Charging Up Europe's Corporate Fleets

Charging Solutions for Greening Corporate Fleets

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ChargeUp
EUROPE

EV charging industry: a partner and solution provider in greening corporate fleets[1]

Introduction

The future is electric, and the EV charging infrastructure industry is at the forefront of developing the solutions to not only support, but also drive the shift to electric road transports.

Maturity levels within the market for corporate fleets vary: policy initiatives must take this into account, while ensuring that electrification stays on track and accelerates where it is possible and desirable.

EV charging companies: active partners and solution providers

The EV charging industry is already partnering today with fleets and fleet operators to provide a range of innovative, tailored-made charging solutions. EV charging companies have specific, advanced expertise that they bring to the table, and are active partners in their clients' roadmap towards electrification, providing options and solutions for the chosen path. This can involve a mix of on-site private charging at the depot or lot of the fleet operator, associated energy management and even consultation or co-investment to optimize energy usage. Comprehensive EV charging solutions also include access to public charging via a mobility service provider (MSP) account and device, home charging solutions for vehicles that go home with the driver at night, and ways for the invoice holder to track and monitor energy consumption by vehicle and driver. Driver and fleet manager training to understand how to drive and charge an EV, and how to make the entire ecosystem run smoothly also tend to be a part of the solution. **Overall, EV charging companies work closely with their corporate and fleet clients to make the best, informed choices for their path on the electrification journey, their goals, and the characteristics of their fleet.**

When it comes to electrifying corporate fleets, ChargeUp Europe recommends adopting a mix of tools and deploying different measures applied to different fleet segments. Education remains a crucial part of the transition – providing training and knowledge will empower fleet managers to make informed decisions and will lead to a more decisive and confident transition, which will meaningfully contribute to the EU's climate objectives.

[1] Corporate fleets in this paper refer to vehicles purchased by corporate actors.

Why EU action on this topic is needed:

I. Addressing the "demand" side and ensuring consistency across Europe

Over the past few years, the **EU has adopted a range of legislative tools aimed at the *supply side*,**[2] setting out targets to help decarbonize the European vehicle fleet and reduce emissions. These developments define the policy direction and give legal certainty to the market.

When it comes to the ***demand side*** **however, policies and measures, such as purchase incentives, tax measures, subsidies and other means, have largely been national. European action is needed to ensure that the transition happens at the same time and speed across all Member States and fleets**. Fleet composition is uneven across the EU.[3] These differences impact the types of businesses that operate in different countries and the support they will need in electrifying their fleets. While for cars and vans, the transition pathway is clearer, the heavy-duty vehicle (HDV) segment will require greater support in ensuring a successful and geographically inclusive transition.

II. Meeting climate targets

According to the European Commission's own data, "faster progress is needed to meet the EU's 2030 target of cutting GHG emissions by at least 55% and to achieve climate neutrality by 2050"[4]. **Road transport is one of the biggest polluters in Europe today.**[5] Effective road transport electrification is a low-hanging fruit in achieving the required emissions reduction in a timely manner. **Prioritizing car and van fleets in their decarbonisation journey is where there is the greatest potential to close the gap**, as the regulatory framework and markets have set a clear direction.

III. Making the EVs more accessible and affordable

Today, 6 in 10 light duty vehicles sold in the EU are corporate vehicles. These are bought new and kept in the fleet for an average of 3-5 years and placed afterwards on the second-hand market, which in turn makes more of them accessible and affordable for a larger consumer base. Gradual and stable fleet decarbonization will therefore accelerate the development of a second-hand market for affordable EVs, contributing to the objective of a "just transition" in the EU.

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[2] CO2 emissions standards for cars and vans Regulation addressing the supply of light duty vehicles; Renewable Energy Directive (RED) addressing energy supply and Alternative Fuels Infrastructure Regulation (AFIR) addressing infrastructure supply

[3] https://www.acea.auto/figure/size-distribution-of-the-eu-vehicle-fleet/: , e.g. Poland has the largest truck (1.2 millions) and bus (over 126,000) fleets in Europe while France has the largest vans fleet (6.3 millions)

[4] https://environment.ec.europa.eu/news/eu-2030-climate-and-environmental-targets-within-reach-2024-03-13_en

[5] Statistics for cars & vans here, for HDVs here: passenger cars and vans are respectively responsible for around 12% and 2.5% of total EU CO2 emissions while HDVs account for 6% of total EU CO2 emissions

Ensuring that new corporate vehicles are emission-free will lead to a higher supply of EVs on the second-hand market in the coming years, which will in turn stimulate competitive EV prices, infrastructure deployment and the overall decarbonisation of road transport, aligning with the climate goals and targets set out by the EU. Company cars (i.e. vehicles provided to employees as an in-kind benefit) also create a practical experience of driving an EV, which allows consumers to get reassured about the feasibility of going electric.

Charging needs of corporate fleets

There is no **one-size-fits-all approach when it comes to the charging needs of corporate fleets.** Each segment (cars, vans, lorries & coaches) is structured differently in terms of size, ownership model and considerations which have to be taken into account when making fleet charging-related decisions.

Factors such as **total cost of ownership (TCO)** (including purchase price, operating expenses and the re-sell value of a vehicle) are critically important; fleet managers must also ensure sufficient availability of, and access to, charging infrastructure, depending on the type of fleet. The EV charging industry is already today supporting companies in this transition, working hand-in-hand with fleet managers throughout the process.

Cars & vans

A variety of fleets dominates this segment – from corporate cars to car rental, leasing company fleets, ride hailing and taxi fleets to 'last mile delivery' vans.

While each has its specificities, one thing that unites them is that **they operate mainly in urban settings.** Already today, the EV charging industry works with these fleet operators to provide not only home-charging solutions but to ensure that drivers can charge wherever they go.

Particularly in densely populated cities, home charging might not be available to many EV drivers. However, with slow and fast urban charging solutions being actively deployed across the EU, the urban charging coverage is increasing, mitigating range anxiety. AFIR will positively impact the EV charging infrastructure deployment along highways, strengthening the overall network. While EV charging requires a different mindset and approach to 'refueling' a vehicle, multiple solutions exist today which can already provide the confidence to drivers.

Vans typically drive a limited daily mileage, a pre-defined trajectory and return to a depot at the end of the day. This makes it one of the easiest segments to electrify. With the increasing rollout of low emissions zones across the EU and the impact that these fleets have on urban air quality, **electrifying these fleets should be considered a high priority.**

Case study

All-in-one charge card solution for businesses

A leading MSP of multi-energy cards active in Europe and America offers commercial customers (from LDV to HDV fleets, notably in the SME segment) all-in-one e-mobility solutions. Companies can use the card to system to charge at more than 570,000 on-road electric acceptance points in Europe.

The company supports fleet managers in the management of their fleets and the transition towards EV usage, thanks to a dedicated smartphone app and integrated data.

Fleet managers share two major concerns when converting their fleets to electricity and facing the management of mixed fleets:

- How can refueling/recharging for all types of drives and fuel be settled easily, cashless, and with a single system and card?
- What is the availability of suitable charging stations across the area where they operate?

With a cost-effective and all-in-one e-mobility solution, charging can take place at work, overnight at a driver's home or at a public charging station. Meanwhile, fleet managers can perform their roles more flexibly, efficiently, and economically while having a consolidated view of transactions to track costs and savings, and to bill drivers for home charging.

In deciding whether to electrify LDV fleets, companies look at the TCO as well as the availability of charging infrastructure. **Already today, the EV charging sector works with a number of fleet operators, providing not only tailored on-site (i.e., depot) charging solutions but also optimizing the network of publicly available charging stations to meet the needs of fleet operators.** While installing charging infrastructure on-site is still desirable for fleet operators, they face a challenge with the availability of grid capacity or other CapEx investments. Utilizing publicly available charging infrastructure helps optimize the driving times, charge on-the-go and reduce capital expenditure, as the charging infrastructure does not need to be deployed at the depot location for each vehicle.

Case study

optimization – commercial fleets using publicly available charging infrastructure

A CPO focused on ultra-fast charging in urban areas supports commercial LDV (such as last mile delivery vans, taxi and ride-hailing companies) fleets with electrification. Fleets that this CPO works with are primarily urban-operating and are required to electrify by law. The CPO's business product allows commercial fleets to access the charging station network at preferential prices using a charging token or a dedicated smartphone application. Besides preferential pricing, the user has access to features such as booking a charging station or Autocharge. Fleet managers also have access to a platform for managing their members and viewing reports.

Today, many last mile delivery companies opt for this solution. At first, these companies focused on installing on-site charging. However, for many reasons (such as not enough suitable car parks; required capital expenditure too high with no certainty of depreciation; operating and maintaining charging infrastructure can complicate operations; lack of vehicle autonomy can slow down operations on certain routes; opportunities during periods of increased activity such as Black Friday or Christmas cannot be easily absorbed; drivers cannot take their vehicles home and have to leave them at the depot...) this was not always feasible or efficient. Companies then started relying on urban fast charging infrastructure to supplement, or even replace, charging on-site.

A CPO with its stations in urban areas and a high reliability rate fits in perfectly with drivers' daily driving routing and the required 15 minutes daily break time, which can be used for charging on-the-go. Such a solution is a simple way of speeding up electrification without the constraints of maintenance and costs of on-site charging infrastructure, and with the convenience of proximity and speed. This helps companies to turn fleet electrification into an opportunity.

Heavy duty vehicles

The number of electric HDVs (eHDVs) on European roads continues to grow. **Around 500,000 eHDVs are expected in Europe by 2030.**[6] Electrification of the HDV segment will come in stages. The first wave of electrification will encompass vehicles operating around urban areas, or where there is a high density of delivery centers, and where they drive very predicable routes. Long-haul trucks, while providing a significant opportunity for cost-effective decarbonization, will require on-the-go charging infrastructure, which is already being deployed today.

Transport companies carefully evaluate the potential of electrifying their HDV fleets, particularly those composed of long-haul trucks. **When it comes to the business model, transport companies operating lorries are primarily small family companies**[7] **with small fleets**. These businesses have small profit margins per vehicle and each vehicle is a lifeline in their business. This means a lot more significance in the decision to go electric. While the share of eHDVs in the fleet in Europe was only 2% in 2022 ,[8] the trend towards electrification is clear[9] and the charging infrastructure is expanding and will continue to ramp up in the coming years, given the targets set out in AFIR & CO2 emissions legislation, as well as market signals.

There are a variety of charging-related considerations that companies take into account when deciding to electrify, such as cost and technological maturity of the vehicles themselves, and sufficient route coverage with charging infrastructure, i.e. availability of charging infrastructure when and where it is needed.

A range of tools are being developed plotting the best spots for HDV charging stations – mainly done in collaboration with big fleet operators that can provide sufficient data to make calculated predictions for locations that will guarantee the best utilization. Having an electric fleet might require transport operators to adapt their routes and schedules to find the right time and place to charge.

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[6] EP study, Alternative fuel infrastructures for heavy-duty vehicles, November 2021

[7] According to IRU: 'There are over one million commercial road transport companies operating in the EU, of which 80% are small and medium-sized enterprises. Goods transport operators and bus and coach operators generally have up to five HDVs in their fleets.' https://www.iru.org/system/files/The%20European%20Commission%20proposal%20on%20the%20deployment%20of%20alternative%20fuels%20infrastructure%20in%20the%20EU.pdf

[8] https://www.acea.auto/publication/report-vehicles-on-european-roads/

[9] Zero emissions HDV sales grew by 23% between 2021 and 2022, with battery electric dominating all zero emissions HDV sales. https://theicct.org/wp-content/uploads/2023/08/EU-HDV-truck-market-update-fact-sheet-for-posting.pdf

Case study

A consortium will deploy 2200 charging stations across 22 Member States

The aim of the consortium is to expand the European electric vehicle charging network with new devices in the area from the Baltic Sea to the Mediterranean Sea and from the Black Sea to the Atlantic Ocean, as well as to fill the gaps in the coverage of the TEN-T road network with charging infrastructure. In total, 2200 charging stations with high-power (150-350 kW) will be deployed as part of the project in more than 450 locations for electric light vehicles (LDV) but also heavy-duty vehicles (HDV), some of which will be dedicated sites while others will combine the charging services for both fleets. All charging stations will be publicly available 24/7 and also roaming.

The project will build out the spine of an HDV charging corridor through numerous countries, a number of which have not previously received EU funding for high power charging infrastructure. Lessons learned will provide valuable experience for future development of the HDV charging market.

Policy recommendations for the Greening Corporate Fleets Initiative

I. Regulatory measures

Light duty vehicles

For the LDV sector, ChargeUp Europe recommends mandatory fleet electrification targets. Targets should be mandatory across the EU but tailored to the national tax measures and incentives that some Member States might consider upholding or implementing.

Only in the recent years, the sales of battery electric vehicles (BEVs) have surpassed the sales of plug-in hybrid electric vehicles (PHEVs) in corporate fleets.[10] While this is a positive development, more should be done. The European Commission should recommend to Member States to eliminate subsidies/tax support/fiscal incentives for the purchase of PHEVs by companies. In the process of electrifying their fleets, companies should not invest their resources into PHEVs. While PHEVs count towards fleet

[10] https://www.fleeteurope.com/en/financial-models/europe/features/bev-sales-finally-surpass-phevs-true-fleet?curl=1

electrification goals under some national regimes, they bring little to no gain in terms of emissions reductions, and they slow down the electrification of corporate fleets.[11]

Moreover, the EU should **reduce the complexity of the VAT treatment of EV charging in home charging reimbursement**. This is particularly important in the situations where employees use a company car as a 'benefit in kind', being able to bring it and charge it at home. Currently, when it comes to home charging reimbursement, employees want to get reimbursed for the electricity costs incurred for charging their company car at home. This can lead to complexity with many parties involved (CPOs sell and install charging points at home, MSP provides the charging service through a charging token or a smartphone app, CPO then invoices the MSP and MSP invoices the employer who then reimburses the employee). This set up causes challenges with respect to VAT treatment and payment regulation within the EU, e.g. differentiation between roaming transactions and reimbursement for VAT treatment, differentiation of these transactions on the invoice, risk of providing a financial service and others. CPO and MSP are facing uncertainties on how to structure the business model to have a legally compliant approach.

Heavy duty vehicles

Given the TCO considerations and the ownership structure of this segment (see above), the HDV sector requires **purchase incentives and other financial support measures** to enable transport companies to transition.

HDV fleets have a much longer lifetime than LDV[12], leading to a long-lasting environmental impact. Therefore establishing financial incentives to electrify these vehicles will lead to cleaner HDVs in the short-term. Long-haul freight will continue to operate and be a large part of the European road transport and the implications of current emissions levels can be mitigated through targeted purchase incentives.

When designing policy and financial measures to support the electrification of these fleets, the **business model, TCO of a vehicle and availability of safe and secure parking locations with suitable charging infrastructure** should be considered.

Today Europe lacks safe and secure parking locations.[13] As the long-haul trucks are expected to charge over-night in these location in many cases, the **EU should work together with Member States and EV charging providers to ensure a safe and positive charging experience.**

II. Non-regulatory measures

While concrete regulatory measures are needed, today companies supporting fleet operators and managers report that **education is missing on how precisely fleet**

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[11] https://climate.ec.europa.eu/news-your-voice/news/first-commission-report-real-world-co2-emissions-cars-and-vans-using-data-board-fuel-consumption-2024-03-18_en

[12] A truck's lifetime is estimated to be around 10-12 years on average. https://theicct.org/sites/default/files/publications/ICCT_EU-HDV-tech-2025-30_20180424_updated.pdf

[13] https://www.iru.org/news-resources/newsroom/drivers-and-cargo-risk-eu-urgently-needs-more-secure-truck-parking

electrification works, resulting in fear of making the wrong decisions that might have negative effects on the financial status of their company.

Educating fleet operators on what it means to go electric, how the technology works, what are the benefits to their companies and what charging solutions are available is part of what the EV charging industry does today. Many ChargeUp Europe members that provide fleet charging solutions work with fleet managers in determining the best solution for their fleet – be it home charging coupled with office charging, depot charging or charging on-the-go where depot charging is not available (e.g. in the case of last mile delivery vans whereby operators report struggles to deploy charging infrastructure and explore urban fast charging options). **Educating fleet operators on how to optimally use already available public charging infrastructure** and how to determine private commercial charging needs will be key in debunking the myth of insufficiently available charging infrastructure, which continues to be reported as one of the main obstacles in (light duty) fleet electrification.

The EU should provide support to private sector in these educational efforts. Measures such as **guidelines, recommendations and training courses should be created** to support fleet managers in this transition and regular workshops should be organized either by the EU or with the support of Member States. The EU should align research & development agenda to incorporate the need for education of fleet managers **providing funding to create training programmes**. This is especially desired for the corporate sector as the impact of electrification decisions will have a positive domino effect on the overall European fleet transition.

Case study

Educating fleet managers on optimizing fleet-charging before, during and after the electrification process

A company with the world's largest network of EV charging stations in North America and Europe, prioritises understanding the unique needs of every fleet to ensure successful electrification. Through a comprehensive set of tailored questions, it ascertains crucial factors such as site specifications, charger requirements, vehicle usage patterns, and organisational roles involved in EV charging. By engaging fleet and facilities managers, it addresses key concerns such as activity continuity, real-time monitoring, infrastructure integration, and total cost of ownership (TCO) reduction. This holistic approach integrates hardware and software solutions into a single ecosystem, offering turnkey management for charging station deployment, energy optimization, and fleet operations.

With a commitment to flexibility and efficiency, it leverages its portfolio to deliver optimised charging solutions tailored to each fleet depot's specific needs. This comprehensive strategy empowers this company to electrify the fleets of its customers with confidence, backed by transparent costs, dependable service levels, and scalable operations.

Moreover, as an integral part of its sales process, the company places significant emphasis on guiding its customers through an educational journey. Whether engaging with procurement, fleet managers, or facility managers, ensuring a deep understanding of both the limitations of the vehicles and the solutions being offered is paramount. To achieve this, the company establishes multiple educational touchpoints both before and after the sale.

Through a combination of physical and remote demonstrations, fleet customers are educated on the usage of charging hardware and software. In-depth demonstrations illustrate effective software utilisation for operational efficiency. This educational process is embedded at various stages of the sales process and reiterated during activation once the chargers are physically installed, where users of the hardware and software receive personalised activation call to ensure comprehensive understanding.

Furthermore, the company continually invests in educational initiatives aimed at raising awareness about EV charging solutions. This includes webinars, and educational materials tailored to different stakeholders within fleets, ranging from drivers to station owners. By fostering a culture of understanding and proficiency in EV charging technologies, the company not only ensures customer satisfaction but also contributes to the wider adoption of sustainable transportation solutions.

Conclusion

Electrifying corporate fleets will be an important step in making more EVs available and affordable throughout the EU and achieving the EU's climate objectives.

Already today, the EV charging industry is partnering with fleet managers in their electrification journey and investing in educating corporate clients on their options when it comes to choosing the right charging set up for their EV fleet.

Managing an electric fleet and its charging needs requires a new approach to refueling, one that allows charging to integrate seamlessly with the purpose of different corporate vehicles. It will be important to not only work on the right regulatory measures in the coming years, to ensure that all fleets can electrify according to the market needs but to also invest in educating fleet managers on the opportunities that transitioning to an electric fleet can present to a company.

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About ChargeUp Europe

ChargeUp Europe is the industry association for the electric vehicle (EV) charging infrastructure sector. Our association works to accelerate the switch to zero emission mobility and ensure that EV drivers can enjoy a seamless charging experience with access to high quality, readily available charging infrastructure across Europe. As of today, our 33 member companies are active in all 27 EU Member States, the UK and EFTA, with over 300,000 charging points in the EU.

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