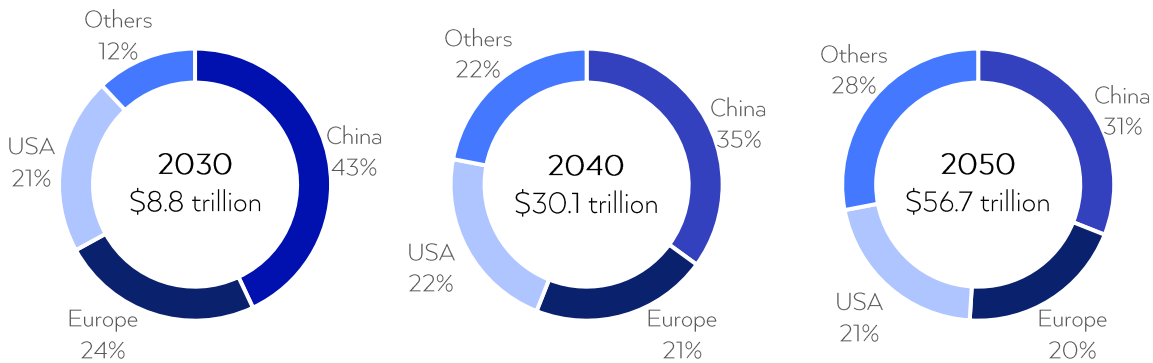


Figure 1: Cumulative global EV ecosystem market opportunity by region (BloombergNEF, 2023)

The global shift to electrification creates a very large economic opportunity across a wide spectrum of industry verticals, ranging from EV manufacturing to components like batteries to critical supporting infrastructure such as charging stations.

EVs, batteries and charging infrastructure are now a central part of many countries' industrial policy and competition to attract investment is likely to increase in the coming years.

### 2.1 Charging infrastructure

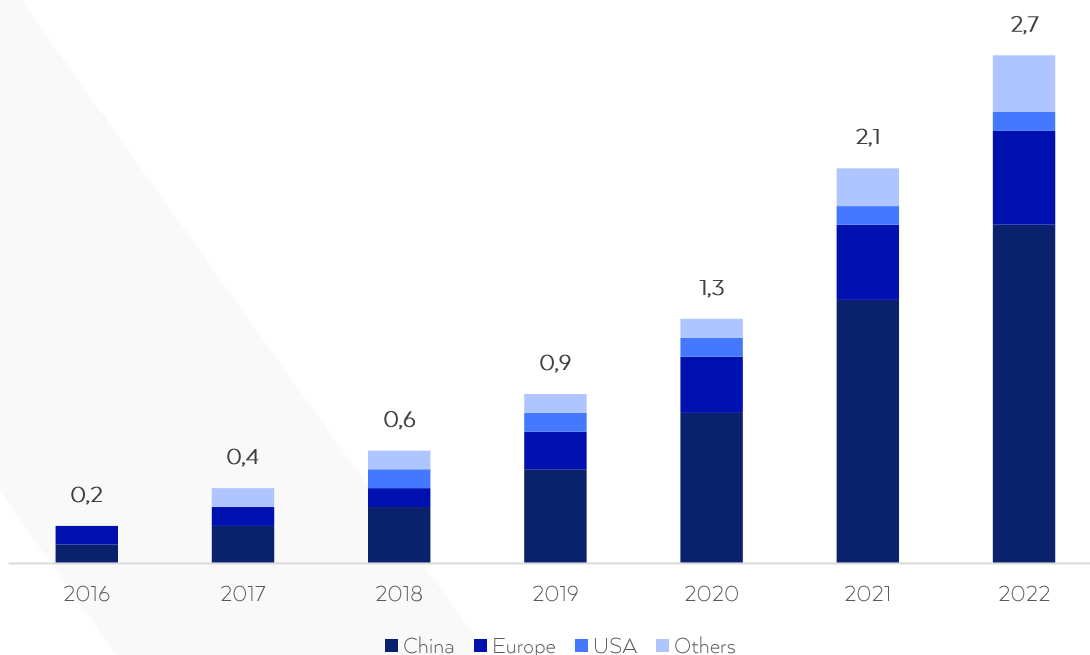


Figure 2: Publicly accessible light-duty vehicle charging points, by region, in millions (IEA, 2023)

At the end of 2022, there were 2.7 million public charging points worldwide, more than 900,000 of which were installed in 2022, an increase of about 55% on 2021 stock. At the end of 2022 China was home to about two-thirds of the global stock of public chargers. Europe ranks second, with around 540,000 total public chargers in 2022, a 50% increase from the previous year.

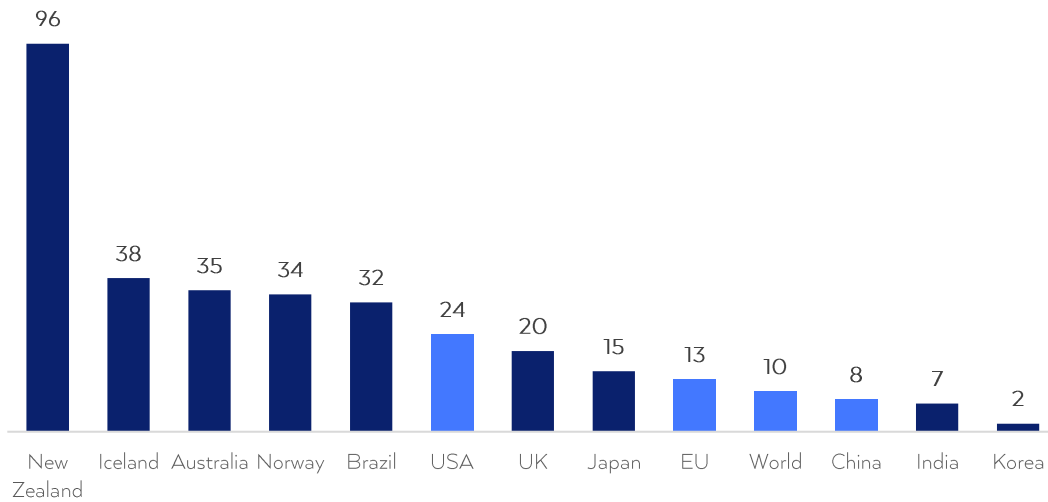


Figure 3: Number of EVs per public charger in 2022 (IEA, 2023)

While most charging demand is currently met by home charging, publicly accessible chargers are increasingly needed to provide the same level of convenience and accessibility as for refuelling conventional vehicles.

## 2.2 EVs

Electric car markets are seeing exponential growth as sales exceeded 10 million in 2022. A total of 14% of all new cars sold were electric in 2022, up from around 9% in 2021 and less than 5% in 2020.

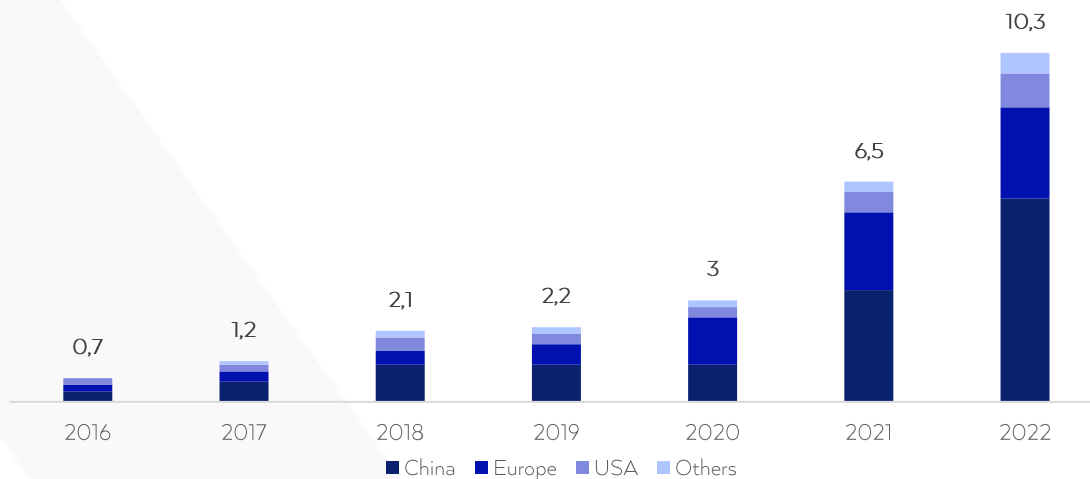


Figure 4: Global EV sales, in millions (IEA, 2023)

Three markets dominated global sales

- China was the frontrunner once again, accounting for around 60% of global electric car sales. More than half of the electric cars on roads worldwide are now in China and the country has already exceeded its 2025 target for new energy vehicle sales.
- In Europe, the second largest market, electric car sales increased by over 15% in 2022, accounting for more than one in every five cars being sold.
- Electric car sales in the United States – the third largest market – increased 55% in 2022, reaching a sales share of 8%.

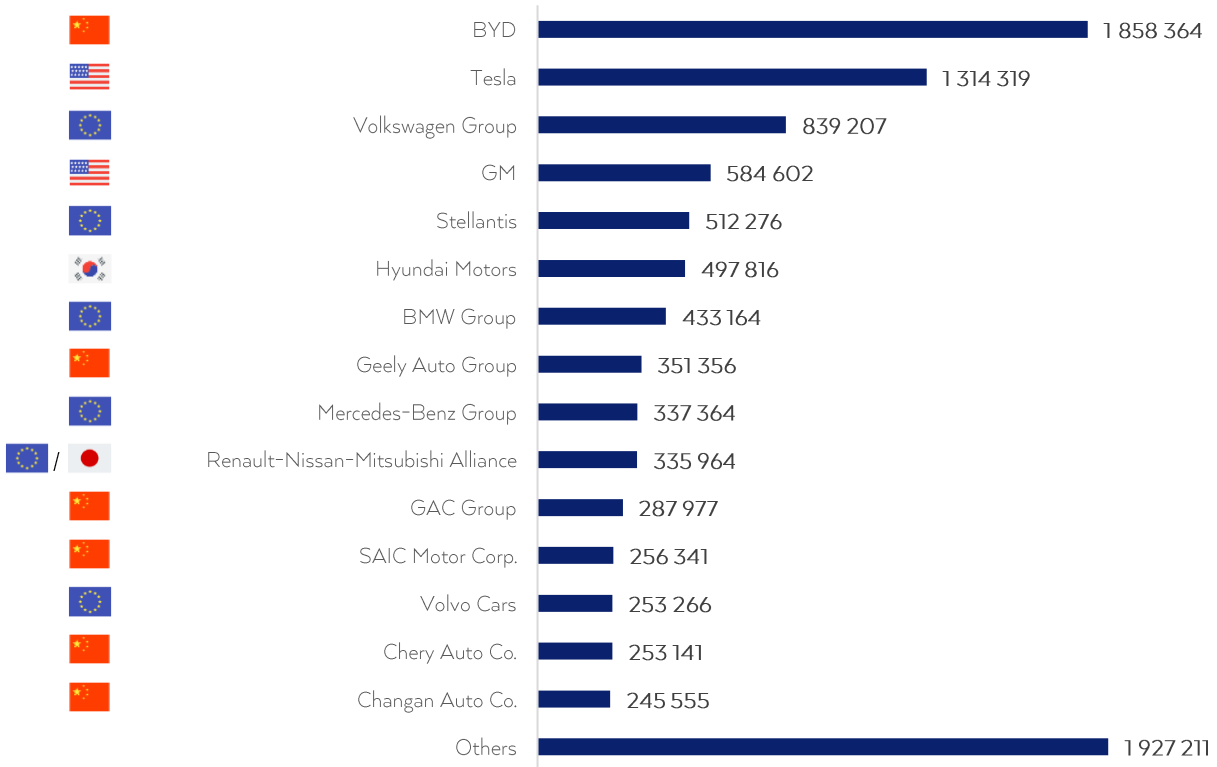


Figure 5: Global plug-in electric vehicle production in 2022, by manufacturer (Statista, 2023)

Given the outsized local demand, China also dominated EV manufacturing in 2022, with 6 out of the top 15 manufacturers headquartered there, while Europe was a close second with 5 companies, and the US third with 2 companies.

### 2.3 Batteries

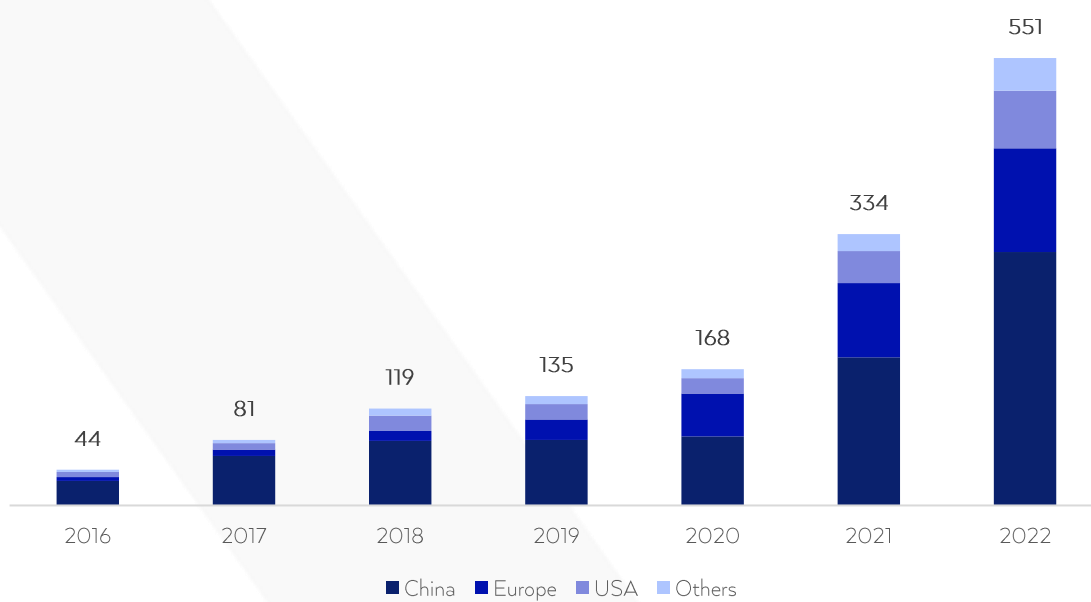


Figure 6: Battery demand by region, in GWh/year (IEA, 2023)

Automotive lithium-ion (Li-ion) battery demand increased by about 65% to 550 GWh in 2022, from about 330 GWh in 2021, primarily due to growth in electric passenger car sales, with new registrations increasing by 55% in 2022 relative to 2021.

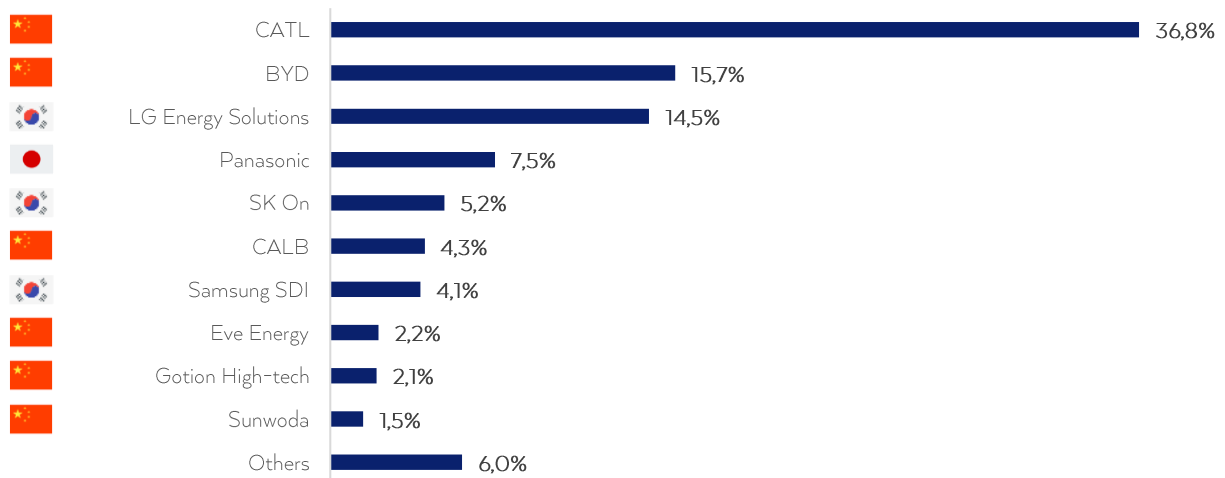


Figure 7: Global market share of Lithium-ion battery makers as of 1H23 (SNE Research, 2023)

Asia is the driving force in the lithium-ion battery market, with China controlling 65% of refining capacity and hosting 65% of active materials. Asian brands, therefore, naturally dominate the lithium-ion battery market, with 1H23 data showing

- China's CATL at number 1, with customers including Tesla, VW, BMW, Ford, among others
- China's BYD the only electric vehicle manufacturer to rank among the leading battery makers, at number 2, with customers including Tesla, Toyota, Daimler, among others
- Korea's LG Energy Solutions at number 3, with customers including Tesla, GM, Hyundai, among others

### 2.3.1 Hydrogen fuel cell EVs (FCEVs) as an alternative to Battery EVs (BEVs)

FCEVs are an interesting alternative to BEVs, especially for long-haul travel, due to factors such as

- longer range
- faster refuelling
- less weight and thus higher payload capacity

However, they have lagged the BEV segment due to some crucial hurdles such as

- higher costs
- lack of fuelling infrastructure
- lower efficiency

Nonetheless, given the early stages of electrification, a lot of large companies are making strides in this sector, such as

- **Carmakers:** Toyota, Hyundai, Honda, BMW, Daimler, VW, among others
- **Fuel infra providers:** Air Liquide, Linde, Shell, ITM Power, Nel Hydrogen, among others
- **Fuel cell providers:** Ballard Power Systems, Plug Power, Bloom Energy, FuelCell Energy, AFC Energy, among others

There are no clear winners yet and the field remains wide open, and we may very well end up with FCEVs and BEVs complementing each other instead of competing with each other, with the former emerging as the go-to for long-range travel while the latter is preferred for short-range transportation.

### 3 M&A landscape

#### 3.1 YTD deals down vs. 2022 and 2021, but above pre-pandemic levels

Macroeconomic uncertainty has caused a marked slowdown in M&A vs. the post-pandemic deal boom, but given the structural tailwinds facing the EV sector, the deal volume has stayed above pre-pandemic levels.

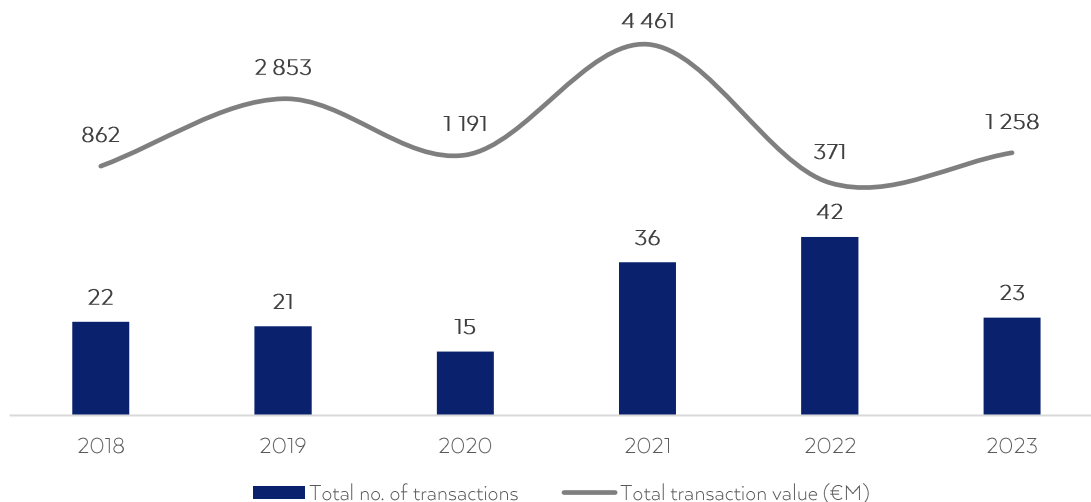


Figure 8: Year to date deal volume and value, in millions of € (S&P Global Inc., 2023) (M&A Worldwide, 2023)

Total transaction value is also up in 2023YTD (as of 17<sup>th</sup> August 2023) vs. last year despite a lower number of deals, indicating increasing risk-taking appetite for larger, more transformative transactions.

#### 3.2 Charging infrastructure dominates deal volume

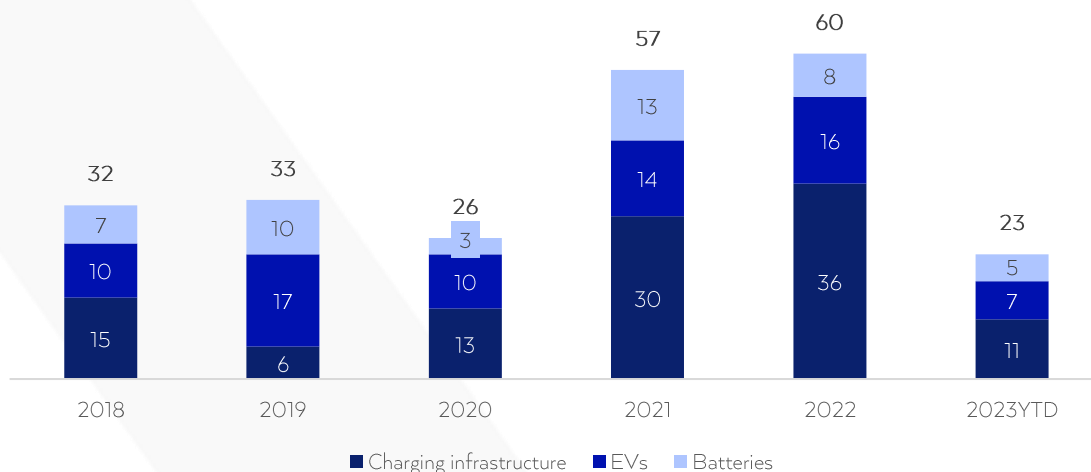


Figure 9: Deals per subsector per year (S&P Global Inc., 2023) (M&A Worldwide, 2023)

Apart from 2019, charging infrastructure has dominated M&A volume every year since 2018, which speaks to its immense potential. While the EV and battery market already has a few incumbents, the charging space does not. Tesla comes the closest, but given the enormous size of the market, there is plenty of room for more firms to come in, scale up and reap the rewards.



On the EV side, the vast majority of M&A is currently focused on the short-range passenger vehicles segment, with long-range batteries for transportation & logistics (T&L) applications still under development. As mentioned previously, FCEVs might also turn out to be a viable alternative to BEVs, especially for T&L, but since the technology is still being perfected and there is also a lack of sufficient infrastructure, this segment hasn't attracted much M&A activity.

### 3.3 Cross-border deals moderate amid post-pandemic and geopolitical stresses

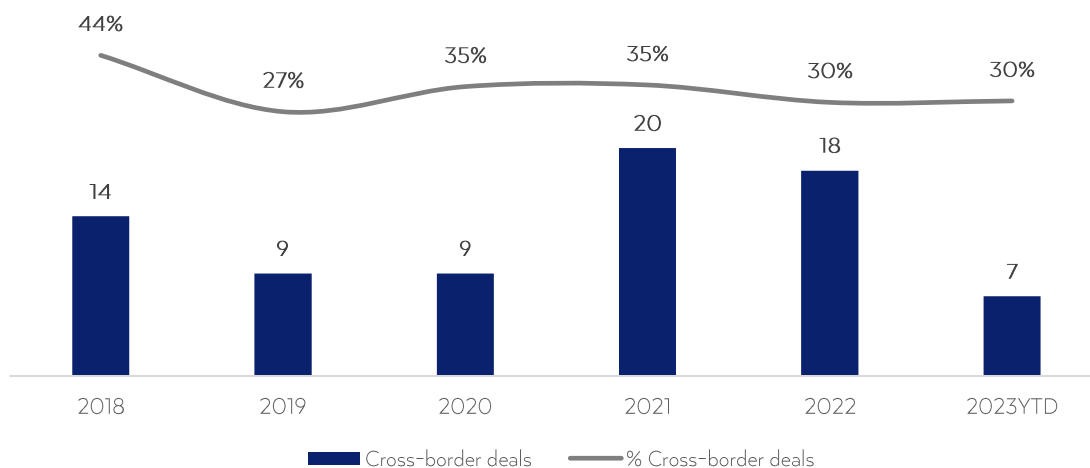


Figure 10: Cross-border deals and % of cross-border deals per year (S&P Global Inc., 2023) (M&A Worldwide, 2023)

Given the after-effects of the pandemic and other geopolitical complication around the globe, cross-border M&A has moderated over the past few years.

Instead, companies have focused more on local opportunities, in line with the global push for onshoring and strengthening of domestic supply chains. Tighter financial conditions have also helped incumbents with strong balance sheets buyout smaller, local competitors in a bid to expand scale and pricing power.

### 3.4 Private equity (PE) participation stays consistent, with growth expected over time

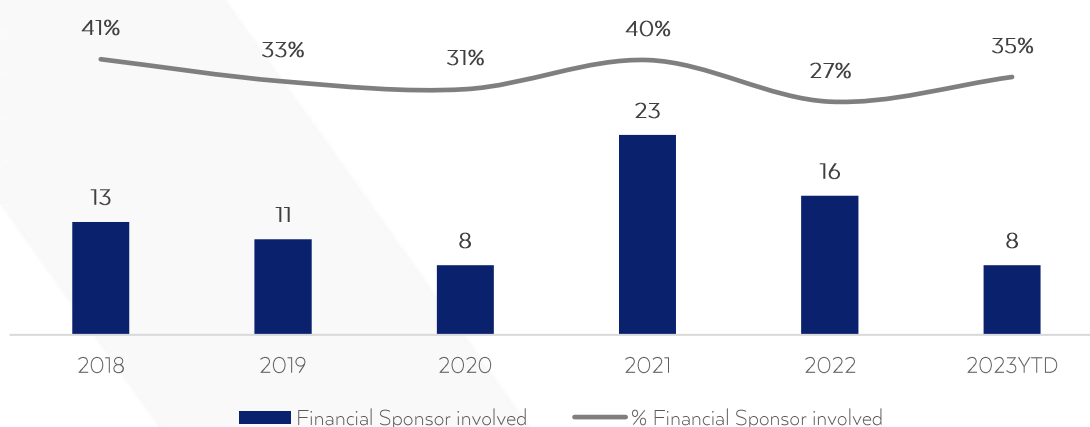


Figure 11: No. of deals with private equity involved and % of deals with private equity involved (in any role) (S&P Global Inc., 2023) (M&A Worldwide, 2023)

Participation by PE firms in 2023YTD is roughly consistent with historical trend, up from the below-trend 27% in 2022. For PEs, the attraction lies in the recurring revenues from the operation of charging points, which are expected to account

for a greater share than the one-time revenue from infrastructure deployment as time goes on. According to (Arthur D. Little, 2021), in the UK, the share of recurring revenues will increase from 20% in 2021 to more than 50% by 2030.

Targets are also increasingly aware of how fickle public markets can be, with the SPAC boom winding down and the wider public markets also correcting since their highs of 2021 and early 2022. Factor in the fact that the industry is capital-intensive, increasingly fragmented, and the unit economics are still being ironed out, especially for subsectors like charging infrastructure, the situation increasingly beckons for alternative sources of capital.

Private equity is thus in a pole position to take up the mantle and serve as the patient, long-term partner that the companies need. In case founders are reluctant to give up potential upside, private credit (PC) has also exploded over the past few years and is increasingly emerging as a viable alternative to private equity and even the traditional banking system.

Companies are also keen to explore charging-as-a-service business model, especially with the notable rise in corporate EV fleets, which should further bolster the interest of PE and PC firms as time goes on.

Some notable PE and PC firms active over the past few years



### 3.5 Lower-mid market dominates deal volumes

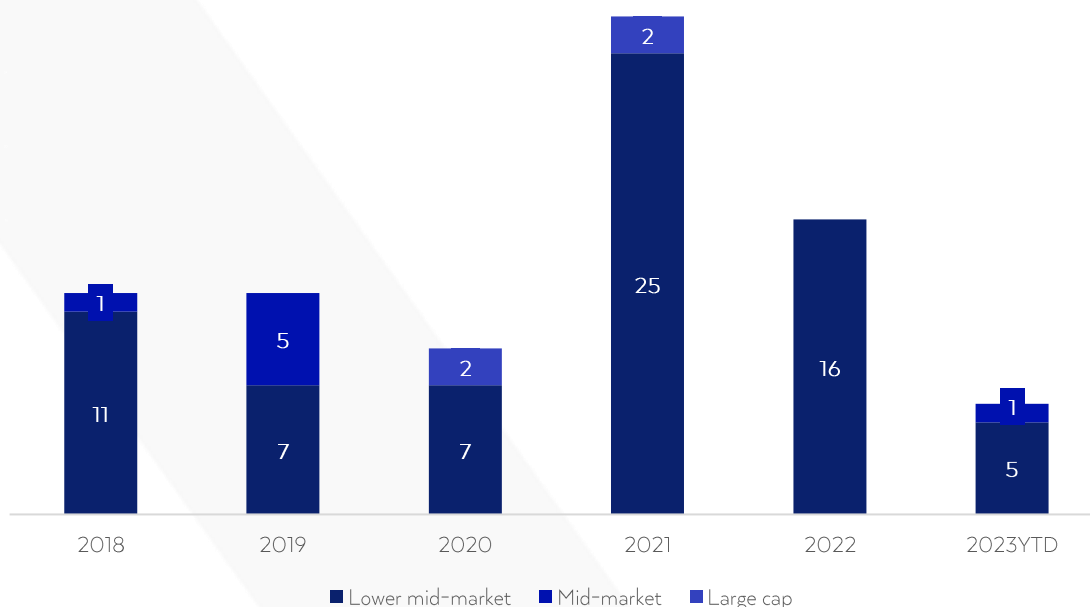


Figure 12: Deal volume per deal size category per year (S&P Global Inc, 2023) (M&A Worldwide, 2023)

### Definitions

- Lower mid-market: €0-250 million
- Mid-market: €250-1,000 million
- Large cap: >€1,000 million

Pockets of the EV ecosystem such as charging infrastructure are increasingly fragmented, with a lot of small, promising companies coming up over the past few years. With unit economics still a work in progress, there is a lot of scope for the more established companies to gain scale and/or access to new technologies and markets through M&A.

Start-ups are also increasingly receptive to a wide variety of investors these days, unlike the past few years when institutional funding flowed more freely and there was greater choice.

The chart above validates this theme, with most M&A volume from 2018 to 2023YTD coming from the lower mid-market.

### 3.6 European M&A leads the way

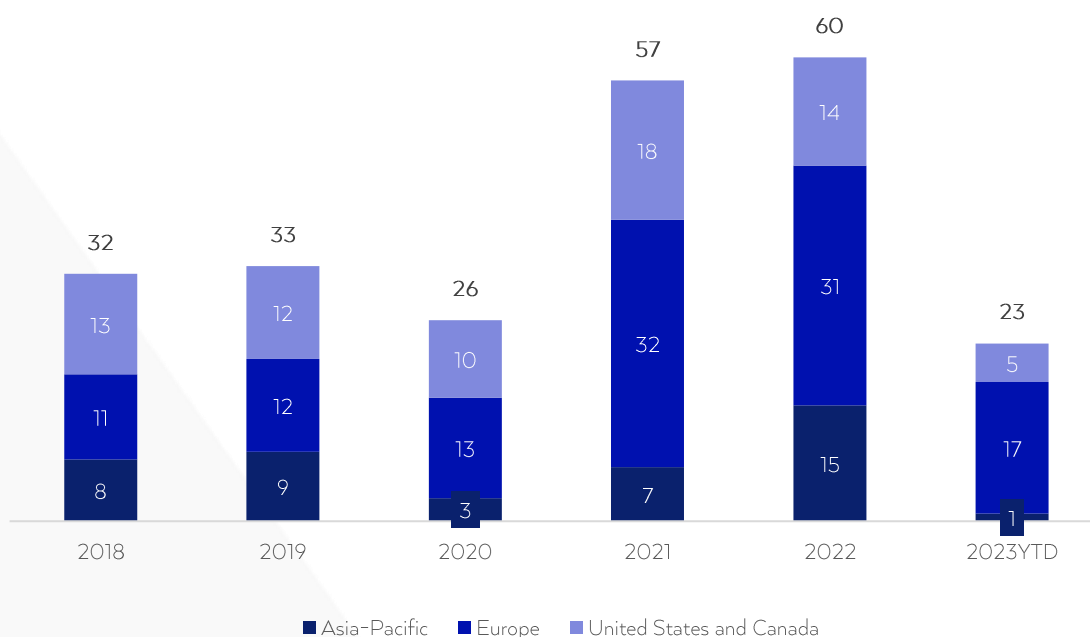


Figure 13: Deals per region per year (S&P Global Inc, 2023) (M&A Worldwide, 2023)

Despite China's leadership of the segment, it is Europe which has seen the highest EV-related M&A activity each year since 2020, with its lead widening further since 2021, with 17 out of 23 deals in 2023YTD coming from the region.

This seems to be a result of the vigour with which it has pursued electrification, with China's domestic focus and USA's complacency also playing a part.

### 3.7 Expanding scope has taken priority over scale over the past few years

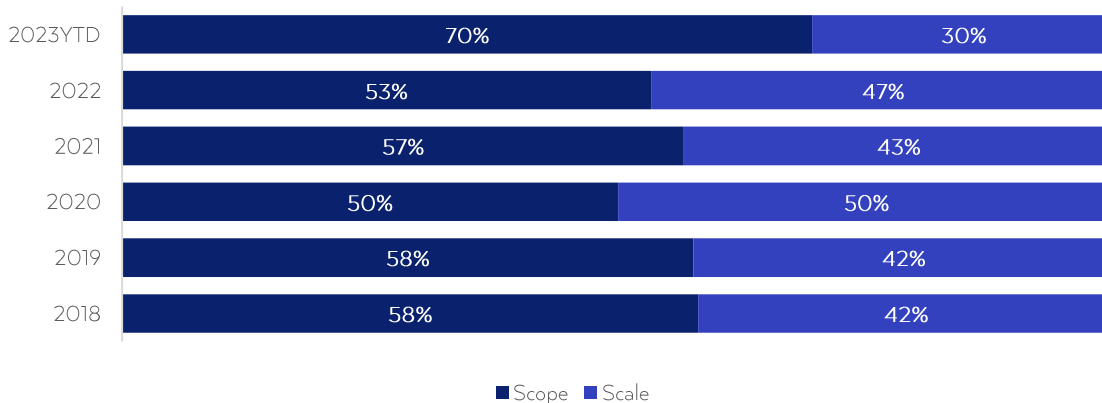
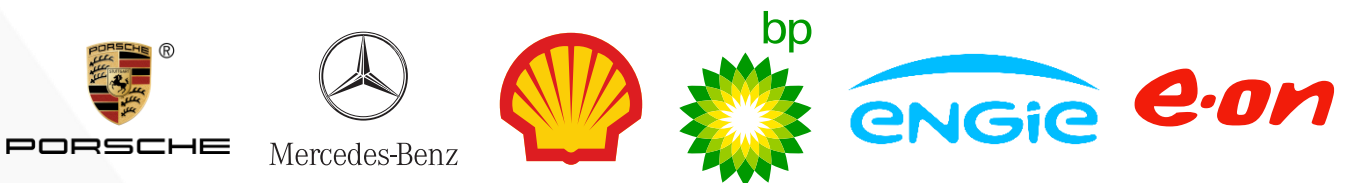


Figure 14: Percentage of scope vs. scale deals per year (S&P Global Inc., 2023) (M&A Worldwide, 2023)

Given that we are still relatively early in the EV revolution, most of the M&A over the past few years has been driven by a desire from the traditional automotive OEMs, energy companies, and utilities to gain exposure to this rapidly expanding sector via acquisitions focused on expanding the scope of their current offerings.

#### A few notable scope acquirers active over the past few years



However, given the fragmentation already emerging in fields like charging infrastructure and the need to vertically integrate in EVs and batteries given the global push for onshoring there is a fair bit of opportunity for consolidation as well, and hence scale deals haven't lagged that far behind either, with several emerging incumbents looking to expand market share or have greater control over their supply chain by rolling up smaller competitors and suppliers.

#### A few notable scale acquirers active over the past few years



### 3.8 Charging infrastructure companies trade at a premium to EV and battery counterparts

Figures as of September 15, 2023, in EUR millions, unless noted otherwise

	Ticker	Market Capitalization	Enterprise Value	2022A	TEV / Revenue LTM	2023E	2024E	2025E	
<b>Charging Infrastructure</b>									
ChargePoint Holdings, Inc.	NYSE:CHPT	€ 1,896	€ 1,977	4.6x	3.9x	3.4x	2.4x	1.8x	
Wallbox N.V.	NYSE:WBX	€ 492	€ 564	3.9x	3.9x	2.7x	1.4x	0.9x	
Allego N.V.	NYSE:ALLG	€ 696	€ 1,003	7.5x	6.6x	5.2x	3.2x	2.2x	
Blink Charging Co.	NASDAQCM:BLNK	€ 240	€ 185	3.2x	2.1x	1.7x	1.2x	0.9x	
Tritium DCFC Limited	NASDAQGM:DCFC	€ 93	€ 208	2.2x	2.2x	1.0x	0.7x	0.5x	
Beam Global	NASDAQCM:BEEM	€ 104	€ 83	4.0x	2.0x	1.4x	1.0x	0.8x	
Average				4.2x	3.5x	2.6x	1.6x	1.2x	
Median				4.0x	3.0x	2.2x	1.3x	0.9x	
<b>EVs</b>									
Tesla, Inc.	NASDAQGS:TSLA	€ 816,219	€ 801,025	10.5x	9.3x	8.5x	6.7x	5.4x	
BYD Company Limited	SEHK:1211	€ 89,403	€ 83,024	1.4x	1.2x	1.0x	0.8x	0.7x	
Li Auto Inc.	NASDAQGS:LI	€ 38,133	€ 30,228	4.9x	3.2x	2.0x	1.3x	1.0x	
NIO Inc.	NYSE:NIO	€ 17,386	€ 18,031	2.7x	2.9x	2.2x	1.4x	1.1x	
XPeng Inc.	NYSE:XPEV	€ 14,806	€ 13,221	3.6x	5.0x	3.2x	1.9x	1.4x	
Zhejiang Leapmotor Technology Co., Ltd.	SEHK:9863	€ 5,916	€ 4,786	2.8x	2.9x	1.6x	0.8x	0.6x	
Polestar Automotive Holding UK PLC	NASDAQGM:PSNY	€ 5,498	€ 6,856	3.0x	2.8x	2.4x	1.4x	0.8x	
Yadea Group Holdings Ltd.	SEHK:1585	€ 5,570	€ 4,227	1.0x	1.0x	0.9x	0.7x	0.6x	
Average				2.8x	2.7x	1.9x	1.2x	0.9x	
Median				2.8x	2.9x	2.0x	1.3x	0.8x	
<b>Batteries</b>									
CATL	SZSE:300750	€ 117,684	€ 110,025	2.5x	2.2x	2.0x	1.6x	1.3x	
BYD Company Limited	SEHK:1211	€ 89,403	€ 83,024	1.4x	1.2x	1.0x	0.8x	0.7x	
LG Energy Solution, Ltd.	KOSE:A373220	€ 84,988	€ 89,166	4.7x	3.8x	3.6x	2.8x	2.2x	
Samsung SDI Co., Ltd.	KOSE:A006400	€ 27,138	€ 28,743	1.9x	1.8x	1.7x	1.5x	1.2x	
EVE Energy Co., Ltd.	SZSE:300014	€ 12,178	€ 14,200	2.9x	2.5x	1.9x	1.4x	1.1x	
Gotion High-tech Co.,Ltd.	SZSE:002074	€ 5,318	€ 6,776	2.2x	1.8x	1.4x	1.0x	0.8x	
CALB Group Co., Ltd.	SEHK:3931	€ 3,946	€ 7,583	2.7x	2.6x	1.8x	1.0x	0.7x	
Farasis Energy (Gan Zhou) Co., Ltd.	SHSE:688567	€ 3,170	€ 2,621	1.7x	1.6x	1.3x	0.7x	0.5x	
Average				2.5x	2.2x	1.8x	1.4x	1.1x	
Median				2.3x	2.0x	1.8x	1.2x	0.9x	

Even though most charging infrastructure and EV companies listed above are expected to be profitable by 2025, given the uncertainty around the quantum of profits, the EV/EBITDA multiples seemed too volatile and speculative and thus we decided to stick to EV/revenue multiples for gauging valuations in the sector.

As a gentle reminder for the reader, the falling multiples over time that can be observed above for all the subsectors are a good thing, as the way these are forecast is that the numerator, in this case the EV, is held constant while the denominator is projected into the future. Thus, falling multiples indicate that the market expects these firms to aggressively grow their denominator over the coming years, which in this case is the revenue.

**Note:** We have excluded Tesla from the mean and median calculations due to its outlier multiples as we believe they are not representative of its segment.

### 3.9 A few notable transactions

Date	Acquirer	Target	Country	Sector	Transaction Value (€M)	Features			Deal size
						Rationale	Cross-border?	PE firm involved?	
May 23	Swiss Life Holding AG	Thef Charging S.R.L.	Italy	Charging Infrastructure	84	Scope	✓	✓	Lower mid-market
May 23	Iveco Group N.V.	Nikola Iveco Europe GmbH	Germany	EVs	194	Scope	✓	✗	Lower mid-market
Apr 23	Cinven Limited	AmArA S.A.	Spain	Charging Infrastructure	750	Scope	✓	✓	Mid-market
Apr 23	Blink Charging Co.	Envoy Technologies, Inc.	USA	EVs	32	Scope	✗	✓	Lower mid-market
Jan 23	Shell plc	Volta Inc.	USA	Charging Infrastructure	229	Scope	✗	✓	Lower mid-market
Dec 22	Atlante S.r.l	Kilometer Low Cost, S.A.	Portugal	Charging Infrastructure	5	Scale	✓	✗	Lower mid-market
Dec 22	Walterscheid Powertrain Group	Benevelli Electric Powertrain Solutions/Sitem Motori Elettrici	Italy	EVs	54	Scope	✓	✗	Lower mid-market
Nov 22	Grenevia S.A.	Impact Clean Power Technology S.A.	Poland	EVs	59	Scope	✗	✗	Lower mid-market
Nov 22	Ouster, Inc.	Velodyne Lidar, Inc.	USA	EVs	106	Scale	✗	✓	Lower mid-market
Sep 22	FLEETCOR Technologies, Inc.	PlugSurfing GmbH	Germany	Charging Infrastructure	75	Scope	✓	✗	Lower mid-market
Jul 22	Nikola Corporation	Romeo Power, Inc.	USA	Batteries	62	Scale	✗	✓	Lower mid-market
Jun 22	Blink Charging Co.	SemaConnect, Inc.	USA	Charging Infrastructure	189	Scale	✗	✓	Lower mid-market
Jun 22	Datametrex AI Limited	EV Connect Solutions Inc.	Canada	Charging Infrastructure	7	Scope	✗	✗	Lower mid-market
Apr 22	Blink Charging Co.	Electric Blue Limited	United Kingdom	Charging Infrastructure	21	Scale	✓	✗	Lower mid-market
Mar 22	EverSource Capital Group	Lithium Urban Technologies Pvt. Ltd.	India	EVs	42	Scale	✗	✓	Lower mid-market
Mar 22	Luceco plc	EV Charge Points UK T/A EVCP Limited	United Kingdom	Charging Infrastructure	10	Scope	✗	✗	Lower mid-market
Jan 22	Cube Infrastructure Managers S.A.	Kople AS	Norway	Charging Infrastructure	39	Scale	✓	✓	Lower mid-market

### 3.10 Case studies

#### 3.10.1 Shell's acquisition of Volta

**Description:** On January 18<sup>th</sup>, 2023, Shell plc announced that it has signed a definitive agreement to acquire Volta Inc. (NYSE: VLTA), a US-based electric vehicle charging and media company, for \$169 million.

**Rationale:** As with most other large, publicly traded oil & gas companies, Shell is under a lot of pressure from its shareholders to transition to a greener business model, and thus, **this acquisition enables Shell to expand the scope of its existing energy network and offerings** to better participate in the long-term EV charging market opportunity within the US.

Volta provides Shell with an existing public charging network of over 3,000 charge points at destination sites (shopping centres, grocery stores, pharmacies, etc.) across 31 US states and territories, a development pipeline of more than 3,400 additional charge points, and capabilities to continue developing, operating, and monetizing EV charging infrastructure.

Additionally, Volta's advertising capability and early mover advantage have allowed the company to secure prime spots and portfolio-level contracts with site hosts in high-value, high-traffic markets.

From Volta's point of view, the transaction provides the opportunity to unlock Volta's significant signed pipeline of charging stalls in construction or evaluation. It gains a well-capitalized owner who can provide a long investment runway to fund its ambitious growth plans and gain a foothold in the seismic EV charging market opportunity.

Valuation: Per (S&P Global Inc., 2023), the transaction values Volta at an EV/LTM revenue of 4.58x and an EV/NTM revenue of 3.09x.

### 3.10.2 Blink Charging's acquisition of SemaConnect

Description: On June 14<sup>th</sup>, 2022, Blink Charging Co. (Nasdaq: BLNK, BLNKW), a leading US-based owner, operator, and provider of EV charging equipment and services, announced the signing of a definitive agreement to acquire SemaConnect, Inc., a leading provider of EV charging infrastructure solutions in North America, for \$200 million.

Rationale: **The transaction was done with the aim of expanding Blink's scale** via vertical integration while also taking advantage of SemaConnect's existing footprint to increase market share.

Blink will benefit from SemaConnect's in-house R&D, hardware design, and manufacturing capabilities, making it one of the few companies to offer complete vertical integration from charging R&D to ownership and operations. This will accelerate its go-to-market speed to 50,000 EV chargers per year while reducing operating costs.

The transaction will add nearly 13,000 EV chargers to Blink's existing footprint, an additional 3,800 site host locations, and more than 150,000 registered EV driver members. Blink will also finalize and bring to market the direct current fast charging (DCFC) equipment being developed by SemaConnect.

SemaConnect's manufacturing facility in Maryland will also allow Blink to comply with the 'Buy American' mandates and to position itself to significantly capitalize on the \$7.5 billion Biden Administration EV infrastructure bill.

Valuation: According to Blink's SEC filings, SemaConnect had a revenue of \$12.354 million in 2021, which would imply an EV/revenue multiple of 16.2x.

## 3.11 Outlook

The outlook for the EV ecosystem remains bright, with both consumer demand and regulations getting more supportive with each passing day.

For instance, in the US, which has lagged both China and Europe in EVs, Biden's Inflation Reduction Act (2022) should provide a boost to US dealmaking due its numerous provisions incentivising local manufacturing and urging citizens to 'Buy American'. We have already seen evidence of this with Blink Charging's acquisition of SemaConnect above, and more such deals are likely as companies look to diversify their supply chains away from China.

Europe also continues to strengthen its commitment to sustainability with the adoption of the revised 'Fit for 55' package centred around legally obligating member states to reduce their CO<sub>2</sub> emissions by 55% by 2030. The revision sets a new target of 100% reduction of CO<sub>2</sub> emissions from cars and vans by 2035 by banning sales of ICE vehicles and only permitting zero emission vehicles to come to the market. Given the aggressive targets, traditional OEMs and service providers are likely to turn to M&A to hasten their pivot to EVs.

Asian countries like India, Vietnam etc. are also pursuing electrification vigorously with the twin targets of sustainability and reducing reliance on foreign oil imports. India, especially, holds a lot of promise, with its massive population providing a possible alternative to Chinese manufacturing while also providing sizeable demand even with minor market penetration as it is already the 4<sup>th</sup> largest automotive market in the world and projected to replace Japan in the 3<sup>rd</sup> position in the

coming years. Both these factors are bound to lead to more M&A in the region as global EV ecosystem companies increasingly vie for a piece of the pie.

## 4 Conclusion

Our analysis shows that **lower mid-market and mid-market companies continue to be the biggest beneficiaries of M&A**, whether it is for scope or scale. While the buyer gains technological expertise and benefits from the consolidation of a fragmented market, the target gains liquidity, capital, and a long investment runway that also benefits from the buyer's wealth of experience.

Subsectors like charging infrastructure are especially promising due to a lack of incumbents, with the situation ripe for proactive companies to scale up in a timely fashion through M&A and secure a dominating position in this hugely lucrative segment for the foreseeable future.

The broader macroeconomic uncertainty in China, Europe and the US gives rise to an even greater need of thoughtful M&A to stay ahead of the pack and achieve sufficient scope or scale to succeed, with global trends like onshoring and energy independence providing companies a great incentive to gain or increase exposure to the global electrification movement to ensure robust long-term shareholder returns while also going above and beyond on their ESG obligations.



## 5 References

- Arthur D. Little. (2021, May). *Electric vehicle charging in the UK and Europe*. Retrieved from Arthur D. Little: <https://www.adlittle.com/en/insights/viewpoints/electric-vehicle-charging-uk-and-europe>
- BloombergNEF. (2023). *Electric Vehicle Outlook 2023*. Retrieved from Bloomberg: <https://about.bnef.com/electric-vehicle-outlook/>
- IEA. (2023). *Electric Vehicles*. Retrieved from IEA: <https://www.iea.org/energy-system/transport/electric-vehicles>
- IEA. (2023). *Global EV Outlook 2023*. Retrieved from IEA: <https://www.iea.org/reports/global-ev-outlook-2023>
- M&A Worldwide. (2023, August). Analysis by M&A Worldwide.
- S&P Global Inc. (2023). *Transactions*. Retrieved from Capital IQ Pro.
- SNE Research. (2023). *From Jan to June in 2023, Global EV Battery Usage Posted 304.3GWh, a 50.1% YoY Growth*. Retrieved from SNE Research: [https://www.sneresearch.com/en/insight/release\\_view/150/page/0?s\\_cat=|&s\\_keyword=#ac\\_id](https://www.sneresearch.com/en/insight/release_view/150/page/0?s_cat=|&s_keyword=#ac_id)
- Statista. (2023). *Electric vehicles worldwide - statistics & facts*. Retrieved from Statista: <https://www.statista.com/topics/1010/electric-mobility/>

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## 7 Latest Transactions

<p>BELGIUM 2/2023</p> <p><b>Katoen Natie</b></p> <p>Port logistics, cargo and stevedoring</p> <p><b>Mexico Natie</b></p> <p>Sell-Side</p>	<p>FRANCE 12/2022</p> <p><b>Staci</b></p> <p>B2B "LAST MILE" LOGISTICS</p> <p><b>LM2S</b></p> <p>Sell-Side</p>	<p>FRANCE 12/2022</p> <p><b>ARENC</b></p> <p>Logistics, transport and customs solutions</p> <p><b>TEMPO ONE</b></p> <p>Buy-Side</p>
<p>FINLAND 10/2022</p> <p><b>Vekka Group Oy</b></p> <p>Public and charter bus transport operator</p> <p><b>Lehtimäen Matkat Oy</b></p> <p>Sell-Side</p>	<p>BRAZIL 12/2021</p> <p><b>Log-In</b></p> <p>Transportation Infrastructure</p> <p><b>Tecmar</b></p> <p>Buy-Side</p>	<p>NORWAY 11/2021</p> <p><b>Posten Norge</b></p> <p>3PL</p> <p><b>Dream Logistics AB</b></p> <p>Sell-Side</p>
<p>NORWAY 12/2020</p> <p><b>Sandahlsbolagen Sweden AB</b></p> <p><b>Bring Freight Forwarding AB</b></p> <p>Sell-Side</p>	<p>NORWAY 12/2020</p> <p><b>Kleijn Transport B.V &amp; Kim Johansen Transport</b> Road Transportation</p> <p><b>Bring Trucking a.s</b></p> <p>Sell-Side</p>	<p>NORWAY 09/2020</p> <p><b>Consortium</b></p> <p>Road transportation forwarding</p> <p><b>Toten Transport AS</b></p> <p>Sell-Side</p>

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