

Electric Vehicles(EV): Charging up the future

DIGITAL ENGAGEMENT TEAM

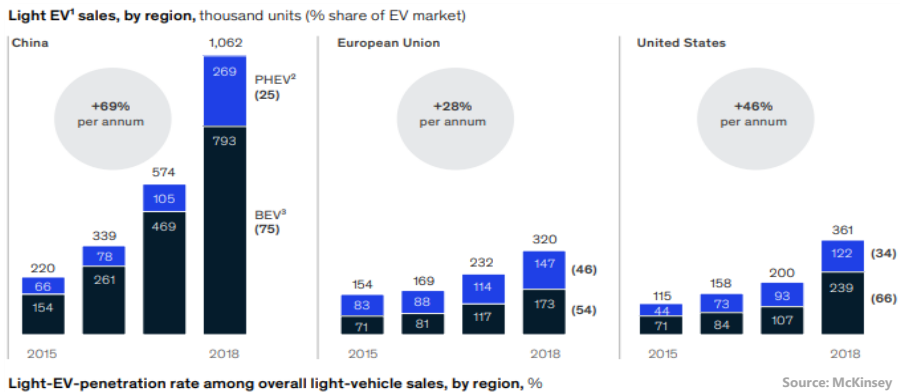
24 NOVEMBER 2020

TRADING MATTERS SERIES: NEWS FOCUS

The summary and impact of a major news event

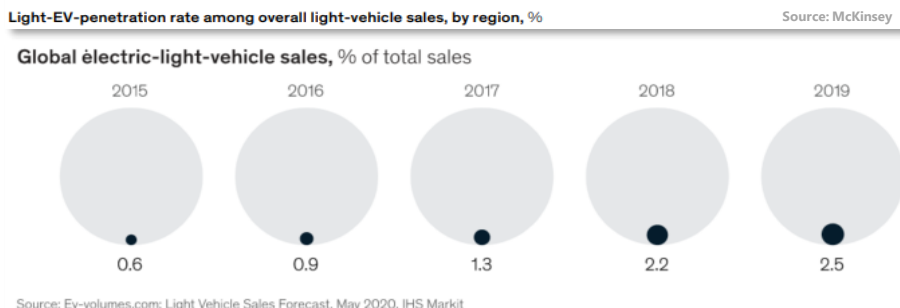
The EV market as a whole:

EVs are vehicles that operate on electric motors instead of traditional internal combustion engines (ICE). These vehicles have risen in popularity in recent years, with the EV market witnessing an unprecedented growth – EV passenger sales have grown more than fourfold, from 450,000 units in 2015 to 2,100,000 units in 2019.



China is currently the world's largest overall auto market, and accounts for the largest share of the EV market.

As of 2019, only 2.5% of car sales are EVs, but analysts surveyed by CNBC have predicted record growth of EV sales in 2021, especially in Europe and China.



Source: Bloomberg, CNBC, Edison Electric Institute, McKinsey

Factors to consider:

In a report published by Deloitte in July 2020, customer demand as well as policy & regulation were identified as several of the main growth drivers for this industry.

Customer Demand

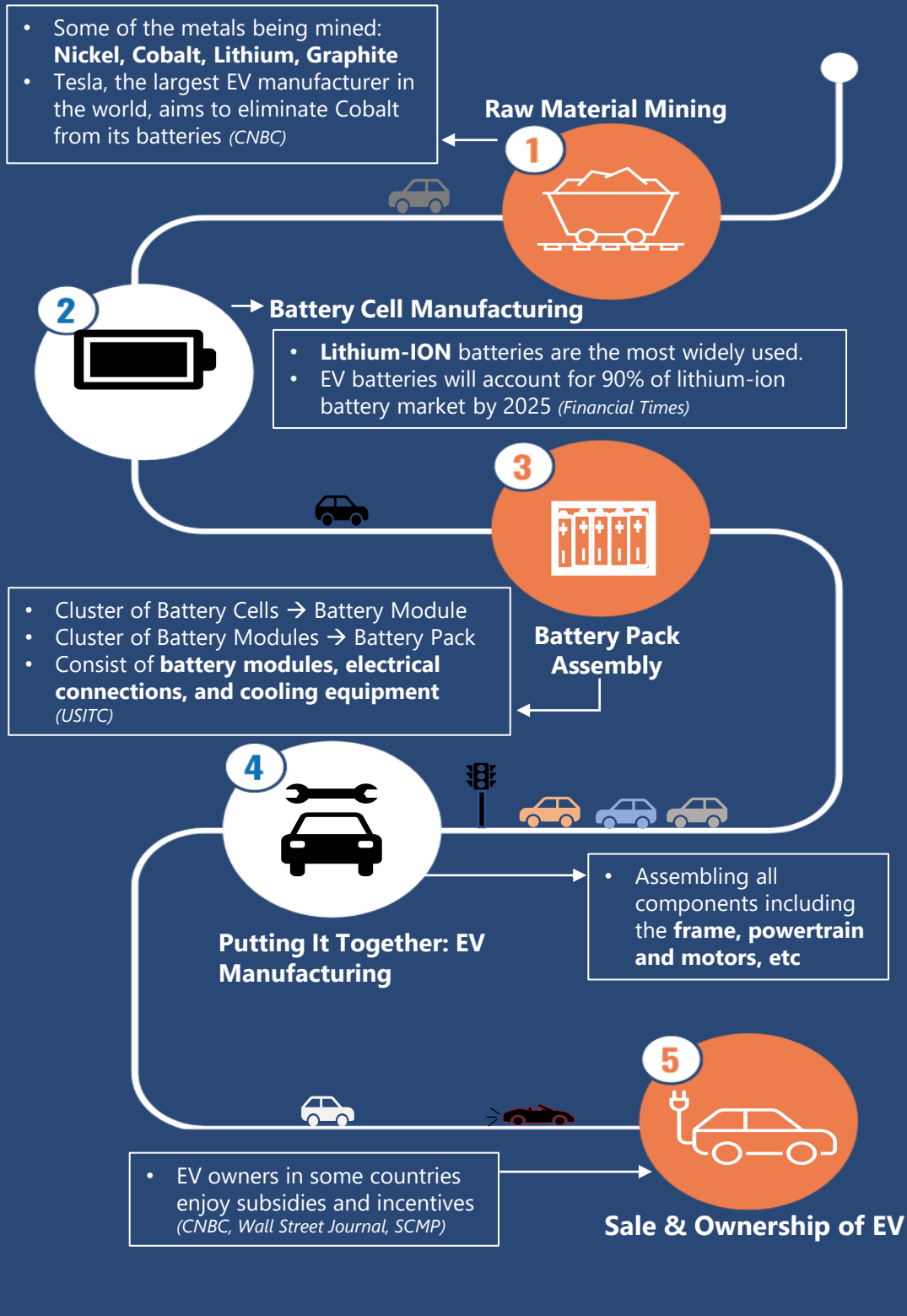
EVs offer a wide array of benefits over traditional cars, from better performance and connectivity to lower running costs. Concerns over driving range and charging infrastructure remain, but are being addressed by automakers such as Tesla and GM, with several EVs already with driving range comparable to that of ICE vehicles.

Policy & Regulation

Countries around the world have rolled out different policies and regulations like fuel economy & emission targets, financial incentives, and city access restrictions to push towards a higher adoption rate of EVs. The UK's proposed restrictions on sale of petrol and diesel vehicles from 2030, and China's pledge to become carbon-neutral by 2060 are some examples of these policies.

Source: Bloomberg, BBC, CNBC, Deloitte

EV SUPPLY CHAIN



Sectors to watch:

As part of the EV Supply Chain, these are the sectors worth keeping an eye on:

- Raw Materials
- EV Manufacturers
- Component Manufacturers
- EV Charging Service Providers

Raw Materials

Companies that mine metals such as lithium, cobalt, and other rare earths, are an integral part of the EV supply chain, as these metals are required in the manufacture of EV batteries. The United Nations Conference on Trade & Department expects the demand for raw materials for electric car batteries to rise over the next few years, driven by the boom in EVs and their growing popularity.

Name	Market Cap	Last Done Price	Analysts Fair Valuation (12 Month Target)	Upside/Downside from Analysts Consensus	Dividend Indicated Yield
Albemarle Corp (ALB US)	USD 14.27 Billion	134.06	101.67	-24.16%	1.15%
Sociedad Quimica y Minera de Chile – ADR (SQM US)	USD 10.47 Billion	47.31	37.35	-21.05%	1.50%
Ganfeng Lithium (1772 HK)	HKD 123.77 Billion	69	54.76	-20.63%	0.48%

Component Manufacturers

Batteries and powertrains are some of the key components of any EV, and Business Wire has reported a forecasted growth in market size of USD 44.24 billion across the global electric vehicle battery market from 2020-2024. Several prominent EV OEMs have also embarked on vertical integration of their supply chains to take component manufacturing inhouse.

Name	Market Cap	Last Done Price	Analysts Fair Valuation (12 Month Target)	Upside/Downside from Analysts Consensus	Dividend Indicated Yield
Cummins Inc (CMI US)	USD 34.81 Billion	235.22	240.18	2.11%	2.30%
BYD (1211 HK)	HKD 576.52 Billion	199.8	178.50	-10.66%	0.03%
Contemporary Amperex – A (300750 CH)	CNY 593.32 Billion	254.7	247.14	-2.97%	0.09%

Note: Statistics for Market Cap, Last Done Price, Analysts Fair Valuation, Upside/Downside from Analysts Consensus, Dividend Indicated Yields are as of 24th November 2020 5pm (SGT).

EV Manufacturers

EV maker Tesla's meteoric rise this year to become the world's most valued automaker and its December inclusion into the S&P 500 index has shone the public spotlight onto the nascent EV industry. Recent government policies such as China's New Energy Vehicle Industry Development Plan for 2021-2035 also show government interest in this fast-growing sector, with China envisioning 20% of new vehicles sales by 2025 coming from EVs.

Name	Market Cap	Last Done Price	Analysts Fair Valuation (12 Month Target)	Upside/Downside from Analysts Consensus	Dividend Indicated Yield
Tesla (TSLA US)	USD 494.66 Billion	521.85	357.70	-31.46%	N/A
Nio Inc (NIO US)	USD 75.44 Billion	55.38	38.06	-31.27%	N/A
Geely Auto (175 HK)	HKD 235.02 Billion	23.95	21.84	-8.79%	1.04%

EV Charging Service Providers

The EV charging infrastructure market is expected to grow at a compounded annual growth rate of 30.2% from 2018 to 2027 according to Business Wire, helping cater to the burgeoning EV market. In the United States, President-elect Joe Biden has also promised a dramatic expansion of charging stations for EVs as part of his pro-environmental and infrastructure agenda.

Name	Market Cap	Last Done Price	Analysts Fair Valuation (12 Month Target)	Upside/Downside from Analysts Consensus	Dividend Indicated Yield
ABB Ltd (ABB US)	USD 57.69 Billion	26.61	28.47	7.00%	3.10%
Eaton Corp (ETN US)	USD 47.94 Billion	120.26	119.91	-0.30%	2.43%
Qingdao TGOOD Electric Co. Ltd-A (300001 CH)	CNY 25.73 Billion	25.79	27.00	4.69%	0.08%

Note: Statistics for Market Cap, Last Done Price, Analysts Fair Valuation, Upside/Downside from Analysts Consensus, Dividend Indicated Yields are as of 24th November 2020 5pm (SGT).

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