

Global electric mobility sector update

H1 2023

Strictly private & confidential



The global EV market is anticipated to reach c. \$824bn by 2030¹, driven mainly by the EU, China, and the US

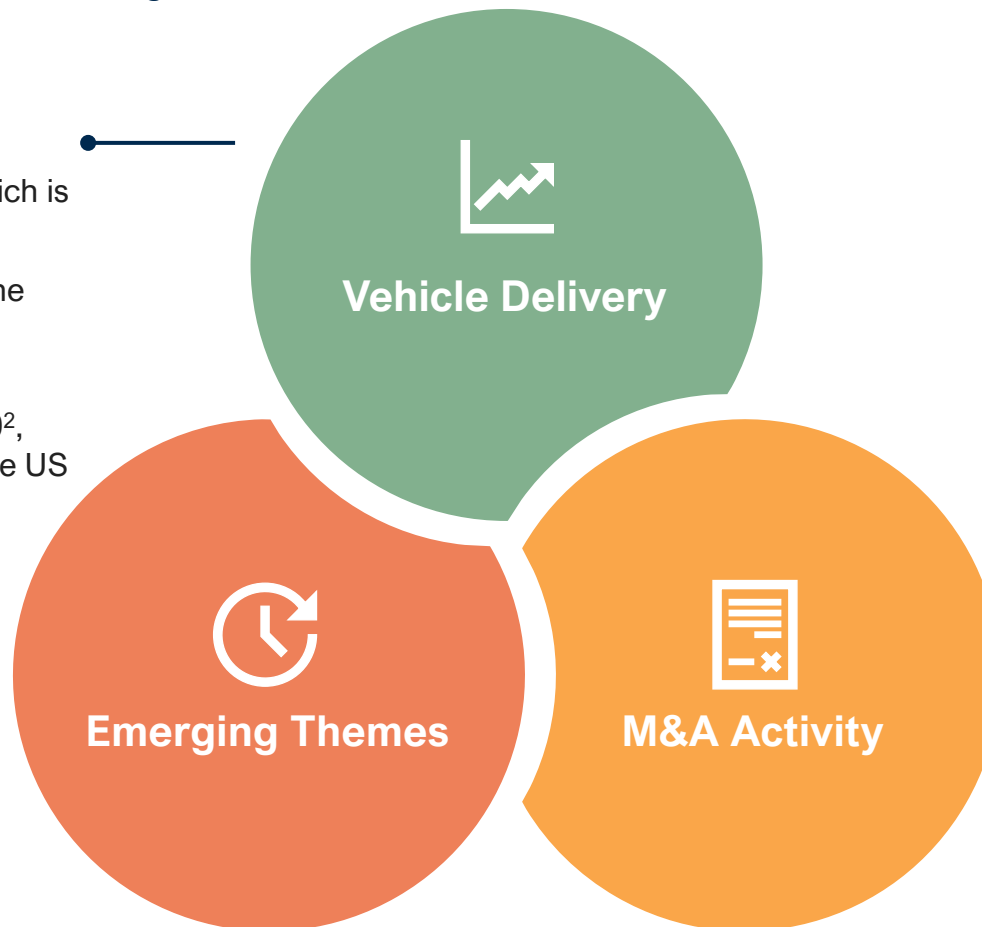
With some exceptions, valuation multiples have slightly decreased from 2022 to H1 2023 alongside unfavourable macroeconomic conditions. Despite lower deal activity, deal volumes have increased due to larger ticket sizes

On track for 2030/35 targets

- Global BEV sales increased by 70% in 2022 compared with 2021, a trend which is continuing through 2023
- EV market share expected to rise in-line with a regulatory push to phase out traditional ICE vehicles
- EV market to reach c. \$824bn by 2030², driven mainly by the EU, China, and the US

Five emerging themes for 2024 and beyond

1. Supply chain pressure
2. High energy prices
3. Economic stabilisation
4. Legislative support
5. Supply-chain consolidation



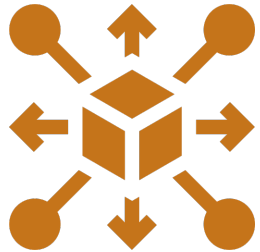
H1 2023 M&A activity

- Compared with H2 2022:
 - Total number of deals has decreased by 9%
 - Deal volume has increased by 33%, which is largely attributable to VinFast's £18bn SPAC transaction
- The majority of H1 2023 transactions involved tier 1 suppliers
- As production costs continue to rise, we expect to see supplier and retailer consolidation increase while firms seek the benefits arising from economies of scope

Five themes for H2 and beyond

Supply chain pressure, high energy prices, economic stabilisation, legislative support, and consolidation are expected to set the tone for the future

Heading into H2 2023 and looking towards 2024, we believe the following will represent some of the key issues:



Continued pressure on supply chains

- Ongoing logistical shortages of raw materials coming out of Eastern Europe. For instance, Ukraine supplies c. 50% of the world's neon, which is a critical material in the production of semiconductor chips



Inflation impacting short-term consumer sentiment

- In the short term, dampening of consumer appetite for household spending is delaying adoption of EVs, as households choose to defer big ticket spending



Long-term economic stabilisation to lead to more M&A activity

- In the longer term, as western countries begin to combat soaring inflation rates and interest rates stabilise, financial capital can be deployed with greater confidence



Significant legislative support from governments

- As economic conditions improve, governments are likely to focus attention back to long-term policies promoting stricter emission standards, continuing long term sector growth



Large players to look for consolidation opportunities

- The EV industry to become more concentrated in the near future as companies mature, consolidate or disappear
- All stages of the value chain will face challenges as rising costs deteriorate margins, forcing larger players to acquire smaller niche players, driven by cost-saving synergies



Sector landscape

OEMs

Traditional

EV – Auto

EV – Commercial

EV – Two Wheeler

EV - Aviation

Development Partners

Tier 1 suppliers

Electric powertrain

Battery Provider

Cell manufacturers

Gigafactories

Materials

Technology

As the EV supply chain matures, increasing consolidation across the sector landscape is expected

Leading vehicle electrification trends

- As EV infrastructure develops and supply chains mature, EVs are expected to continue to capture market share in-line with the regulatory push to phase out conventional ICE vehicles
- In reaction to the ever-increasing growth in the EV market, in the last three years, EV battery manufacturers have dominated the global market share of all battery production, producing c. 80% of batteries. However, given that batteries account for up to 40% of the cost of an EV, vehicle prices will remain high until battery production costs are reduced
- In addition, EV OEMs are seeking to reduce manufacturing costs by means of vertical integration, carried out principally through a combination of JVs with battery manufacturers and onshoring battery manufacturing capabilities. This will see OEMs achieve improved margins and reduce the dependency on supply chains originating from China. Aston Martin's recent involvement with Lucid Group is an example of this vertical integration
- Looking ahead, more and more emerging technologies are being pioneered by EV start-ups (the eVTOL sector in particular is currently experiencing rapid innovation) which may provide opportunities for larger players to consolidate the market in the coming years, leading to an increase in M&A in the sector
- European OEMs are facing lower demand than anticipated from large emerging markets, particularly China, which are continuing to buy ICE vehicles as opposed to electric. This is evident in Germany where only 16% of all newly registered vehicles are electric²



Global EV Market Value (2030)

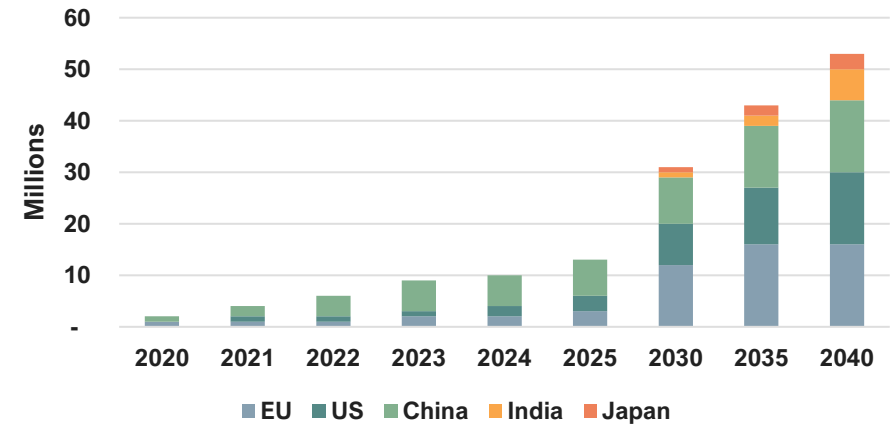
\$824bn



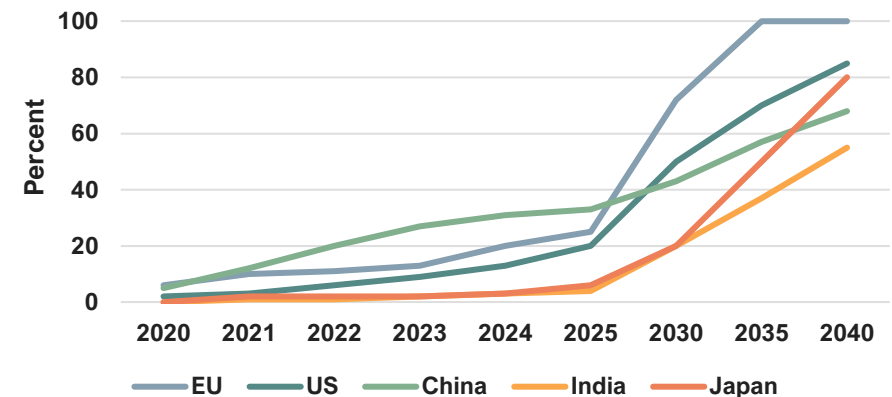
CAGR (2022-2030)

18.2%

Vehicle delivery stats¹



Battery electric vehicle (BEV) sales share (%)¹



Source: ¹Electric vehicles are forecast to be half of global car sales by 2035 – Goldman Sachs | ²ADAC Germany

Spotlight: electric aircraft trends

Global electric aircraft market size to reach \$23.5bn¹ by 2031 at 10.9% CAGR



Determinants of growth

- Continued spotlight on environmental concerns, particularly in the aviation industry where there is a drive to reduce overall carbon footprint and operational costs
- Technological advancement in batteries and electric propulsion systems
- Rise in demand for short range regional routes



Challenges

- Weight limitations – large and bulky batteries required
- Need to charge aircraft frequently before scheduled flight path
- Limited infrastructure capabilities



Opportunities















- The rise in efforts by major companies across the globe to develop electric aircraft capabilities, supported by their R&D budgets, is presenting new opportunities in the coming years
- Increase in requirement of drones for commercial and non-commercial market

Key trends

- Vertical Takeoff and Landing (**VTOL**) held **largest electric aircraft market share** in 2021 and is estimated to maintain this lead through to 2031
 - This puts VTOL ahead of Conventional Takeoff & Landing and Short Takeoff & Landing
- **North America held the highest market share** in 2021, and is projected to experience the highest regional **CAGR of 12.3%** to 2031
- Europe expected to witness strong growth due to an increase in **military aircraft modification** programs and a rise in commercial sector demand
- European aviation industry facing **operational obstacles** due to the sharp increase in passenger traffic
 - Airports, operational partners and OEMs struggling to cope
 - Long commercial **aircraft order backlogs** and increasing demand for short term routes have provoked airline operators to shift their attention towards electric aircrafts on commercial fronts
- **UK has a dominant market presence** within the aviation industry and serves as one of the most important players in the EU

Sector highlights (I/V)













H1 2023: Electric mobility sector update

Companies	Topics	Date	Description	
  	Passenger cars	Jul-23	Volkswagen announced a partnership with SAIC and Xpeng to build new models and potentially co-create new platforms. VW will also invest \$700 million in Xpeng for a 4.99% stake	M&A
 	Passenger cars	Jul-23	Nissan finalised their plans to invest €600m in Renault EV unit Ampere under reshaped alliance, also reducing Renault ownership of Nissan from 43% to 15%. The deal was announced in Feb-23	M&A
 	Battery	Jul-23	Stellantis and Samsung signed a memorandum of understanding to build a second battery facility in the U.S.	
	Battery	Jul-23	Toyota claimed that a solid-state battery breakthrough could halve battery costs and sizes	
	Passenger cars	Jun-23	Ford's Chairman claimed that the US cannot compete with China in EV production yet. This is just one month after Ford's CEO said that Chinese EV companies are Ford's main rivals	
 	Electric powertrain, passenger cars	Jun-23	Lucid has acquired 3.7% of Aston Martin through a cash and shares deal valued at £182m. In the long-term, Lucid will supply Aston Martin with powertrain components for initial and future BEV models	M&A
	Battery	Jun-23	GM signed a deal with Element 25, an Australian supplier for EV battery raw materials. This is GM's first direct supply agreement, and its first with a company outside of China	
	Passenger cars, battery	Jun-23	The Japanese Government raised financial support for the production of storage batteries to up to \$2.2bn, \$841m of which has been devoted to Toyota	
	Passenger cars	Jun-23	Geely have discussed raising c. \$1.2bn from investors for LEVC (London Electric Vehicles Company) as the Chinese firms attempt to increase their fleet size	

■ OEMs
 ■ Electric-focused OEMs
 ■ Tier 1 suppliers
 ■ Electric powertrain
 ■ Battery providers
 ■ Other

Sector highlights (II/V)












H1 2023: Electric mobility sector update

Companies	Topics	Date	Description	
 	Passenger cars	May-23	Geely acquired 9.61% of Aston Martin for £234m valued on the basis of shares priced at £3.35 per share	M&A
 	Passenger cars	Apr-23 Jan-23	In anticipation of listing later in the year, Geely assisted Lotus with a cap-raise of \$122m before listing Geely announced it will list part of Lotus in the UK through a SPAC merger, valuing Lotus at \$5.4bn	M&A
 	Passenger cars, battery	Apr-23	General Motors (GM) and Samsung SDI are jointly investing over \$3bn on a battery cell plant for EVs in Indiana, US	
	R&D	Apr-23	VW announced their intention to invest €1bn in a new research, development and procurement centre for EVs in China	
	Commercial vehicles	Mar-23	Stellantis announced that the Mangualde Production Centre in Portugal will begin the production of battery electric light commercial vehicles starting in early 2025	
	EV charging	Mar-23	Lisa Brankin, Ford MD warned that tariffs on imported battery cars, and the lack of public charging infrastructure could hinder the UK's target of selling 100% EVs by 2030	
	Passenger cars	Mar-23	VW significantly boosts investment in EV transition with €180bn injection of capital. This is a 5-year commitment to manufacture their own batteries and expand in their largest markets, the US and China	
	Passenger cars	Feb-23	Volvo CEO warned competitors that they are moving too slow into EVs and calls for a more concerted effort. In preparation for rising EV demand, Volvo's aim to keep up with other car manufacturers	
	Passenger cars	Feb-23	Ford mentioned plans to cut 3,800 ICE jobs in Europe as part of the shift to EV, but will retain about 3,400 engineers who will continue to build on core technology provided by their US counterparts	

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Sector highlights (III/V)

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Companies	Topics	Date	Description
	Passenger cars	Feb-23	New Toyota CEO said that reforming EV strategy is his new team's top priority, promising to "drastically change" the way the company does business with regards to electrification
 	Commercial vehicles, battery	Feb-23	Ford announced their plans to build a \$3.5bn battery plant in Michigan in collaboration with Chinese tech partner (Amperex Technology) to meet growing demand for electric vehicles in the region
	Passenger cars. R&D	Jan-23	Hyundai Motor Co. said it will invest \$8.5bn in 2023 as it moves to electrify more of its fleet to meet rising consumer demand for cleaner cars, including R&D expenditure and a new US plant
	Passenger cars	Jul-23	BYD announced their intention to invest \$620 million in a new industrial complex in northeastern Brazil in a bid to boost local production to offer more competitive prices
	Electric Aircraft	Jun-23	Joby Aviation raised an equity investment of \$100m from SK Telecom, South Korea's leading telecommunications company.
	Passenger cars	Jun-23	Tesla announced it had delivered a record number of vehicles in Q2 2023, 10.4% higher than Q1 2023. This is partially attributable to Tesla's price cuts earlier this year
 	EV software	Jun-23	Rivian has acquired Iternio Planning AB, the Sweden based software company providing electric vehicle route planning software
	Passenger cars	Jun-23	NIO, the Chinese EV maker raised \$738.5m in new capital from a fund owned by the Abu Dhabi government.
	Passenger cars	May-23	Black Spade Acquisition Co, the Hong Kong (China) based blank check Company (BCC) acquired VinFast Auto Pte Ltd, Singapore based engaged in electric vehicle manufacturing for \$23bn.

M&A













M&A

M&A

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Sector highlights (IV/V)











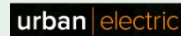


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Companies	Topics	Date	Description	
	Passenger cars	May-23	Following a 60% stock slump last year, Lucid Group looked to raise c. \$3bn from their existing Saudi owners	
	Passenger cars	Feb-23	American EV manufacturer Rivian announced plans to lay off 6% of its workforce in order to conserve cash as EV price war concerns grow	
	Commercial vehicles	Jan-23	Arrival has announced it will replace its CEO and cut production in an effort to preserve cash. The move highlights the pressure on EV start-ups to cut costs amid supply-chain issues and raw material costs	
 	Automotive supplier	Jul-23	Magna International to invest \$790 million to build three facilities in Tennessee to supply Ford with battery enclosures, truck frames and seats	
 	EV charging	Jun-23	BorgWarner and Eldor Corporation have entered into a Share Purchase Agreement where BorgWarner has agreed to acquire the Electric Hybrid Systems (EHS) business segment of Eldor for €75m at closing	M&A
	Digital mobility	May-23	Robert Bosch GmbH acquired through its subsidiary Automobility Services & Solutions Pvt Ltd, the India based Digital Mobility business from Bosch Ltd. The consideration was \$84m	M&A
 	EV charging	Apr-23	McLaren Applied Technologies Limited acquired Fimer SpA, the Italy-based company engaged in the production of inverters for photovoltaic plants, welding and charging stations for electric vehicles	M&A
  DeepDrive	Electric powertrain	Mar-23	A group of investors including BMW i Ventures and Continental AG acquired an undisclosed stake in DeepDrive GmbH, the Germany based provider of modular powertrain platforms for EVs for \$16.1m	
 	Automotive supplier	Jan-23	Schaeffler acquired Ewellix AB, the Sweden-based designer and manufacturer of linear motion and linear actuators, including smart actuators, linear guides and ball and roller screws for £597m	

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Sector highlights (V/V)

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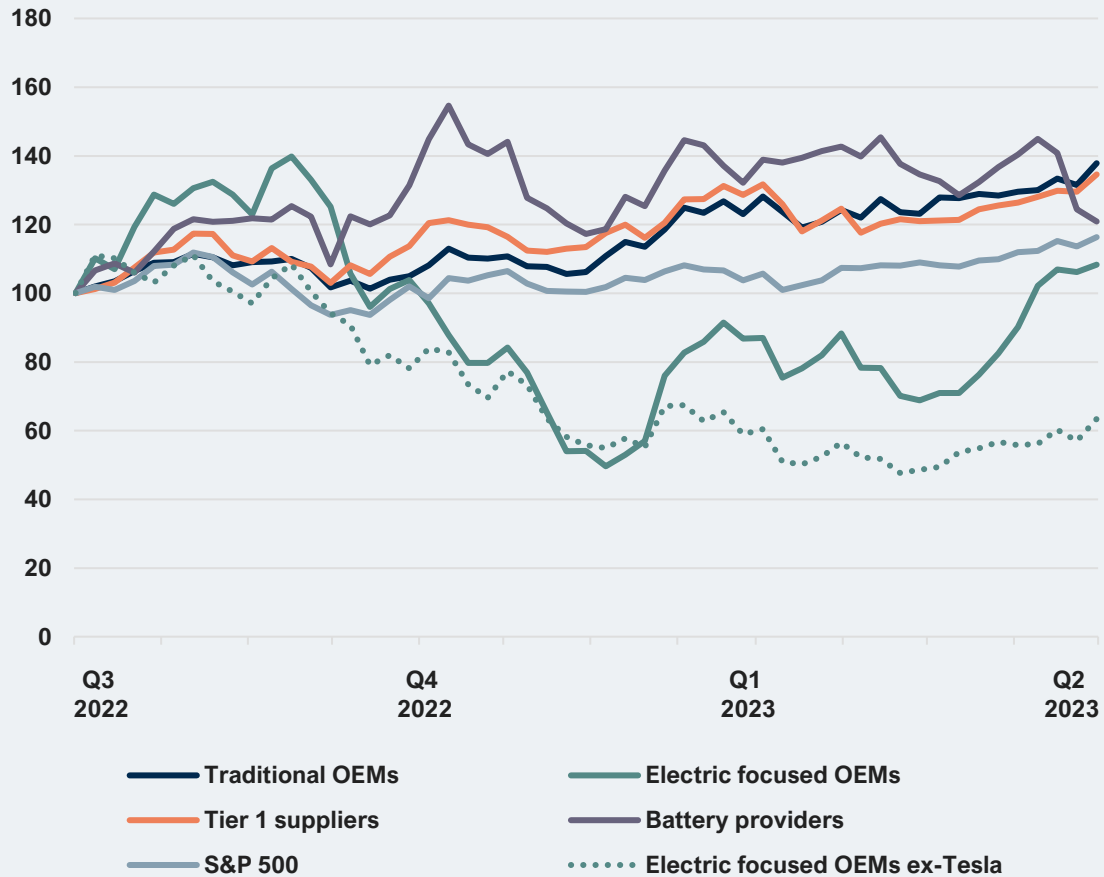
Companies	Topics	Date	Description	
 	Automotive supplier	Apr-23	Aptiv acquired Hohle OU, the Estonia-based producer of micro-ducts for the installation of fiber optical cables	M&A
	Battery	Jun-23	Fortescue to expand the production of batteries and electric powertrains in the UK with new WAE Oxfordshire facility	
	Battery	Apr-23	CATL launched condensed battery, a technology allowing for high energy density and safety, allowing for a new electrification scenario of passenger aircraft	M&A
	Passenger cars	Feb-23	A consortium led by Mr. Amnon Shashua acquired 5.77% of ZEEKR Intelligent Technology Holding Ltd, the China based holding company with manufacturing business of EVs for \$750m	M&A
 	Battery	Feb-23	Northvolt AB and 7 other parties acquired Liminal Insights Inc, the US-based provider of a battery analytics platform using ultrasound imaging and machine learning analytics for \$17.5m	M&A
 	EV charging	Mar-23	Shell acquired Volta Inc. for \$169m, scaling up its US public electric vehicle charging network. This forms part of Shell's expansion strategy to provide more than 500,000 charge points by 2025	M&A
 	EV charging	Mar-23	Balfour Beatty Investments joined Urban Electric Networks to form Urban Fox, the on-street EV charging business in which they plan to invest up to £60m to fund up to 35,000 charging points across the UK	M&A
 	Battery, gigafactory	Feb-23	Australian group Recharge Industries acquired the business and assets of struggling UK gigafactory business Britishvolt for £8.5m. The UK Government had committed £100m, but the project collapsed	

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Market valuation

Overall, stock price performance over LTM has been better than the S&P 500, excluding the Electric focused OEMs. Trading multiples show mixed trends across sectors, reflecting a patchy trading environment

Stock price performance (LTM, indexed)



Trading multiples

	CY22		CY23 H1	
	EV/Revenue	EV/EBITDA	EV/Revenue	EV/EBITDA
Traditional OEMs	1.3x	7.4x	1.4x	7.3x
Electric focused OEMs	5.3x	n/m	4.0x	n/m
Tier 1 suppliers	1.3x	10.1x	1.3x	10.4x
Battery providers	4.5x	23.0x	2.2x	19.0x
S&P 500	2.6x	12.6x	2.7x	12.2x

Source: FactSet as of 27 July 2023

Note: Electric-focused OEMs not included in EV/EBITDA category as there is insufficient data to draw analysis from n/m (non-meaningful); multiples < 0 have been excluded as well as: EV / Revenue > 15x, EV / EBITDA > 50x

Clairfield in the automotive sector

H1 2023: Electric mobility sector update

 WILLIAMS ADVANCED ENGINEERING sold to 	 EMK Capital Enterprise Management Knowledge acquired WILLIAMS ADVANCED ENGINEERING	  equity raise  & several investors	 AUTOKLINIKKA sold to PROCURITAS	  acquired 	 RASKONE sold to LEASEDEAL	  sold to 	 mengineering gmbh sold to 	  acquired 	  sold to 
 nImab. acquired 	  acquired 	  sold to 	  sold to 	  sold to 	  acquired 	  sold to 	  sold to 	  sold to 	 bynco acquired 
  sold to 	  sold to - INDUSTRY 4.0 FUND - 	  sold to 	  sold to 	  sold to 	 TOMATEX sold to 	  acquired 	  sold to 	  sold to  Charme Capital Partners	  acquired 

Electrification

H1 2023: Electric mobility sector update

Appendix

Selection of precedent transactions

H1 2023: Electric mobility sector update

Traditional OEMs

Date	Target	Acquiror	EV (£m)	EV / Revenue	EV / EBITDA	Target Description
Jun-23	ALGOLiON Ltd	General Motors Company	n/a	n/a	n/a	Israel based developer of battery software
Jun-23	Aston Martin Lagonda Global Holdings plc	Lucid Group Inc	3,343	2.3x	n/a	Manufacturer of luxury sports cars
May-23	Aston Martin Lagonda Global Holdings plc	Geely Automobile Holdings Ltd	3,201	2.3x	n/a	Manufacturer of luxury sports cars
Apr-23	Lotus Tech	Geely Automobile Holdings Ltd & 3 others	n/a	n/a	n/a	China based manufacturer of electric vehicles
Sep-22	Aston Martin Lagonda (17% Stake)	Public Investment Fund	1,427	1.3x	n/a	UK-based company designing and manufacturing luxury sports cars, also providing fashion and other accessories
Sep-22	Porsche AG	Porsche Automobil Holding SE	8,849	n/a	n/a	Germany-based automobile manufacturer specializing in sports cars, SUVs and sedans
Jun-22	Koppar Resources Ltd (8% Stake)	Stellantis N.V.	390	n/a	n/a	Australia-based ASX-listed company headquartered in Melbourne, Victoria, is engaged in exploring and developing copper, zinc and other minerals

Source: MergerMarket

n/a: data unavailable on MergerMarket

Bold companies are those included in the relevant sectors of the sector landscape

Selection of precedent transactions

H1 2023: Electric mobility sector update

Electric-focused OEMs

Date	Target	Acquiror	EV (£m)	EV / Revenue	EV / EBITDA	Target Description
Jun-23	Northern Group Inc	Kandi Technologies Group Inc; SC Autosports LLC	n/a	n/a	n/a	Owner of sales channels for wholesale, retail, supply chain and analytics solutions
Jun-23	Iternio Planning AB	Rivian Automotive	n/a	n/a	n/a	Software company providing electric vehicle route planning software
Jun-23	NIO Inc (2.12% stake)	The Emirate of Abu Dhabi CYVN Holdings LLC	13,452	2.5x	n/a	Manufacturer of electric vehicles
May-23	VinFast Auto Pte Ltd	Black Spade Acquisition Co	18,450	n/a	n/a	Electric vehicle manufacturer
Dec-22	Electric Last Mile Solutions, Inc.	Mullen Automotive, Inc.	82	n/a	n/a	US-based company engaged in designing, manufacturing and customizing electric, connected last mile delivery vehicles
Oct-22	RMG Acquisition Corp.	Nikola Corporation	59	n/a	n/a	US-based SPAC sponsored by Riverside Management Group (“RMG”) and the Management Team of James Carpenter, Robert Mancini and Philip Kassin
Sep-22	Zero Motorcycles, Inc.	Hero MotoCorp Ltd & 2 others	98	n/a	n/a	US-based electric motorbikes manufacturer
Sep-22	Bollinger Motors Inc (60% Stake)	Mullen Automotive, Inc.	215	n/a	n/a	EV truck innovator
Jul-22	Guangzhou Xiaopeng Motors Technology Co., Ltd.	Xpeng Inc & IDG Capital	84	n/a	n/a	China-based listed company engaged in design and manufacture of smart electric cars
Apr-22	Poema Global Holdings (10% Stake)	Hero MotoCorp Ltd & 4 others	2,163	n/a	n/a	US-based special purpose acquisition company (SPAC)
Feb-22	Hero FinCorp Ltd (9% Stake)	Apollo Global Management, LLC & Hero MotoCorp Ltd	198	n/a	n/a	India-based provider of financial services

Source: MergerMarket

n/a: data unavailable on MergerMarket

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Selection of precedent transactions

H1 2023: Electric mobility sector update

Tier 1 suppliers

Date	Target	Acquiror	EV (£m)	EV / Revenue	EV / EBITDA	Target Description
Jun-23	Eldor Corp SpA	BorgWarner Inc.	64	n/a	n/a	Italy based electric Hybrid Systems (EHS) business segment of Eldor Corp
Jun-23	Vitesco Technologies Italy	Punch Powertrain NV	n/a	n/a	n/a	The Italian division is active in injectors, the components that inject fuel into the engine, and does both development and production
May-23	Bosch Ltd (Digital Mobility Business)	Robert Bosch GmbH; Automobility Services & Solutions Pvt Ltd	68	n/a	n/a	India based Digital Mobility business
May-23	BEDEO	Ludgate Investments Limited	n/a	n/a	n/a	Engineering company which originates the full technical solutions for their powertrains, including a power source, drivetrain, and operating system
Apr-23	Fimer SpA	McLaren Applied Technologies Limited	n/a	n/a	n/a	Italy-based company engaged in the production of inverters for photovoltaic plants, welding and charging stations for electric vehicles
Mar-23	DeepDrive GmbH	Continental AG & 4 others	13	n/a	n/a	Germany-based e-mobility start-up providing a modular powertrain platform for e-vehicles
Jan-23	Ewellix AB	Schaeffler AG	597	n/a	n/a	Sweden-based provider of electrical linear actuator components, systems and linear motion products
Dec-22	Drivetek AG	BorgWarner Inc.	30	n/a	n/a	Provider of engineering and product development services for inverters, electric drive solutions and power electronics
Nov-22	Tenneco Inc	Apollo Global Management, LLC	4,638	n/a	n/a	US-based designer, manufacturer and distributor of automotive ride control and emission control products and systems for the automotive market
Sep-22	Elmo Motion Control	Robert Bosch GmbH & Bosch Rexroth AG	609	n/a	n/a	Israeli designer of servo drives and other motion-control technologies
Aug-22	Rhombus Energy Solutions, Inc.	BorgWarner Inc.	152	n/a	n/a	US-based provider of power conversion, control and energy storage solutions
Jul-22	Valeo Siemens eAutomotive GmbH (50% Stake)	Valeo SA	467	0.7x	n/a	Germany-based High Voltage Powertrain project of Valeo SA and Siemens AG
Mar-22	StradVision, Inc. (6% Stake)	ZF Friedrichshafen AG	187	n/a	n/a	US-based company that provides technology software with advanced object detection and recognition software to automotive industry

Source: MergerMarket

n/a: data unavailable on MergerMarket

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Selection of precedent transactions

H1 2023: Electric mobility sector update

Electric powertrain

Date	Target	Acquiror	EV (£m)	EV / Revenue	EV / EBITDA	Target Description
Apr-23	Hohle OU	Aptiv plc & HellermannTyton Ltd	n/a	n/a	n/a	An Estonian producer of micro-ducts for the installation of fiber optical cables
Dec-22	Intercable Automotive Solutions srl	Aptiv plc	516	n/a	n/a	Company engaged in high-voltage power distribution and high-precision connection technologies
Dec-22	Wind River Systems Inc	Aptiv plc	2,573	n/a	n/a	US based provider of operating systems and development tools for embedded systems used in products as cellular phones, auto braking systems, Internet routers, jet fighter control panels, and traffic signals
Aug-22	StradVision, Inc.	Aptiv plc & ZF Trading GmbH	73	n/a	n/a	US-based company that provides technology software with advanced object detection and recognition software to automotive industry
Jun-22	Turntide Technologies, Inc. (8% Stake)	Consortium	828	n/a	n/a	US-based developer of an efficient intelligent motor system which aims to replace all traditional motors
Mar-22	David Energy Systems Inc	Turntide Technologies, Inc. & 6 others	16	n/a	n/a	Electricity provider engaged in designing, building, and managing onsite energy grids
Apr-22	TTTech Auto AG (29% Stake)	AUDI AG & Aptiv plc	737	n/a	n/a	Austria-based producer of software and components used in autonomous driving

Source: MergerMarket

n/a: data unavailable on MergerMarket

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Selection of precedent transactions

H1 2023: Electric mobility sector update

Development partners

Date	Target	Acquiror	EV (£m)	EV / Revenue	EV / EBITDA	Target Description
Mar-23	Aither (90% Stake)	Ricardo plc	19	3.3x	n/a	Australia-based advisor specialising in water policy, water markets, infrastructure, and natural hazards
Jan-23	E3-Modelling SA (93% Stake)	Ricardo plc	26	n/a	n/a	Greece-based consultancy which specialises in delivering advanced empirical modelling of the energy-economy-environment nexus
Mar-22	Williams Advanced Engineering Ltd	Fortescue Metals Group Ltd.	164	n/a	n/a	UK-based technology and engineering services company providing technical innovation, engineering, testing and manufacturing services related to Formula One race cars
Dec-19	Williams Advanced Engineering Ltd	EMK Capital LLP	48	n/a	n/a	UK-based technology and engineering services company providing technical innovation, engineering, testing and manufacturing services related to Formula One

Battery providers

Date	Target	Acquiror	EV (£m)	EV / Revenue	EV / EBITDA	Target Description
Feb-23	ZEEKR Intelligent Technology Holding Ltd (6% Stake)	CATL Ltd & 4 others	10,756	n/a	n/a	Cayman-based holding company interested in automotive design, software systems development, modular development, virtual engineering of intelligent EVs
Feb-23	AMCI Acquisition Corp. II (6% Stake)	BASF SE & 9 others	1,589	n/a	n/a	US-based blank check firm
Feb-23	Liminal Insights Inc	Northvolt AB & 7 others	15	n/a	n/a	US-based battery analytics platform using ultrasound imaging and machine learning analytics.
Aug-22	Atom Power, Inc	SK Energy Co., Ltd.; SK Inc.	125	n/a	n/a	US-based manufacturer of a solid-state power circuit breaker switches for commercial and industrial buildings.
May-22	Morrow Batteries AS	Siemens AG & 4 others	84	n/a	n/a	A Norwegian company looking to build a giga-scale battery cell factory in southern Norway
Feb-22	Power by Britishvolt Ltd	Bank of America Corporation & 3 others	200	n/a	n/a	UK-based battery manufacturer

Clairfield transaction

Source: MergerMarket
n/a: data unavailable on MergerMarket

Selection of trading comparables

H1 2023: Electric mobility sector update

Traditional OEMs

Company	July 2023			EV / Revenue						EV / EBITDA					
	Share price (LTM)	Market cap (£m)	EV (£m)	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
Toyota	(3.0%)	173,411	270,114	1.4x	1.4x	1.3x	1.2x	1.1x	1.2x	9.4x	10.1x	10.1x	9.7x	9.0x	9.1x
BMW	43.4%	58,250	105,988	0.3x	0.3x	0.2x	0.8x	0.8x	0.8x	1.8x	1.6x	1.4x	5.1x	4.9x	5.0x
Ford	3.0%	43,016	117,323	1.2x	1.0x	1.0x	0.9x	0.9x	0.9x	16.5x	11.1x	12.3x	11.1x	10.6x	11.4x
Ferrari	53.0%	44,551	45,478	8.9x	7.7x	8.2x	8.2x	9.4x	10.6x	25.0x	22.0x	23.5x	23.3x	26.4x	28.8x
General Motors	9.2%	43,593	104,684	1.2x	1.1x	1.0x	0.8x	0.8x	0.8x	7.6x	7.3x	6.9x	6.0x	6.0x	6.1x
Stellantis	44.9%	46,989	23,418	0.1x	0.1x	0.1x	0.1x	0.1x	0.1x	1.0x	0.5x	0.6x	0.5x	0.9x	0.8x
Honda	15.1%	40,926	59,098	0.6x	0.6x	0.6x	0.5x	0.5x	0.6x	6.3x	6.1x	5.7x	5.4x	5.3x	5.2x
Volvo	22.9%	34,624	46,268	1.2x	1.1x	1.0x	1.0x	1.1x	1.1x	7.2x	6.5x	6.3x	6.5x	6.4x	6.8x
Hyundai	(4.1%)	28,215	67,068	0.9x	0.9x	0.8x	0.7x	0.7x	0.7x	7.4x	7.1x	7.2x	7.0x	6.2x	6.2x
Suzuki	13.9%	14,799	15,782	0.5x	0.5x	0.5x	0.5x	0.5x	0.5x	5.5x	5.4x	5.1x	4.7x	4.7x	4.4x
Nissan	12.5%	14,172	39,046	0.8x	0.9x	0.8x	0.8x	0.6x	0.6x	7.1x	8.4x	8.1x	7.1x	5.8x	5.7x
Renault	60.1%	9,860	31,082	0.7x	0.7x	0.7x	0.7x	0.7x	0.7x	5.1x	4.7x	4.4x	4.3x	4.7x	4.9x
Mazda	13.1%	4,954	3,721	0.1x	0.3x	0.2x	0.2x	0.1x	0.1x	2.0x	5.0x	2.6x	2.5x	2.2x	1.7x
Mean	21.9%			1.4x	1.3x	1.3x	1.3x	1.3x	1.4x	7.8x	7.4x	7.2x	7.2x	7.2x	7.4x

Source: FactSet as of 27 July 2023

n/a: data unavailable on FactSet

n/m (non-meaningful): multiples < 0 have been excluded as well as: EV / Revenue > 15x, EV / EBITDA > 50x

Selection of trading comparables

H1 2023: Electric mobility sector update

Electric-focused OEMs

Company	July 2023			EV / Revenue						EV / EBITDA					
	Share price (LTM)	Market cap (£m)	EV (£m)	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
Tesla, Inc.	(4.8%)	731,408	716,023	n/m	12.8x	15.0x	5.2x	8.1x	9.2x	n/m	n/m	n/m	24.0x	41.5x	48.8x
Li Auto	1.9%	33,378	26,437	4.0x	6.5x	3.6x	2.0x	2.2x	2.6x	n/m	n/m	n/m	n/m	n/m	n/m
NIO Inc	(35.5%)	17,255	15,731	6.0x	6.2x	4.1x	2.0x	2.2x	2.2x	n/m	n/m	n/m	n/m	n/m	n/m
Rivian Automotive Inc	(20.1%)	22,903	15,174	n/m	n/m	n/m	4.8x	3.0x	2.6x	n/m	n/m	n/m	n/m	n/m	n/m
Lucid Group, Inc.	(63.1%)	10,601	9,846	n/m	n/m	n/m	n/m	n/m	n/m	n/m	n/m	n/m	n/m	n/m	n/m
Fisker Inc	(39.6%)	1,701	1,704	n/m	n/m	n/m	n/m	n/m	n/m	n/m	n/m	n/m	n/m	n/m	n/m
Nikola Corporation	(63.5%)	1,326	1,370	n/m	n/m	n/m	n/m	13.3x	n/m	n/m	n/m	n/m	n/m	n/m	n/m
Lion Electric Company	(51.3%)	413	475	n/m	9.5x	5.5x	3.8x	2.8x	2.3x	n/m	n/m	n/m	n/m	n/m	n/m
Hyllion Holdings	(53.6%)	261	43	n/m	n/m	n/m	n/m	n/m	9.3x	n/m	n/m	n/m	n/m	n/m	n/m
Kandi Technologies	42.8%	210	45	0.3x	n/m	n/m	n/m	n/m	n/a	n/m	1.4x	2.1x	2.9x	0.9x	n/a
Proterra Inc.	(70.2%)	262	161	5.3x	2.7x	4.0x	2.3x	0.7x	0.4x	n/m	n/m	n/m	n/m	n/m	n/m
Faraday Future Intelligent Electric, Inc.	(88.1%)	338	392	n/a	n/a	n/a	n/a	n/a	n/m	n/m	n/m	n/m	n/m	n/m	n/m
Canoo Inc	(84.6%)	269	287	n/a	n/a	n/a	n/a	n/a	n/a	n/m	n/m	n/m	n/m	n/m	n/m
ElectraMeccanica	(51.7%)	67	(19)	n/m	n/m	n/m	n/a	n/a	n/a	n/m	0.2x	0.1x	n/a	n/a	n/a
Greenpower Motor	19.4%	83	90	9.4x	4.8x	3.4x	1.8x	1.6x	1.3x	n/m	n/m	n/m	n/m	n/m	n/m
Arrival	(97.5%)	24	(535)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Lordstown	(90.1%)	39	(74)	n/a	n/a	n/a	n/m	n/m	n/m	n/a	n/m	n/m	n/m	n/m	0.5x
Mean	(44.1%)			5.0x	7.1x	5.9x	3.1x	4.2x	3.7x	n/a	0.8x	1.1x	13.5x	21.2x	24.6x

Source: FactSet as of 27 July 2023

n/a: data unavailable on FactSet

n/m (non-meaningful): multiples < 0 have been excluded as well as: EV / Revenue > 15x, EV / EBITDA > 50x

¹Electric-focused OEM average EBITDA multiple denoted by n/m due to small sample size

Selection of trading comparables

H1 2023: Electric mobility sector update

Tier 1 suppliers (I/II)

Company	July 2023			EV / Revenue						EV / EBITDA					
	Share price (LTM)	Market cap (£m)	EV (£m)	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
EATON	36.0%	63,083	69,908	3.7x	3.3x	3.5x	3.5x	3.5x	3.9x	19.0x	16.8x	17.6x	17.2x	17.4x	19.0x
Safran	42.9%	54,427	52,395	2.6x	2.1x	2.1x	2.6x	2.9x	2.9x	17.2x	13.3x	12.2x	14.9x	16.2x	15.6x
Hitachi	19.4%	45,767	54,343	0.8x	0.9x	0.7x	0.8x	0.8x	0.9x	6.8x	7.0x	6.0x	6.8x	6.5x	7.0x
Parker Hannifin	35.8%	39,985	50,422	2.9x	2.6x	3.2x	3.1x	3.1x	3.3x	13.6x	12.3x	15.5x	15.4x	15.1x	16.1x
DENSO	12.7%	39,799	42,109	1.1x	1.0x	0.9x	0.9x	0.9x	1.0x	8.9x	8.6x	7.5x	7.6x	7.6x	7.9x
Nidec Corporation	(16.0%)	26,816	29,557	4.0x	3.3x	3.2x	2.1x	2.0x	2.0x	27.6x	23.6x	23.5x	16.6x	20.1x	n/a
Aptiv	6.9%	25,654	29,061	2.3x	1.8x	1.5x	1.7x	2.0x	1.7x	20.2x	18.0x	13.7x	14.0x	16.1x	12.6x
Mitsubishi Electric	27.3%	24,551	21,760	0.5x	0.5x	0.5x	0.5x	0.6x	0.6x	5.0x	5.5x	5.4x	5.2x	5.9x	6.6x
MAGNA	(3.1%)	13,993	16,103	0.6x	0.6x	0.5x	0.5x	0.5x	0.5x	6.8x	6.6x	6.0x	5.9x	5.7x	5.6x
WEICHAI Group (Aradex)	(8.0%)	11,391	12,721	0.6x	0.7x	0.6x	0.5x	0.6x	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Toshiba	(23.1%)	10,846	10,274	0.5x	0.6x	0.6x	0.6x	0.5x	n/a	7.5x	9.3x	9.3x	10.5x	7.9x	n/a
BorgWarner	18.6%	8,537	11,177	0.9x	0.8x	0.8x	0.8x	0.9x	0.9x	6.2x	6.0x	5.8x	5.9x	6.6x	6.3x
Lear Corporation	0.7%	7,117	8,631	0.6x	0.5x	0.5x	0.5x	0.5x	0.5x	9.3x	9.7x	8.6x	7.1x	7.3x	6.6x
Aisin	(0.8%)	6,914	11,370	0.5x	0.5x	0.4x	0.4x	0.4x	0.4x	4.5x	4.9x	4.9x	5.6x	5.2x	4.8x
Gentex Corporation	7.9%	5,965	5,719	4.0x	4.0x	3.3x	3.3x	3.1x	3.1x	14.5x	15.1x	13.4x	13.7x	13.2x	12.8x
Bosch	6.1%	5,328	5,066	3.4x	3.4x	3.4x	3.2x	3.5x	3.2x	27.9x	27.6x	28.0x	26.8x	28.7x	26.0x
Valeo	14.0%	4,604	8,684	0.5x	0.5x	0.5x	0.5x	0.5x	0.5x	4.0x	4.3x	3.9x	4.0x	4.1x	3.9x
Visteon	25.4%	3,478	3,478	1.2x	1.1x	1.0x	1.0x	1.1x	1.0x	16.9x	14.7x	12.7x	12.9x	13.7x	10.9x
Schaeffler/Continental	9.8%	3,324	7,294	0.6x	0.6x	0.5x	0.5x	0.6x	0.5x	4.0x	4.6x	4.1x	4.4x	5.0x	n/a
Adient Plc	28.6%	3,152	4,579	0.5x	0.4x	0.4x	0.4x	0.4x	0.3x	16.6x	13.3x	8.9x	8.2x	7.7x	6.5x

Selection of trading comparables

H1 2023: Electric mobility sector update

Tier 1 suppliers (II/II)

Company	July 2023			EV / Revenue						EV / EBITDA					
	Share price (LTM)	Market cap (£m)	EV (£m)	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
Sona Comstar	(2.0%)	3,300	3,279	n/m	n/m	12.9x	9.7x	8.7x	10.0x	n/m	n/m	n/m	39.3x	34.1x	38.3x
Vitesco Technologies	51.0%	2,654	2,535	n/a	0.2x	0.3x	0.2x	0.3x	0.3x	2.4x	3.9x	4.5x	3.0x	4.1x	4.3x
Linamar Corporation	22.6%	2,754	2,964	0.5x	0.6x	0.5x	0.5x	0.5x	0.5x	3.9x	4.4x	4.2x	4.0x	3.8x	3.9x
JTEKT	14.1%	2,535	3,585	0.4x	0.4x	0.3x	0.3x	0.3x	0.3x	4.7x	5.1x	4.6x	4.4x	4.0x	n/a
Dana	14.7%	2,167	4,220	0.6x	0.5x	0.5x	0.5x	0.5x	0.5x	8.1x	8.5x	8.1x	7.3x	7.3x	7.0x
Gentherm Incorporated	(12.4%)	1,482	1,534	2.4x	2.1x	1.8x	1.9x	1.6x	1.3x	19.2x	22.3x	19.0x	23.8x	19.3x	14.4x
Nexteer Automotive Group Limited	(20.0%)	1,316	1,191	0.4x	0.5x	0.4x	0.4x	0.4x	0.3x	4.1x	5.0x	3.9x	4.3x	3.8x	2.8x
MAHLE	102.9%	937	933	1.0x	0.9x	0.8x	0.9x	0.9x	n/a	4.8x	5.4x	4.6x	5.6x	5.0x	n/a
Tremec/KUO	(2.7%)	827	882	0.5x	0.5x	0.5x	0.5x	0.5x	0.4x	6.5x	6.4x	7.9x	7.2x	7.5x	6.4x
American Axle	4.9%	895	2,835	0.7x	0.7x	0.7x	0.6x	0.6x	0.6x	4.8x	5.3x	5.2x	4.7x	4.7x	4.8x
Martinrea	45.6%	682	1,207	0.4x	0.4x	0.4x	0.4x	0.4x	0.4x	5.2x	4.9x	3.8x	3.3x	3.5x	3.2x
Exedy Corporation	17.9%	632	587	0.3x	0.3x	0.3x	0.3x	0.3x	n/a	1.9x	2.2x	2.3x	2.3x	2.4x	n/a
Nemak SAB de CV	(8.8%)	570	1,695	0.6x	0.5x	0.5x	6.7x	0.4x	n/a	4.3x	3.9x	4.2x	n/m	3.8x	3.4x
ElringKlinger	9.7%	423	720	0.4x	0.3x	0.3x	0.4x	0.5x	0.5x	3.7x	3.6x	3.3x	4.6x	5.3x	n/a
Stoneridge, Inc.	7.2%	444	547	0.9x	0.8x	0.8x	0.8x	0.7x	0.7x	43.5x	n/m	31.4x	24.6x	22.6x	18.9x
Cooper-Standard Holdings Inc.	264.4%	237	1,032	0.5x	0.4x	0.4x	0.4x	0.5x	0.5x	n/m	n/m	n/m	24.8x	21.9x	13.5x
Equipmake Holdings Plc	n/a	90	92	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Saietta Group Plc	(70.2%)	44	21	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Mean	18.4%			1.2x	1.1x	1.4x	1.4x	1.3x	1.4x	10.7x	9.4x	9.5x	10.8x	10.4x	10.3x

Source: FactSet as of 27 July 2023

n/a: data unavailable on FactSet

n/m (non-meaningful): multiples < 0 have been excluded as well as: EV / Revenue > 15x, EV / EBITDA > 50x

Selection of trading comparables

H1 2023: Electric mobility sector update

Battery providers

Company	July 2023			EV / Revenue						EV / EBITDA					
	Share price (LTM)	Market cap (£m)	EV (£m)	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023
Contemporary Amperex Technology Co Ltd	(31.2%)	107,360	105,089	8.1x	6.7x	4.0x	3.0x	2.6x	2.3x	n/m	46.6x	31.2x	23.7x	n/a	n/a
LG Energy Solution Ltd	40.8%	82,396	85,800	5.6x	4.9x	4.8x	4.3x	4.6x	3.8x	34.8x	36.0x	29.8x	35.9x	40.5x	31.6x
Samsung SDI	19.4%	28,213	24,544	2.3x	1.9x	1.7x	1.7x	1.9x	1.6x	13.2x	10.9x	10.1x	10.7x	12.3x	10.3x
CALB	(58.2%)	3,203	3,592	n/a	n/a	n/a	1.5x	1.3x	1.1x	n/a	n/a	n/a	25.0x	17.3x	12.8x
Quantumscape Corp	(13.5%)	3,382	2,689	n/a	n/a	n/a	n/a	n/a	n/a	n/m	n/m	n/m	n/m	n/m	n/m
Varta AG	(70.2%)	782	1,227	4.3x	4.2x	2.1x	1.8x	2.1x	1.7x	14.8x	15.5x	10.6x	20.8x	n/m	n/a
Microvast Holdings	11.0%	755	605	10.2x	2.3x	2.1x	1.6x	1.4x	2.0x	n/m	n/m	n/m	n/m	n/m	n/m
Amte Power plc	(84.5%)	4	5	14.2x	12.2x	n/m	n/m	n/a	n/a	n/a	n/a	n/a	n/m	n/m	3.6x
Mean	(23.3%)			7.5x	5.4x	2.9x	2.3x	2.3x	2.1x	21.0x	27.2x	20.4x	23.2x	23.4x	14.6x

Source: FactSet as of 27 July 2023

n/a: data unavailable on FactSet

n/m (non-meaningful): multiples < 0 have been excluded as well as: EV / Revenue > 15x, EV / EBITDA > 50x



We look forward to speaking with you

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