

JULY 2020



## Sector Report

# EV Charging at the Crossroads: The Fast, The Curious & The Race for Scale



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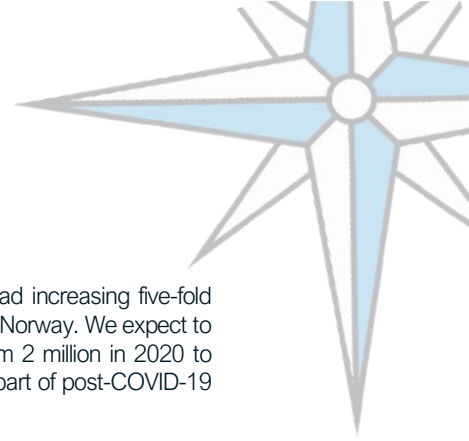
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# 1. EXECUTIVE SUMMARY

Growth in electric vehicles (EVs) is accelerating across Europe, with the number of EVs on the road increasing five-fold between 2014 and 2019 and now reaching up to 70% of new vehicle sales in market leading country, Norway. We expect to see this growth trajectory continuing, with the number of EVs on the road in Europe increasing from 2 million in 2020 to approximately 40 million by 2030, as increased funding is poured into the sector by governments as part of post-COVID-19 stimulus packages and decarbonisation incentives, giving the private sector confidence to invest.

This anticipated growth has led to aggressive 'land grabbing' in the EV charging sector over the last five years, as companies compete for the technology, chargepoint locations and strategic partnerships that will be crucial for future success. To identify the trends driving the market, we have leveraged Drake Star's unique insight into the transactions that have occurred in the EV charging sector to date, categorising transactions by transaction type, valuation, role in the value chain and type of acquiring or investing company. A full list of these transactions is available in the appendix. This insight has been combined with Delta-EE's analysis on the business models being developed by EV charging companies, the future growth of this sector and market intelligence on the player landscape. To give a more comprehensive overview of how sector dynamics are reshaping the industry, we have exclusively interviewed some of the leading executives within the EV Charging and New Energies domain. We would like to thank: Daniel Lyons (GM New Business Development, Future Mobility at Shell), Franz Weber (Co-founder & CFO, The Mobility House), Jelle Vastert (SB Energy, Former Director of Global EV Charging at Tesla), Massimo Resta (Partner, Zouk Capital, investor in EO Charging, Liberty Charge, InstaVolt and BePower), for sharing their valuable insights.

## KEY FINDINGS

As the EV market develops rapidly, growth investors, car OEMs, utilities, and oil & gas majors have all made investments in relatively early-stage companies to secure a position in the EV charging value chain. Car OEMs have been involved from an early stage, both in North America and Europe, enabling them to learn about the interfaces between their vehicles and the wider EV charging ecosystem. Their investments have largely focussed on private placement investments, allowing them to take a slower - and lower risk - "watch and learn" approach. Utilities have considered EV charging as a top-line synergy play, opening the potential to higher energy sales, and the opportunity to deploy their balance sheet in this high-growth sector. For oil & gas majors, the EV charging sector has been a largely defensive play with their core business being impacted by decarbonisation agendas. For these companies, diversifying into EV charging has been occurring through both M&A and minority investments. Finally, the sector has recently become of interest to infrastructure and energy transition funds, in particular since some of the leading CPO networks are displaying higher utilisation and income predictability, and potential for significant growth.

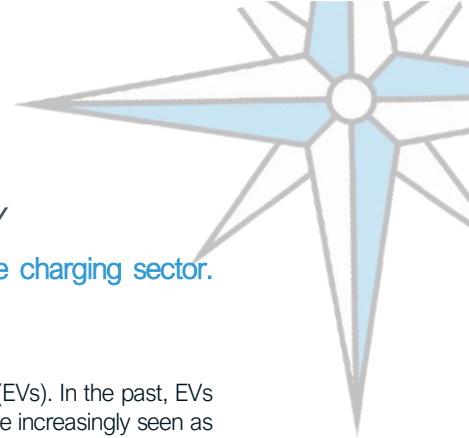
Most EV charging companies are loss-making with a break-even point years ahead. Nevertheless, valuations have been steep. There are significant differences in valuations across the value chain, but revenue growth opportunities and the ability to generate long-term returns are becoming increasingly apparent. Valuations have been generally high, with the number of transactions valued at greater than EUR 100m steadily increasing.



## OUTLOOK

To date, we have experienced the first wave of consolidation in highly strategic parts of the value chain that have "winner takes all" characteristics. As EV adoption further accelerates, we expect to see:

- Early movers benefit from economies of scale in a high-margin and/or high-volume markets.
- A market led by large and well-funded players, with an increasingly low chance of new entrants playing a relevant role in the sector.
- Increased influx of institutional capital into the sector when the market further de-risks and large pension funds become comfortable with the risk profile of EV charging investments at scale.
- New types of investors coming into play for back-end providers, when EV charging software is proven to be mission-critical for energy management, and payment processing volumes increase in scale.
- Beyond the car, there is increasing interest in the electrification of commercial fleets and buses with high utilisation and low-risk revenue streams. These sectors will be the ones to watch.



## 2. A GROWING MARKET OF DIVERSE OPPORTUNITY

The rapid growth in EVs across Europe is driving a hotbed of activity across the charging sector. Different charging solutions are being developed to meet evolving customer needs.

### The growth of EVs across Europe is accelerating rapidly

Over the last decade there has been a significant shift in customer attitude towards electric vehicles (EVs). In the past, EVs were perceived as expensive with short ranges. Now, with costs falling and ranges extending, EVs are increasingly seen as an attractive proposition for those seeking high performance and environmental benefit. This has led to an acceleration in the adoption of EVs across Europe, with the number of EVs on the road increasing five-fold between 2014 and 2019. In 2020, we will pass 2 million EVs on the road in Europe.

This trend is likely to continue, with approximately 10 million EVs expected on the road by 2024. While the COVID-19 pandemic has significantly reduced the number of new cars sold in Europe during the first 6 months of 2020, EV registrations have proved to be remarkably resilient. In Norway, as much as 70% of new cars sold have been plug-in variants during some months. The majority of post-COVID-19 stimulus packages have eMobility as a core focus of the “green bounceback”. Support is targeted towards enhancing EV manufacturing, EV purchase and funding for chargepoint deployment. Some recently announced examples include:

- €4,000 – €7,000 subsidies for EV purchase in Spain, France, Germany and Malta and a 15% subsidy and tax exemption in Greece.
- European Commission supporting the financing of one million chargepoints by 2025
- 100,000 public chargepoints installed in France by the end of 2021.
- €500 million of funding made available in Germany for private chargepoints and all German petrol stations mandated to have chargepoints.

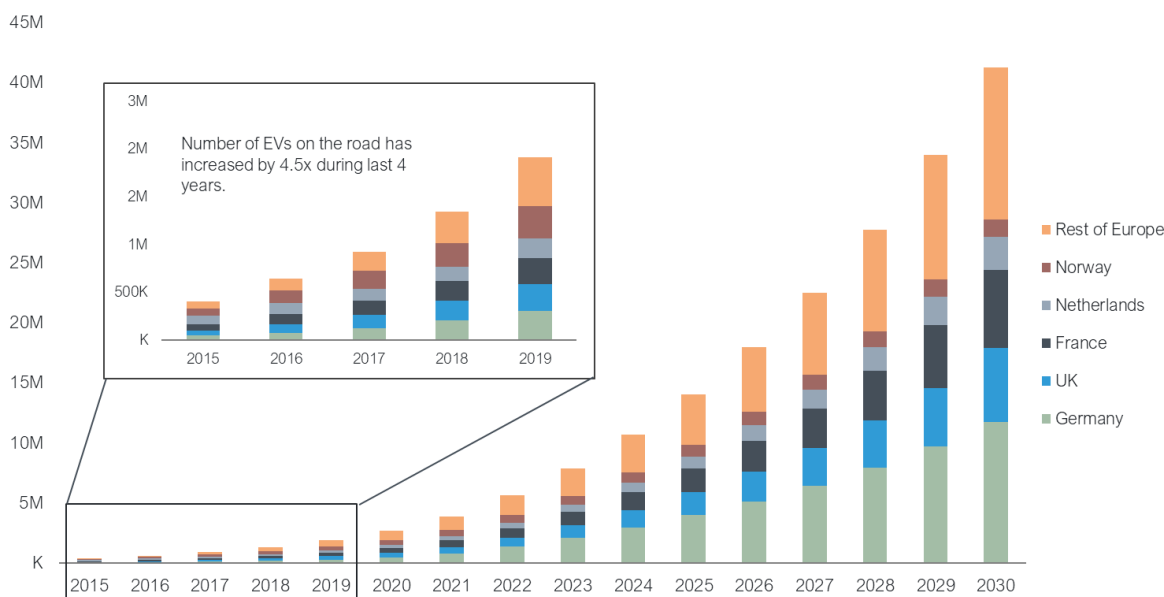
Announcements from the UK and Italy are expected in the coming months, with similar support mechanisms anticipated.

This financial support is expected to be complemented with a push from governments and corporates on climate and air quality agendas, such as the government bans on the sale of internal combustion engine (“ICE”) cars from as early as 2030 and corporate initiatives such as the EV100 Climate Group. It will be further enabled and supported by technological advancements reducing costs of batteries and the development of more models with longer ranges.

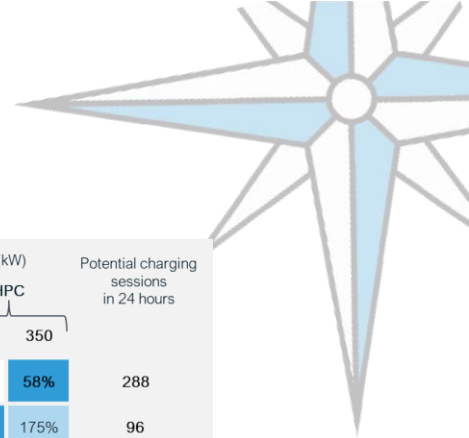
This anticipated growth has led to accelerated investment in this sector, as a wide range of players aim to capitalise on the emerging opportunities.

In this report, we discuss the trends that have shaped the European EV charging sector, from the early stages in 2010 to the present day. By focussing on some of the major mergers and acquisitions that have come to characterise the stakeholder landscape, we explore the motivations and strategies of key players in the industry including the oil & gas majors, utility companies and automotive players.

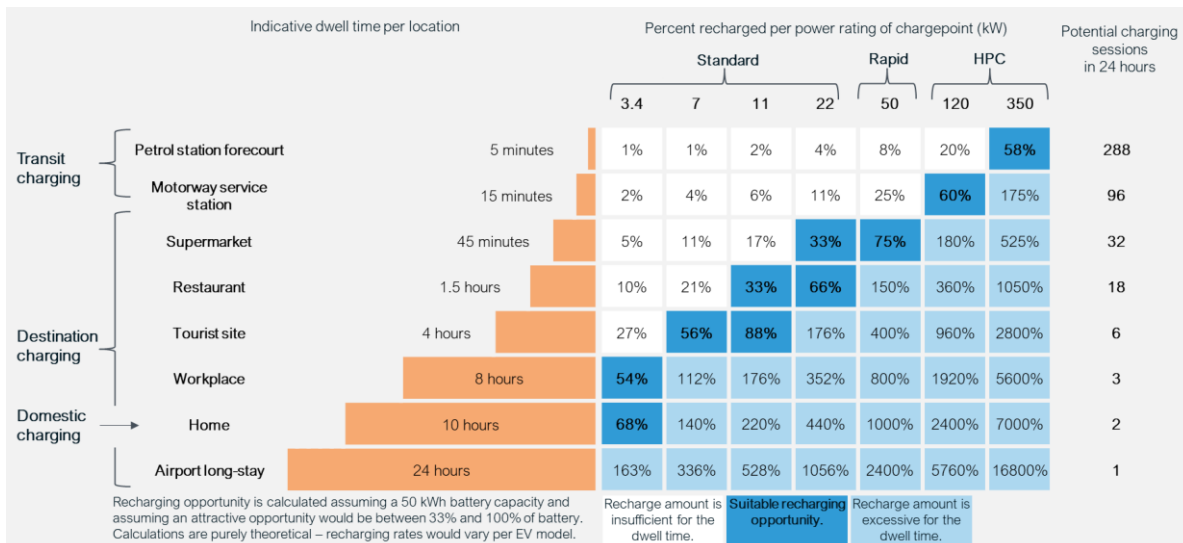
Total EVs on the Road in Europe: 2015 to 2030



Source: Delta-EE & ACEA | Rest of Europe: EU + EFTA | Plug-In Vehicles: BEVs, PHEVs and electric LCVs | Actual data: 2015-2019. Forecast data from 2020.



## IDENTIFICATION OF SUITABLE CHARGEPOINT POWER RATING PER LOCATION TYPE



### Ease of EV charging is crucial to the success of EVs

The dynamics of charging an EV are radically different to refuelling a conventional ICE vehicle. Anywhere a car is routinely parked has become an opportunity for charging: home, work, destinations, and, if required, top-ups at motorway service stations and petrol forecourts. Whilst the last decade of EV growth has been dominated by early adopters with access to off-street parking, the balance will dramatically shift as EVs become mainstream. The optimum mix of chargepoint locations in 2030 will allow any driver to add charging into their normal routine with minimal disruption. Different chargepoint types are required at each of these locations to facilitate this, based on the variations in dwell time:

- Standard: Low power and low capital cost chargepoints, aimed at charging EVs over multiple hours. These chargepoints are suited locations with long dwell times and low throughput, such as home and workplaces and dominate today's charging landscape. They are well suited for smart charging business models.
- Rapid: Used for charging at destinations where customers are likely to stay for limited time periods, such as supermarkets, but do not need the speed of HPC and hence a lower cost option is more suited.
- High Power Charging (HPC): Targeted at 'on the go' drivers, looking to charge in minutes and continue their journey. These chargers come at capital costs of €100,000s per unit and must have high utilisation to be profitable.

The different chargepoint cost and utilisation patterns have resulted in different risk and return profiles for investments and emerging business models.

### A complex ecosystem of players is emerging

The EV value chain has developed into a complex web of interacting players, with vehicle and chargepoint manufacturers supplying the infrastructure, retailers and installation companies facilitating deployment of assets and electricity suppliers and network companies required to manage and supply the electricity. There are three key roles in bringing these stakeholders together and providing a smooth customer experience:

- Chargepoint Operators (CPOs): The CPO is responsible for the installation, management, maintenance and operation of the charging stations (both technical and administrative), while minimising defaults and maximising uptime. The CPO enables access from the chargepoint to EV drivers through e-mobility service providers. Two main business models are emerging within this group:
  - Asset Heavy: The owner and operator model. The CPO (co-)finances EV charging infrastructure and have assets on their balance sheet. By investing into its own network these companies take on risk in return for long-term revenue gain.
  - Asset Light: The hardware and service provider model. The CPO sells, installs and operates chargepoints on behalf of a third-party owner, such as private individuals, a local authority or commercial sector host. Also the CPO provides connectivity to enable smart charging.
- eMobility Service Providers (eMSPs): The eMSPs is the provider of the EV charging service to the EV driver and offer value by enabling access to a broad network of chargepoints, either through direct agreements with CPOs or e-roaming platforms. Their responsibilities include providing locations of chargepoints, authorising access to chargepoints and handling payments.
- Back-Office Provider: the back-end provider offers a cloud-based charging management platform to CPOs and/or eMSPs with functionalities including, energy management, billing and roaming capabilities, and driver self-service tools.

While the roles themselves are clearly defined, market players are often providing a range of services which cut across both CPO and eMSP. Software for both roles is often provided by the back-office software providers, which can be integrated CPOs or independent players.

### 3. THE FIVE STAGES OF MARKET DEVELOPMENT

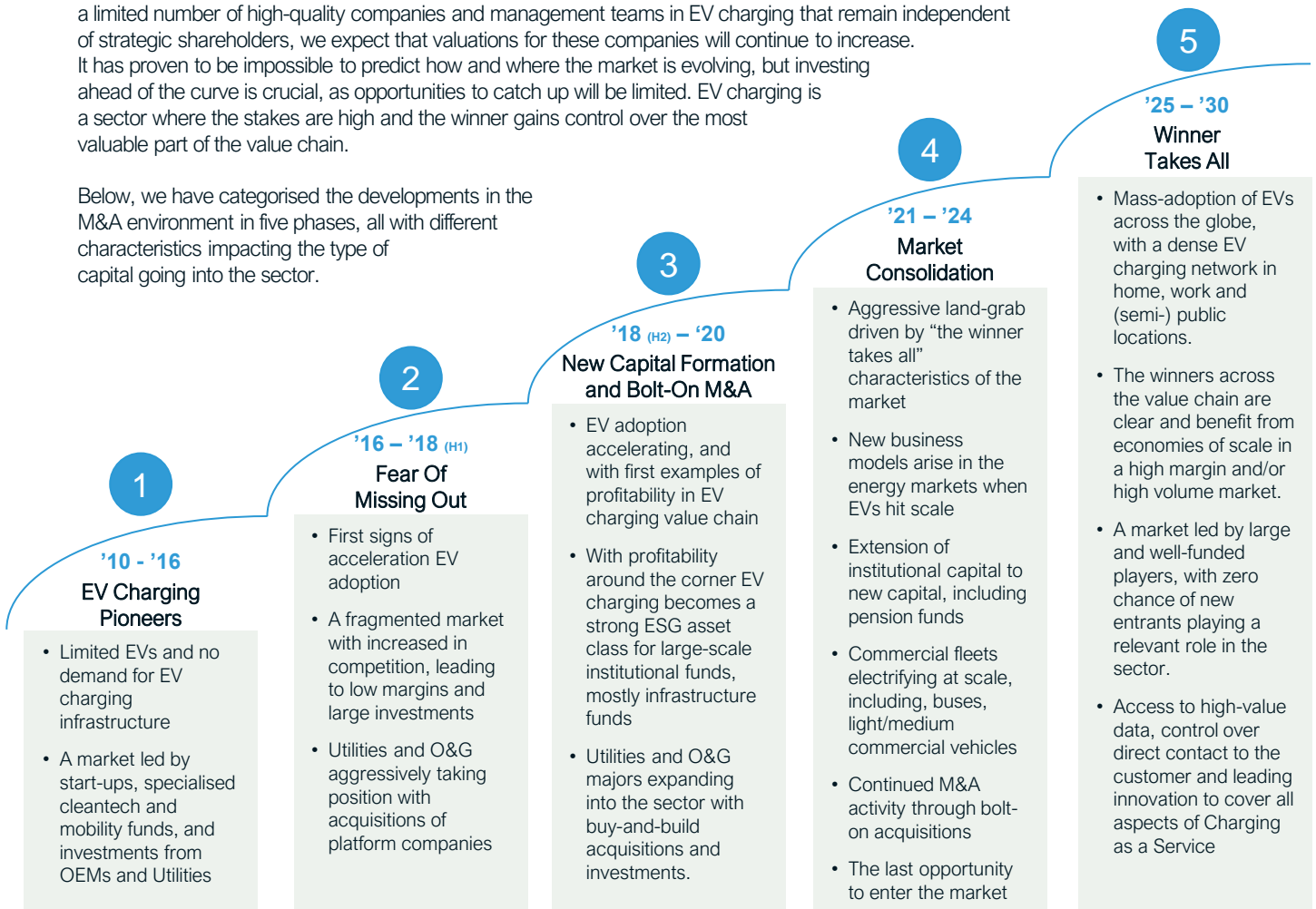
The EV charging sector has rapidly evolved over the last decade, from a sector dominated by EV charging pioneers to a fast-paced M&A landscape with large strategic acquirers entering the space.

The EV charging sector has proven to have an active M&A environment. Strategic corporates, such as utilities, oil and gas majors and automotive companies have made investments in relatively early stage companies to secure a position in the EV charging sector. These sectors are in the midst of a fundamental change driven by technology and innovation, where new winners are rising, and traditional incumbents need to adapt to remain relevant. EV charging is at the crossroad of these multi-trillion shifting value pools, triggering a whole range of M&A and investments in the sector.

Furthermore, fund managers at infrastructure private equity funds have done a tremendous job by raising EUR multi-billion funds. The number of typical infrastructure investment opportunities with attractive risk and return profiles are decreasing and the amount of capital available for investing in strategic acquisitions or portfolio companies is rising to record levels, standing at USD 212 billion for unlisted funds globally as of December 2019 (Preqin). Recently, infrastructure investors have recognised EV charging infrastructure as an asset class in which they can generate long term returns through value-added investing, further increasing the demand for M&A and investments in high quality companies in the sector.

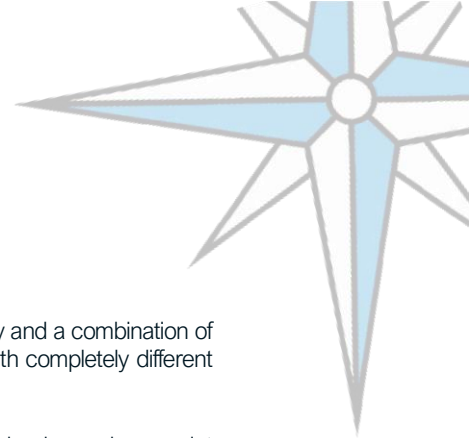
In Europe, the first wave of consolidation has largely been completed, which was driven by strategic acquirers. With only a limited number of high-quality companies and management teams in EV charging that remain independent of strategic shareholders, we expect that valuations for these companies will continue to increase. It has proven to be impossible to predict how and where the market is evolving, but investing ahead of the curve is crucial, as opportunities to catch up will be limited. EV charging is a sector where the stakes are high and the winner gains control over the most valuable part of the value chain.

Below, we have categorised the developments in the M&A environment in five phases, all with different characteristics impacting the type of capital going into the sector.



#### KEY INVESTMENTS AND ACQUISITIONS





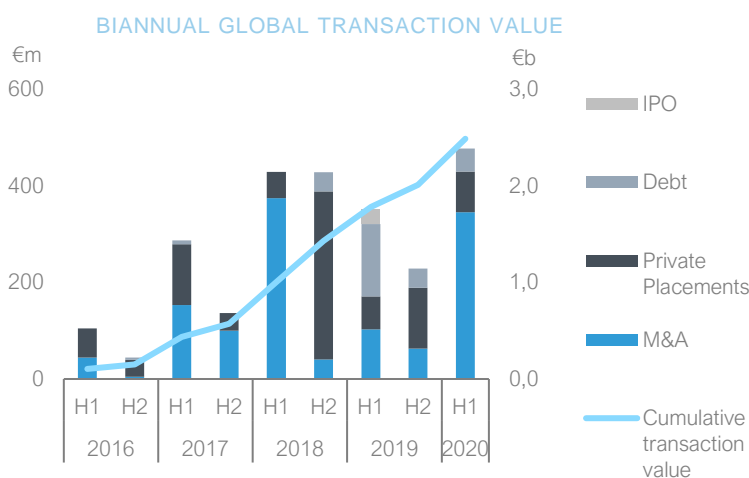
## 4. M&A ACTIVITY TO 2020

### A goldrush where the winner takes all and there is a lot at stake

The EV charging sector comprises several types of business models, involving varying capital intensity and a combination of hardware, software, consumer-facing, infrastructure and energy management-focused companies with completely different risk and return profiles, which have proven to attract different investors and trade buyers.

The sector today is characterised by aggressive 'land-grabbing' as companies compete for the technology, chargepoint locations and strategic partnerships that will be crucial for future success. The stakes are high; the stakeholders have very deep pockets and timing is crucial – players need to act quickly in order to become a relevant company in the highly competitive EV charging sector. These conditions have created the perfect timing for early growth investors to exit pioneering companies at high valuations, based on growth, land-grab and strategic positioning.

We have analysed over 100 transactions in the EV charging sector in Europe, US and APAC. Since 2016, a total amount of EUR 2.5bn has been invested in companies through M&A, private placements, debt and Initial Public Offering transactions.



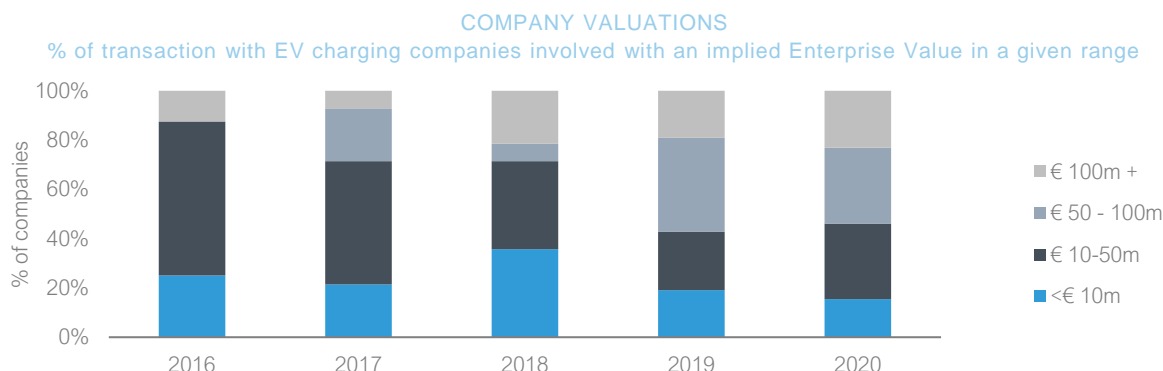
Sources: pitchbook, press releases, annual statements and Drake Star estimates

Transactions can be categorised as follows:

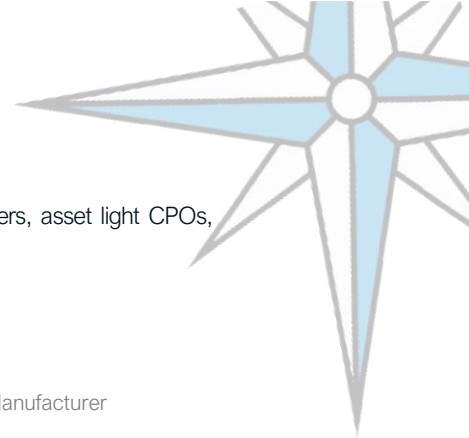
- **Mergers & Acquisitions ("M&A"):** the sale of all or substantial part of the issued and outstanding share capital
- **Private Placements ("PP"):** the sale of an issue of equity to a single or a limited number of buyers without a public offering, including minority investments or growth financing transactions such as seed and series A - F fundraisings
- **Debt:** financial instruments, such as bonds, mortgages, and loans that represent a claim to payment and rights of creditorship, including asset financing.
- **Initial Public Offering ("IPO"):** the first underwritten public offering of Equity

Until 2017, the transactions in the sector were mostly private placements from cleantech funds, investing in start-up companies facing a high market risk. Since then, strategic investors such as utilities and oil and gas majors have developed increased certainty in the future direction of mobility and have taken steps to secure their position, a.o. by consolidating Asset-Light CPOs aggressively and acquiring platform companies such as EVBox and NewMotion.

In the early stages of the sector, US-based charge point operator ChargePoint was the only company in the space with a valuation of EUR +100m, but since 2018 this has changed significantly for European-based EV charging companies. The number of transactions with companies that exceed a EUR 100m (implied) valuation has steadily increased and this trend has continued in the first half of 2020 with several landmark transactions. In November 2018, ChargePoint was valued at EUR +1bn in the private placement transaction, the only EV charging company to hit such a milestone so far. We expect more companies will follow over the next 3 - 5 years.

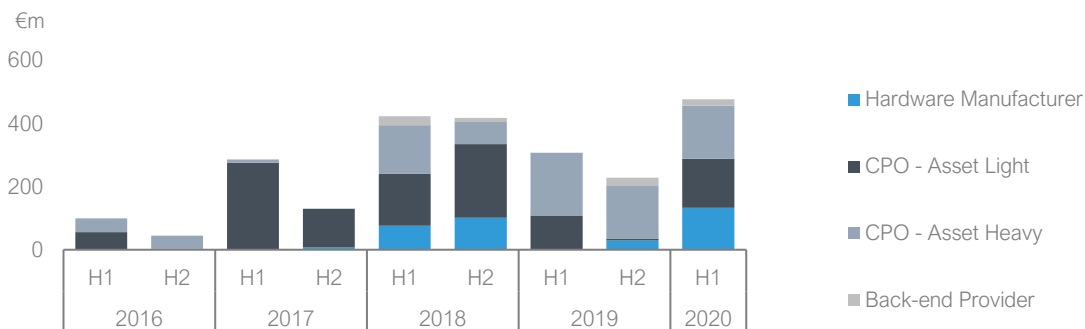


Sources: Pitchbook, press releases, annual statements and Drake Star estimates



Transactions have focused on four key roles in the value chain: chargepoint hardware manufacturers, asset light CPOs, asset heavy CPOs and back-end providers.

### TOTAL TRANSACTION VALUE BY PLAYER TYPE



Sources: Pitchbook, press releases, annual statements and Drake Star estimates

While these businesses are generally not profitable yet, they are seen as key for future success as business models evolve and volumes increase. Scale and technological advantage is seen as key, with most players striving for this organically, as well as through targeted M&A and well-placed bets in the form of minority investments, joint ventures and strategic partnerships. Daniel Lyons (Shell New Energies ) commented:

*"We are still at the start of the overall transition, and there is lots of experimentation happening with new business models and new solutions being tested around the world. Today the economics for EV charging businesses can be tough, especially in the public charging domain where high infrastructure costs and relatively low asset utilisation in these early years can be really challenging. At the same time, we are seeing energy companies, utilities, automotive manufacturers and others, who see the promise that can be delivered through bundled and integrated offers in eMobility, looking to enter the market, jump-start or shore up their own networks so finding the right opportunities is not easy.*

*This rush to market entry, together with plenty of ESG-linked capital and funds, and the promise of grant subsidies and general government incentives for the market in whole, has led to some rather eye-brow raising valuations in recent deals. That's why it is important to look long-term and, like Shell, you need to be in this business for the long run to generate attractive returns."*

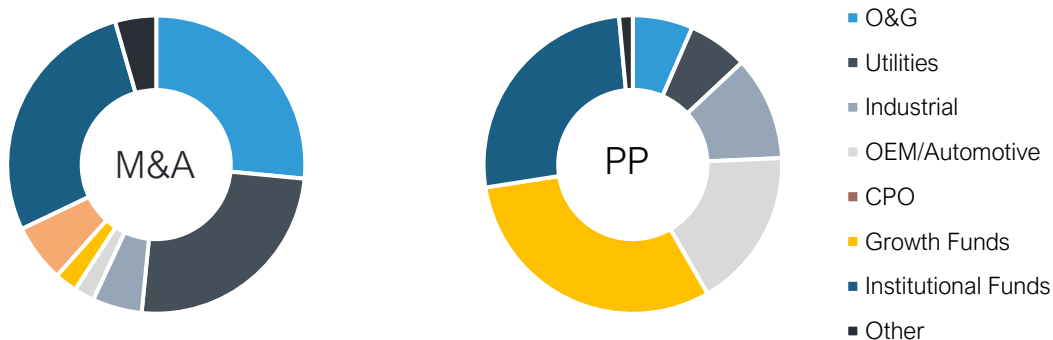
**– Daniel Lyons, GM New Business Development, Future Mobility at Shell**

Driven by the above, oil and gas majors and more recently institutional funds (mostly infrastructure private equity funds) have executed the largest volume of M&A transactions based on investment amounts, as they acquire companies to give them a strong base to build from. This contrasts to utilities, who have executed by far the largest number of transactions. However, these have generally been smaller, following a buy-and-build strategy. Car OEMs have been relatively silent in investing in EV charging companies to date, limiting their interest to private placement investments, motivated by accessing technology to provide smart energy services around the EV. Interestingly, when vehicle OEMs have led private placements, the valuation for companies have increased materially.

Only 30% of all private placements have been led by growth funds (venture capital and growth private equity funds), which is remarkably low compared to other growth sectors. In contrast, a lot of the private placement inflow has been from strategic parties. Generalist technology investors have been less active in betting on EV charging as a sector in which they can generate attractive returns.

### BUYERS AND LEAD INVESTORS CATEGORIES

By type based on value of transaction executed or led (Jan 2016 – Jun 2020)







## 5. VALUATION METRICS

### EV charging is a sector with unique valuation metrics and material differences across the value chain

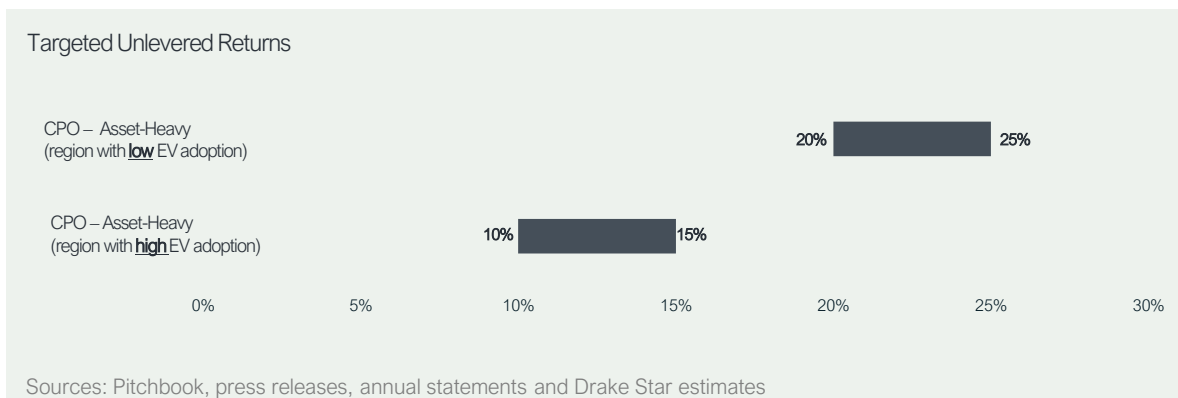
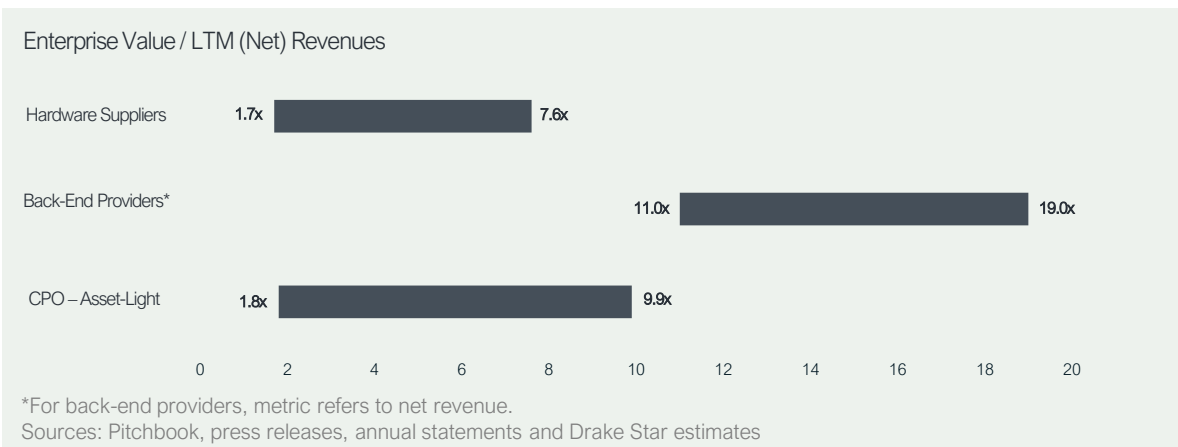
With limited public data available from listed companies across the value chain, we have built a proprietary database of all transactions since 2016 based on the public data available, proprietary data and expert estimations. From this database, we have concluded at an aggregated level the revenues, transaction volumes, implied enterprise values, and related financial and operational multiples at which EV charging companies have traded or raised funds. Most companies are loss-making with a break-even point years ahead, and valuations have been based on revenue growth and the ability to generate long-term future returns. The most accurate valuation metric proved to be Enterprise Value ("EV") / Last 12 Months Revenues ("LTM Rev") for hardware manufacturers and Asset-Light CPOs, Enterprise Value ("EV") / Last 12 Months Net Revenues ("LTM Net Rev") for back-end providers (net revenues being, the fees charged to CPOs and MSPs by back-end providers for performing transaction processing services and connectivity revenues) and the ability to generate future returns, including the acquisition of the company and future CapEx investments for Asset Heavy CPOs.

Pure hardware manufacturing companies have traded at an EV / LTM Rev ranging between 1.7x to 7.6x. AC hardware developers (with charging capacity for standard charging) have traded at the low-end of that spectrum.

Pure back-end providers show comparable multiples as fin-tech payment processing companies, in the range of 11x and 19x EV / LTM Net Rev.

Asset-Light CPOs have traded between 1.8x and 9.9x EV / LTM Rev. The large spread is driven by CPOs which have been sold without an integrated back-end and small bolt-on acquisitions, which have traded at 2x – 3x EV / LTM Rev.

Asset-Heavy CPOs are valued ranging between 10% - 15% targeted IRR on an unlevered basis for networks in more mature EV regions and 20% - 25% targeted IRR on an unlevered basis for networks located in nascent EV regions. As networks are long term investments, the time horizon to generate such returns is +10 years. With EV adoption increasing, we expect the targeted returns will decrease further as other types of investors will come in to play when the market risk further decreases.





## 6. VALUE CHAIN DEEPLIVES

### CHARGE POINT MANUFACTURERS

#### PUSHING THE SPEED BOUNDARIES

##### VALUE DRIVEN BY TECH AND INNOVATION

**Innovation and development as the prime driver for sustainable growth**

Charge point hardware manufacturing is a relatively low-margin and low-volume business. The sales model is based on one-off revenues, which results in short-term profitability and high revenue growth. Innovation will be key to driving further profitable growth. However, in recent years we have seen examples of growth companies with a technology advantage succeeding to raise capital and exit.

Compared to other parts of the value chain, relatively low valuations are seen. This is the result of limited customer lock-in, low barriers to entry and decreasing margins for developers of standard charging hardware. The most successful companies have been able to develop high-end HPC, battery-integrated and/or bi-directional charging hardware

##### KEY VALUATION METRIC

Enterprise Value / LTM Revenue

- Maximum: 7.6x
- Minimum: 1.7x

##### KEY VALUE DRIVERS

- Technology
- Number of CPs sold
- Gross Margin
- Sales Pipeline

#### DEAL RATIONALES



Active in a high-growth market Heliox requires further integration of energy management possibilities, optimisation of communication functions and additional services, which will propel the zero-emission transport revolution. Waterland supported Heliox on different strategic, financial and staffing levels based on years of PE experience. Recently Heliox joined forces with PRE and added the EV passenger car segment to the portfolio. Their complementary portfolios make them well-positioned to accelerate growth.



Cigna recognised the value in Tritium's differentiated technology and global market position. Cigna Investments, the investment wing of healthcare company Cigna Corporation, which has sought out opportunities to gain exposure in environmentally sustainable sectors. The loan provided to Tritium will be put towards expanding Tritium's production capacity and expand the company's reach into the United States and European markets.



FreeWire's flexible and low-cost technology allows BP to make better informed decisions about the placement and scaling of their EV charging infrastructure—all with less risk.

ABB could turn to FreeWire to supply customers with fast charging in locations where grid upgrade costs would make traditional fast-charging equipment prohibitively expensive.



The acquisition of ChargeDot is expected to further strengthen ABB's relationship with leading Chinese electric vehicle manufacturers and broaden the company's e-mobility portfolio with hardware and software developed specifically for local requirements as well as service offerings.

##### KEY DIFFERENTIATORS

- Bi-directional chargers
- HPC chargers
- Battery-integrated chargers
- Plug and Charge

##### KEY COMPANIES



#### OUTLOOK

Pure hardware manufacturing companies that have the scale and the means to offer robust and low-cost hardware will be the likely consolidators. Typically, AC chargers (standard charging) will be provided by the companies that are able to offer this at the lowest price point and commoditise, resulting in a low-margin segment in EV charging.

With new technologies arising such as bi-directional chargers, battery integrated chargers and increasing charging capacity of new cars up to 350 kWh, we foresee a range of selective M&A for companies that succeeded to generate recurring international sales.



## BACK-END PROVIDERS

### A MARKET DOMINATED BY VERTICAL LEADERS

Specialist software companies recognise the growth opportunity in this space, operating a highly scalable business model.

EV charging impacts a whole range of sectors and industries, including automotive companies, car leasing, dealerships and energy companies, part of whom consider the value in becoming a CPO or MSP themselves. Back-end software providers offer an off-the-shelf solution to these companies to grow an EV charging network with limited resources. As the target market is diverse, and potential B2B customers have different requirements, vertical leaders will arise and be able to increase their margins offering undisputed premium solutions dedicated for a select number of verticals.

Offering a back-end as a service is highly scalable business model, which suits well for internationalisation. Companies focussing on the back-end have a clear advantage over integrated CPOs offering a proprietary back-end system as pure back-end players are hardware agnostic. At this stage there is no clear winner, and almost all companies in this space that lead the market early have raised funds from Car OEMs and Utilities.

#### KEY VALUATION METRIC

Enterprise Value / LTM Net Revenue

- Maximum: 19.0x
- Minimum: 11.0x

#### KEY VALUE DRIVERS

- Transaction growth
- # of connected CPs
- Net revenue margin
- Recurring revenues

#### KEY DIFFERENTIATORS

- Volume processed
- Strategic partnerships
- Energy management functionalities

#### KEY COMPANIES

Last Mile Solutions

GreenFlux  
Smart charging

driivz  
KEEPING YOU IN CHARGE

VIRTA

has-to-be  
eMobility

### DEAL RATIONALES

JXTG Nippon Oil & Energy



"Virta enables the value proposition of electric vehicle charging services in JXTG's wide service network. The cloud-based platform supports different payment systems and makes EV charging possible for commercial properties, such as petrol stations and as well in private locations."



"Eneco secured access to one of the leading back-end providers for EV charging management, through a minority investment in Greenflux. GreenFlux requires an independent position to provide high quality services to other CPOs, utilities and eMSPs, that may be of a competitive nature to Eneco. Through venturing, Eneco can combine strategic and financial value from this investment."



has-to-be  
eMobility

"With Volkswagen Elli's participation in has-to-be, Elli is laying the foundation for a seamless customer experience during charging and for the integration of further digital services of the Volkswagen Group. This participation is a further consistent step in the strategy for the intelligent networking of charging and energy services around the car."

centrica



Driivz technology is unlocking the future of energy management and Gilbarco Veeder-Root will grow this platform with new opportunities to support their customers and improve the end user experience."

"Centrica Innovations is currently working with Driivz's R&D team to integrate their advanced EV-related power management solutions into Centrica's energy management suite."

### OUTLOOK

We believe this is a high growth area in which there will be up to five back-end providers with a significant market share in Europe. The companies in this space that are able to gain an undisputed market leadership position in a select number of verticals are expected to become one of these providers.

EV charging back-end providers manage a large volume of transactions and we believe there will be an increasing interest from fintech companies looking to expand into new markets. Furthermore, enterprise software companies seeking to expand their offering with new energy management modules will show an increase in interest when the market matures, and clear market leaders will arise.

# ASSET HEAVY CPOs

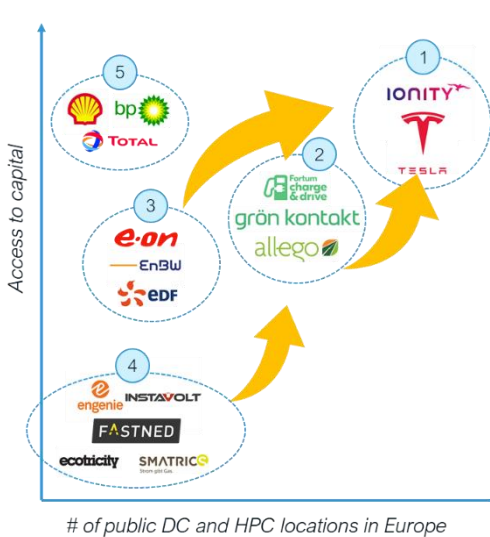
## LANDGRABBING IS THE NAME OF THE GAME – A RACE FOR HIGH TRAFFIC LOCATIONS

Increased competitive dynamics is driving the accelerated roll-out of DC/HPC rapid charging networks, as players seek to be the leader in the market and access best locations - the time to invest in now.

Asset-heavy charge point operators have a high margin business model but are dependent on the location of the chargepoints to increase transaction volume. High traffic volume locations are scarce, so companies in this space need to invest ahead of the curve to secure the most attractive locations, accepting that profitability may be some years away. Successful companies in this domain realise that this is a real estate play and effective site acquisition is key. Effective site acquisition is the result of data-driven traffic analysis to assess where the driver of the future will charge, local relationships with landlords to secure the most attractive locations for a long-term and a high-quality service offering for the EV driver as charging becomes part of the customer journey for consumer of the site-owner. Consequentially, access to funding is key as deep pockets are required to finance the high upfront cost of public chargepoints and remain solvent during the potentially long payback time.

*“Investing in EV charging infrastructure is comparable to investing in Solar in in 2007 or 2008. In terms of market maturity investing in EV is currently at the very beginning and in order to deploy capital you needed to take a view on where the market is heading towards. There was a lot of uncertainty around solar at the time, and now it is one of the most attractive asset classes to invest in. EV charging is not supported by Feed In Tariffs but car OEMs have embraced the transitions and are investing heavily in R&D and new models. Most Governments are also committed to the electrification of transport and have created a very favourable regulatory and policy environment. There is only one way this transition is moving towards and electric cars will require public EV charging infrastructure. To be successful in EV charging infrastructure you need to be there first.” - Massimo Resta (Zouk Capital, investor in EO Charging, InstaVolt, BePower and Liberty Charge)*

The race for high-traffic locations has five types of player, all expanding aggressively. Below an overview of Asset Heavy CPOs, categorised per type.



### 1. The Pan-European Players

IONITY and Tesla are the largest open public HPC network, with a pan-European scope. EV Charging is non-core and a necessity to sell EVs.

### 2. Regional Champions, Pan-European Challengers

Champions from mature EV markets, expanding aggressively into Europe. Mostly backed by multi-bn infrastructure funds.

### 3. Regional Incumbents

Utilities with regional customer bases and substantial funds available to invest.

### 4. King of a country or region

Independent companies with access to sufficient funds to roll-out strong regional open public DC/HPC network

### 5. Oil & Gas companies

Increasingly building HPC chargers on proprietary forecourts, but less focussed on third party sites.

### KEY VALUATION METRIC

Unlevered target IRR:

- 10% - 15% (mature EV markets)
- 20% - 25% (nascent EV markets)

### KEY VALUE DRIVERS

- # of high traffic locations
- Utilisation rates
- Location contract duration
- Location pipeline

### KEY DIFFERENTIATORS

- Scale
- Strategic partnerships
- Traffic analysis data

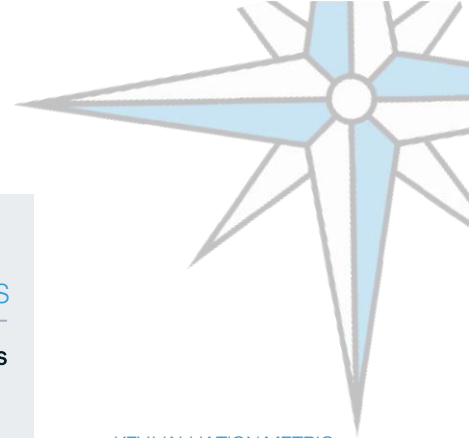
### KEY COMPANIES



### OUTLOOK

The need for scale will drive further consolidation in the sector, leading to a future with only 3-5 networks with significant market share in Europe remaining. CPOs backed by infrastructure investors with 10 - 15-year fund horizons and multi-billions of assets under management will have the time and the means expand aggressively.

Being the king of a region owning and operating high traffic locations, prevails over being an average player across Europe. We expect that there will be a consolidation wave of larger networks acquiring small well positioned networks over the next 3-5 years.



## ASSET LIGHT CPOs

### THE ENERGY GIANTS MOVE IN - A CONSOLIDATED MARKET BY UTILITIES AND OIL & GAS

Seen as the steppingstone from energy to eMobility, asset light CPOs have been attractive targets for the big fish of the energy sector to enter the game

The most successful companies have grown the number of chargepoints connected to their platforms and have strong commercial partnerships with OEMs, leasing companies and car dealerships. Market consolidation has almost been completed for this segment in Europe, with almost all asset light CPOs with scale that have been acquired by strategic Oil & Gas companies and Utilities.

A range of different motivations has stimulated acquisition of asset light CPOs. For utilities, EV charging is seen as a growth area. For O&G majors the drivers are defensive, as their forecourt petrol station will go into decline. Both players, see having access and control over the chargepoints as a valuable route to engaging directly with end consumers.

#### KEY VALUATION METRIC

Enterprise Value / LTM Revenue

- Maximum: 9.9x
- Minimum: 1.8x

#### KEY VALUE DRIVERS

- Revenue growth
- Connected chargepoints
- International sales

### DEAL RATIONALES



“The acquisition of EVBox offered the opportunity to create a global, leading electric vehicle charging player. By adding EVTronic’s fast and ultra-fast charging (DC) expertise and offer customers the full scope of electric vehicle charging from 3.7kW up to 350kW (both AC and DC), and offering charging solutions at home, at work, and in public.”



newmotion greenlots

“Shell’s New Energies business is building a globally operating and integrated new power value chain. Shell has been actively pursuing a buy-and-build strategy by acquiring Sonnen, Limejump, Greenlots and NewMotion. EV charging is a highly strategic part of the integrated power value chain, and Shell acquired both NewMotion and Greenlots to build a globally operating EV charging network.”

#### KEY DIFFERENTIATORS

- Scale
- Strategic partnerships
- Fit for purpose EV charging solutions



“Statkraft is striving to become a leading e-mobility provider in selected growth markets in Europe. Thanks to its long-standing participation in the Norwegian charging station operator Grønn Kontakt in a market with the highest % of EVs in the world, Statkraft is well equipped to bring its expertise and experience to other European markets through multiple acquisitions in Germany and the UK.”



pod POINT

“The acquisition forms part of EDF Group’s plan to become the leading energy company for e-mobility. This complements a range of M&A, JVs and partnerships, such as Pivot Power and Nuve.”

“Legal & General’s Future Cities business is committed to delivering sustainable change, through urban regeneration, clean energy, infrastructure and technology”

#### KEY COMPANIES

newmotion

pod POINT

-chargepoint+



### OUTLOOK

The M&A activity over the past 2-3 years results in a situation where most asset light CPOs are now backed by shareholders with deep pockets and remain in the market for bolt-on acquisitions. This has led to more aggressive strategies to winning commercial partnerships, leading to a strong decrease in margins across this player type. Investors in this space need to have a long investment horizon and the winners in this part of the value chain will be able to bundle higher value energy management and V2G propositions.

We expect further that utilities and O&G companies will further expand aggressively into new regions through a buy-and-build strategy with the already acquired companies as their platforms to do so. Smaller and more regional asset light CPOs and ones with fit-for-purpose EV charging solutions, for instance focussed on real estate developers, urban areas or fleets, will become interesting targets for expansion.



## 7. WHAT TO WATCH

The next five years of M&A activity will be driven by expansion and innovation. In this section we highlight areas to watch.

### Crossing borders

eMobility is increasingly becoming a global market, with networks and service providers operating across borders. With growth in EVs anticipated in countries such as Eastern Europe, Spain and Italy many players are looking for routes into these markets via acquiring the local national or sub-national CPOs currently operating there or establishing partnerships with local stakeholders such as energy companies and destination chargepoint hosts.

### The sleeping giants

The titans of the EV world, the automotive-OEMs, have been comparatively silent in the charging sector when compared to equivalents in energy and oil and gas majors. The first question that will shape the future is how these sleeping giants will develop their eMobility strategies over the coming five years. We're likely to see a split in direction, with some following Tesla's lead and embracing the opportunities that the charging sector can offer, others are likely to struggle with the scale of change required. For those with the capital and the will, start-ups focused on innovations, such as "Plug&Charge" technology, will appear lucrative opportunities. An acquisition will enable them to rapidly build in-house capacity and grow and maintain the long-term customer relationship.

### A pillar of stability

The electricity network world is buzzing with the potential EVs could play in managing intermittent renewable generation and assisting with grid stability. Smart charging is key to solving a large portion of the system's needs, but the bigger question is when V2G (Vehicle-2-Grid) technology will become a commercial reality. While dozens of trials are taking place, there is only one real customer in 2020: the innovation fund. However, with falling costs in hardware and increased value in offering flexibility we expect to see numerous plays for V2G.

*"V2G technology is going to be an essential tool for managing the electricity network, becoming a commercial reality within the next five years. We anticipate V2G chargepoints costs below €2,000 as economies of scale are reached. However, you need to know how to play the piano of the energy markets to access the value they offer – acquiring this knowledge will be a big driver for M&A in the coming years".*

– Franz Weber, CFO, The Mobility House

### Beyond the car

Whilst the car is claiming most of the attention in some markets, vans, electric two wheelers, aviation, shipping and public transport are also rapidly evolving.

The market characteristics of these sectors differ greatly to that of the car, attracting different types of investors and requiring tailored business models. For example, public buses are being seen as an area to watch. Here, 95% of the value is in the vehicle itself, rather than the charging infrastructure. This, combined with high chargepoint utilisation and certain revenue streams makes this sector very attractive for infrastructure financing with payback periods expected to be significantly lower than from high speed chargepoints.

*"Charging electric busses and light-duty vehicles create a compelling value proposition consuming renewables when they are available and offering flexibility to the grid. This helps reach TCO parity now for various segments and regions, and soon it will accelerate pushing the TCO of ICE vehicles out of water everywhere. For the ones at the forefront of energy and infrastructure solving and packaging this with, charging as a service will be a major area of growth".*

– Jelle Vastert, ex-Director of Tesla EV Charging globally, now SB Energy (part of the Softbank Group)

greenway

EASYCHARGER  
Enefit  
VOLT

easytrip  
N/A Pass Solutions

DIGITAL CHARGING SOLUTIONS

AMPECO

THE MOBILITY HOUSE

NOVVE

JEDLIX  
ubitrlicity

ARRIVAL

heliox

KEMPOWER  
Charging solutions  
Built to last.

EKO SMART ENERGY SYSTEMS  
ENERGETYKA



## 8. CONCLUSION

**EV Charging has proven to be a highly strategic sector, in which the winners are still to be defined**

As the European EV market continues to accelerate at double-digit growth rates, valuations of EV charging sector companies are soaring. Market consolidation is already underway with oil and gas majors, utilities and more recently institutional funds executing M&A transactions in the last 1-2 years.

The EV sector has still to reach mass market scale in most European countries. However, the direction of travel has now been set in rapid motion. With a reducing pool of high-quality, independent companies remaining, it will become increasingly important for companies that wish to play a role at the leading edge of the EV charging sector to make their moves.

Companies that move quickly, with a clear strategy focussed on reaching scale and technology innovation are most likely to succeed in this increasingly competitive sector. The next 3-5 years are likely to define the winners for the long-term.

Special thanks for sharing their valuable insights to:

**Daniel Lyons** - GM New Business Development, Future Mobility at Shell

**Franz Weber** - Co-founder & CFO, The Mobility House

**Jelle Vastert** - Former Director of Global EV Charging at Tesla, SB Energy, part of the Softbank Group

**Massimo Resta** - Partner, Zouk Capital, investor in EO Charging, InstaVolt, Liberty Charge and BePower

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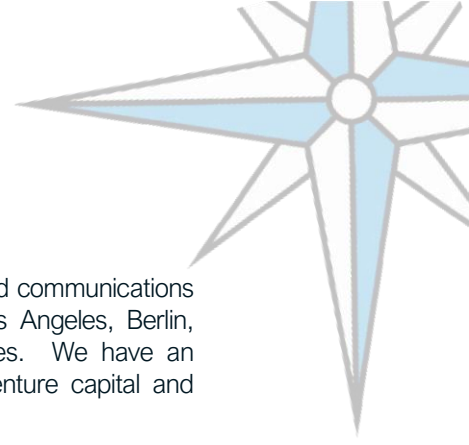
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## ABOUT THE GLOBAL DRAKE STAR MOBILITY TEAM

Drake Star Partners is a global investment banking firm serving the technology, media and communications (TMC) sectors. With offices in New York, London, Paris, Munich, San Francisco, Los Angeles, Berlin, Amsterdam, and Geneva. We help our clients maximise the value of their businesses. We have an international network of entrepreneurs, fast growing businesses, large corporations, venture capital and private equity firms, family offices and debt providers.

Since 2003, we have worked with myriad important clients and counterparties, such as 3i, Accel Partners, Amdocs, Axel Springer, Balderton Capital, Bertelsmann, Brookfield, Capgemini, CA Technologies, Carlyle Group, Cathay Capital, Cisco, EDF, Europcar, Index Ventures, Infracapital, Lexis-Nexis, Marlin Equity Partners, Meridiam, Michelin, Nokia, Ola Electric, Oracle, Orange, PSA Peugeot Citroen, ProSiebenSat.1, Q8, Rakuten, Shell, Thomson Reuters, WPP, among many others.

The EV Charging domain is a core focus segment for Drake Star Partners Amsterdam, which has led to numerous landmark transactions within the domain. Our team of senior professionals offer unequalled understanding of the business models and buyer/investor universes within the mobility, energy transition and smart city sectors. This domain expertise, along with the technical know-how of bulge bracket investment banks uniquely positions us to achieve desired results for our clients worldwide.

## ABOUT DELTA-EE

Delta-EE is a leading research and consulting company providing insight across the energy transition including heat, distributed energy, energy networks and energy services. Delta-EE provides research to the new energy industry through research services and bespoke consultancy projects, depending on the individual client's needs. Our sole focus is providing research, analysis and expertise, with a focus from the customer end of the value chain, to help the energy sector best navigate the energy transition.

Delta-EE's breadth of coverage and expertise across the "new energy" sector means we are uniquely positioned to provide a strategic viewpoint on the future challenges and opportunities for energy networks, and the role which they will need to play in the energy transition. Importantly Delta-EE is technology agnostic, and not part of the network industry, allowing us to take an independent and critical stance.



## APPENDIX: EV CHARGING M&A / FUNDRAISING BY DATE

Date	Target/ Investee	Country	Description	Acquirer/ Investor	Deal Type	Financing Round / M&A rationale
Jun-20	<b>Tritium</b>	AU	DC and HPC hardware solutions provider	Cigna	Debt	Debt
Jun-20	<b>PRE</b>	NL	Power module supplier for DC, HPC and V2G chargers	Waterland	M&A	Bolt-on
May-20	<b>Wallbox</b>	SP	Designer and manufacturer of AC, DC and V2G chargers	Seaya Ventures (lead) Iberdrola, Endeavor Catalyst	PP	Series A
Apr-20	<b>Fortum Recharge AS</b>	FI	Public EV charging network in the Nordics, primarily in Norway	Infracapital	M&A	Platform
Apr-20	<b>Virta</b>	FI	Back-end provider for EV Charging Management	JXTG Nippon Oil & Energy	PP	Series C
Apr-20	<b>GreenFlux CPO</b>	NL	B2B focussed CPO	Joulz	M&A	Divestment
Apr-20	<b>FreeWire Technologies</b>	US	Manufacturer of mobile and battery-integrated EV chargers	BP Ventures (lead), ABB, Energy Innovation Capital, Silicon Valley Bank	PP	Series B
Apr-20	<b>Amplify Power</b>	US	Commercial fleet electrification operations (CaaS model)	Soros Fund Management (co-lead), Siemens (co-lead), Congruent Ventures, Edison International	PP	Series A
Apr-20	<b>AmpUp</b>	US	P2P charging network (Charging back-end software)	SAIC Motor & Hyundai Motor Company	PP	Series A
Mar-20	<b>Chargedot</b>	CN	Smart charging AC/DC stations + EV software (mobile app)	ABB	M&A	Bolt-on
Mar-20	<b>Vattenfall (UK EV charging)</b>	UK	Operator EV charging network	Statkraft	M&A	Bolt-on
Mar-20	<b>POD Point</b>	UK	Asset-light CPO focused on home and semi-public segments	Triodos	Debt	Asset Financing
Feb-20	<b>Drivz</b>	IL	Cloud-based EV charging management platform	Gilbarco Veeder-Root (co-lead), Centrica Innovations (co-lead), Ombu, Inven Capital	PP	Series C
Feb-20	<b>POD Point</b>	UK	Asset-light CPO focused on home and semi-public segments	EDF, Legal & General	M&A	Platform
Feb-20	<b>Ample</b>	US	Autonomous battery swap technology developer	VAS Ventures	PP	Series B
Jan-20	<b>Jedlix</b>	NL	Smart charging back-end provider	Renault	M&A	Technology
Jan-20	<b>Evgo</b>	US	Operator of public fast-charging stations	LS Power Group	M&A	Platform
Dec-19	<b>Gron Kontakt</b>	NO	HPC and DC charging network in the Nordics	Statkraft	M&A	Bolt-on
Nov-19	<b>ChargeIT Mobility GmbH</b>	DE	EV charging solutions provider	Eneco	M&A	Bolt-on
Oct-19	<b>EVConnect</b>	US	Cloud-based software platform to manage EV charging services	Mitsui (lead), Ecosystem Integrity Fund	PP	Series B
Oct-19	<b>Compleo</b>	DE	Hardware developer of AC charging stations	Management, Fontus Invest	M&A	Platform
Sep-19	<b>Ionity</b>	DE	Operator and owner of high-power charging network for EVs	Hyundai, KIA	PP	JV
Sep-19	<b>Volta</b>	US	Asset-heavy CPO with DC charging stations	Energize Ventures, SE Ventures, SK Innovation	PP	Series C
Sep-19	<b>Amplify Power</b>	US	Commercial fleet electrification operations (CaaS model)	Obvious Ventures (lead), Congruent Ventures, Edison International, PeopleFund, KittyHawk Ventures	PP	Seed
Sep-19	<b>Volta</b>	US	Asset-heavy CPO with DC charging stations	Energy Impact Partners, CION Investment Corp	Debt	Debt
Aug-19	<b>Tritium</b>	AU	DC and HPC hardware solutions provider	Varley Group (lead)	PP	Series C
Aug-19	<b>Has.to.be</b>	AT	E-mobility software	Elli (Volkswagen Group)	PP	Technology
Aug-19	<b>E-Wald</b>	DE	Offers charging infrastructure, fleet management and e-mobility services	Statkraft	M&A	Bolt-on
Jul-19	<b>Engenie</b>	UK	Fast-charging network operator	Cube Infrastructure	PP	Platform
Jun-19	<b>The Mobility House</b>	DE	Smart Charging and Energy Management Solutions provider	Alliance Ventures (lead), Ventura Capital	PP	Series B
Jun-19	<b>Fastned</b>	NL	Operating fast charging network for EVs in Netherlands	IPO	IPO	IPO
Jun-19	<b>Allego</b>	NL	Operator of a public charging network	Societe Generale, Kommunalkredit	Debt	
Jun-19	<b>Wallbox</b>	SP	Designer and manufacturer of AC, DC and V2G chargers	Iberdrola	PP	Series A
Jun-19	<b>Chargepoint Services Ltd.</b>	UK	EV charging infrastructure provider	Engie	M&A	Bolt-on
May-19	<b>Be Power</b>	IT	Public EV charging infrastructure + services	Zouk Capital	M&A	Platform
Mar-19	<b>FLOW Charging</b>	NL	Operator of electric car charging stations	Eneco	M&A	Bolt-on
Mar-19	<b>POD Point</b>	UK	Asset-light CPO focused on home and semi-public segments	Legal & General	PP	Series D
Feb-19	<b>Qualcomm Halo technology (Wireless Charging Patent portfolio)</b>	US	Wireless charging technology for EVs	WiTricity	M&A	Technology
Feb-19	<b>Ubitricity</b>	DE	Asset-light CPO offering smart charging solutions	Honda (lead), EDF, Next47	PP	Series C
Jan-19	<b>PowerShare</b>	CN	Provider of an online platform to connect EV drivers, CPOs and power suppliers	BP Ventures (lead), Alliance Ventures, DT Capital Partners	PP	
Jan-19	<b>Xcharge</b>	CN	Manufacturer and provider of AC and DC (ultrafast) chargers up to 480kW	Innoven Capital	PP	Debt
Jan-19	<b>Greenlots</b>	US	Asset-light CPO offering end-to-end EV charging network management solution	Shell	M&A	Bolt-on
Dec-18	<b>Virta</b>	FI	Back-end provider for EV Charging Management	E-On	PP	Series B
Dec-18	<b>eeMobility</b>	DE	Asset-light CPO focused on fleet and facility managers	Statkraft AS	M&A	Bolt-on
Dec-18	<b>Allego</b>	NL	Operator of a public charging network	European Investment Bank	Debt	Asset Financing

M&A = Merger and Acquisitions, PP = Private Placement, JV = Joint Venture, IPO = Initial Public Offering

## APPENDIX: EV CHARGING M&A / FUNDRAISING BY DATE

Date	Target/ Investee	Country	Description	Acquirer/ Investor	Deal Type	Financing Round / M&A rationale
Nov-18	<b>Chargepoint</b>	US	EV charging solutions provider, incl. proprietary hardware	Quantum Energy Partners (lead), Siemens, Linse Capital, Daimler Trucks NA, Chevron Tech Ventures, CPPIB, GIC, Braemer Energy Ventures, PP BMW i Ventures, American Electric Power Company		Series H
Oct-18	<b>Tritium</b>	AU	DC and HPC hardware solutions provider	Gilbarco Veeder Root (lead)	PP	Series B
Oct-18	<b>Wirelane</b>	DE	Asset-light CPO focused on Home and Semi-public slow charging	Vito Ventures (lead), Coparion, High-tech Grunderfonds	PP	Series A
Oct-18	<b>FreeWire Technologies</b>	US	Manufacturer of mobile and battery-integrated EV chargers	BP Ventures (lead), Volvo Cars Tech Fund, Stanley Ventures	PP	Series A
Oct-18	<b>Recargo</b>	US	Provider of an online platform to connect PHEV EV drivers and CPOs	Innogy	M&A	Bolt-on
Sep-18	<b>G2 Mobility</b>	FR	Provider of smart EV charging infrastructure products and services	Total	M&A	Bolt-on
Aug-18	<b>Drivz</b>	IL	Cloud-based EV charging management platform	Centrica Innovations (co-lead), Inven Capital, Ombu (co-lead)	PP	Series B
Aug-18	<b>Ample</b>	US	Autonomous battery swap technology developer	Shell Ventures (lead), Repsol Energy Ventures, TRIREC, Hemi Ventures, Moore Strategic Ventures	PP	Series A
Jul-18	<b>EVtronic</b>	FR	Manufacturer of EV charging stations (AC & DC)	Engie	M&A	Bolt-on
Jul-18	<b>Volta</b>	US	Asset-heavy CPO with DC charging stations	Activate Capital Partners, Autotech Ventures, Energize Ventures, GE Ventures, Idivest Partners, Nautilus Venture Partners, Orsted, Virgo Investment Group	PP	Series C
Jul-18	<b>BTCPower</b>	US	Manufacturer of AC & DC charging stations	Innogy	M&A	Bolt-on
Jun-18	<b>Xcharge</b>	CN	Manufacturer and provider of AC and DC (ultrafast) chargers up to 480kW	GGV Capital, Zhen Fund	PP	Series A
Jun-18	<b>Greenflux</b>	NL	EV charging backend software provider	Eneco Ventures (co-lead), SET ventures (co-lead)	PP	Series B
Jun-18	<b>Chargemaster</b>	UK	Provider of EV charging solutions	BP	M&A	Platform
Jun-18	<b>POD Point</b>	UK	Asset-light CPO focused on home and semi-public segments	Panoramic Growth Equity	PP	Series C
Jun-18	<b>EO Charging</b>	UK	Designer/manufacturer of smart EV chargers in the UK	Zouk Capital	PP	Series A
Jun-18	<b>AeroVironment EV Charging and Test Systems Business</b>	US	Manufacturer of EV charging equipment (power electronics, battery management technology and EV chargers)	Webasto	M&A	Platform
Jun-18	<b>EVConnect</b>	US	Cloud-based software platform to manage EV charging services	Ecosystem Integrity Fund	PP	Series A
Jun-18	<b>Kisensum</b>	US	Developer of an energy management storage platform designed for energy distribution grid	Chargepoint	M&A	Technology
May-18	<b>Allego</b>	NL	Operator of a public charging network	Meridiam infrastructure	M&A	Platform
May-18	<b>Heliox</b>	NL	EV Charging Hardware Manufacturer focussed on public transport and vehicles in the construction, mining and port industries	Waterland	M&A	Platform
Apr-18	<b>Virta</b>	FI	Back-end provider for EV Charging Management	Helen Ventures, Lahti Energia	PP	Series A
Apr-18	<b>Fastned</b>	NL	Operating fast charging network for EVs in Netherlands	Riyadh Valley Company	PP	Series C
Apr-18	<b>Chargestorm</b>	SE	Developer/supplier of charging infrastructure of EVs	CTEK Group	M&A	Bolt-on
Apr-18	<b>Engenie</b>	UK	Fast-charging network operator	Greenbackers Investment Capital, Investec	PP	Series A
Mar-18	<b>Plugsurfing</b>	DE	Developer of a mobile-based charging application created to charge electric vehicles	Fortum	M&A	Bolt-on
Jan-18	<b>Clever</b>	D	Building & operating ultra-fast chargers along freeways throughout Scandinavia	E.ON	M&A	JV
Dec-17	<b>Nuve</b>	US	Developer of grid-integrated vehicle platform (VGI)	EDF, Toyota Tsusho	PP	Series A
Oct-17	<b>The Mobility House</b>	DE	Smart Charging and Energy Management Solutions provider	Daimler (lead), Mitsui&Co.	PP	Series A
Oct-17	<b>Hubject</b>	DE	Developer of a eRoaming platform	BMW, Daimler, EnBW, Robert Bosch, RWE, Siemens, Volkswagen	PP	JV
Oct-17	<b>Ubitricity</b>	DE	Asset-light CPO offering smart charging solutions	Next47 (lead)	PP	Series B
Oct-17	<b>NewMotion</b>	NL	Asset-light CPO offering smart charging solutions	Shell	M&A	Platform
Oct-17	<b>Jedlix</b>	NL	Smart charging back-end provider	Renault	PP	JV
Oct-17	<b>eMotorWerks</b>	US	Developer of EV products, including charging hardware	Enel	M&A	Platform
Aug-17	<b>Tritium</b>	AU	DC and HPC hardware solutions provider	St Baker Innovation Fund (lead)	PP	Series A
Jul-17	<b>Greenlots</b>	US	Asset-light CPO offering end-to-end EV charging network management solution	Energy Impact Partners	PP	Series A

M&A = Merger and Acquisitions, PP = Private Placement, JV = Joint Venture, IPO = Initial Public Offering

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Jun-17	<b>Fastned</b>	NL	Operating fast charging network for EVs in Netherlands	Private investors	Debt	Debt
Jun-17	<b>GE EV charging network</b>	US	Provider EV charging network	Chargepoint	M&A	Bolt-on
May-17	<b>PitPoint</b>	NL	Operator of compressed natural gas and liquefied natural gas filling stations	Total	M&A	Platform
Mar-17	<b>EVBox</b>	NL	Manufacturer of charging stations offering EV charging infrastructure and related cloud-based services	Engie	M&A	Platform
Mar-17	<b>GOTthard FASTcharge Ltd (GOFAST)</b>	CH	DC/HPC EV charging infrastructure developer	Energie360	M&A	Platform
Mar-17	<b>POD Point</b>	UK	Asset-light CPO focused on home and semi-public segments	Draper Esprit (lead), AME Ventures,	PP	Series B
Mar-17	<b>Chargepoint</b>	US	EV charging solutions provider, incl. proprietary hardware	Daimler (lead), Siemens, BMW i Ventures, Braemar Energy Ventures, Linse Capital, Rho Ventures	PP	Series G
Jan-17	<b>Elektromotive</b>	UK	Developer and installer of EV charging stations for both home & public charging	Chargemaster	M&A	Bolt-on
Dec-16	<b>Hubject</b>	DE	eRoaming platform	Volkswagen	PP	JV
Dec-16	<b>Fastned</b>	NL	Operating fast charging network for EVs in Netherlands	Private investors	Debt	Debt
Dec-16	<b>Instavolt</b>	UK	UK-based CPO that owns and operates DC EV charging stations	Zouk Capital	PP	Series A
Oct-16	<b>Gron Kontakt</b>	NO	HPC and DC charging network in the Nordics	Statkraft	M&A	Platform
Oct-16	<b>Volta</b>	US	Asset-heavy CPO with DC charging stations	Autotech Ventures, Walden International, WRV Capital	PP	Series B
Jul-16	<b>POD Point</b>	UK	Asset-light CPO focused on home and semi-public segments	Crowdcube	PP	Crowdfunding
Jun-16	<b>Evgo</b>	US	Operator of public fast-charging stations	Vision Ridge Partners	M&A	Platform
May-16	<b>PowerShare</b>	CN	Provider of an online platform to connect EV drivers, CPOs and power suppliers	Cyzone, DT Capital Partners, Furong Capital, LVF Capital, Zhongli Capital	PP	
May-16	<b>Chargepoint</b>	US	EV charging solutions provider, incl. proprietary hardware	Linse Capital (lead), Braemar Energy Ventures, Clearvision Ventures, Constellation Tech Ventures, Envision Ventures, Madison Parker Capital	PP	Series F
Apr-16	<b>G2 Mobility</b>	FR	Provider of smart EV charging infrastructure products and services	Nexans, BPI France, Vermeer Energy and Innovacom	PP	Series A

M&A = Merger and Acquisitions, PP = Private Placement, JV = Joint Venture, IPO = Initial Public Offering

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**DELTA-EE**

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