

Driving Change: The Challenges and the Opportunities of the EV Race

Retailers can play a crucial role in eliminating range anxiety for Electric Vehicle (EV) drivers and creating high-quality amenities that provide a positive charging experience. They just need to define their individual business model to make it beneficial for both sides.



The EV market is booming as the race to full electrification continues. Consumer mindsets have shifted toward sustainable mobility, and EVs are quickly becoming mainstream and will become a dominant transportation mode. The tremendous growth is mostly driven by China, the U.S. and Europe. These parts of the world account for about 95% of global electric sales. According to the 2023 State of the Industry report by [ChargeUp Europe](#), the number of EVs is growing by 34% year-on-year. By 2030, almost one of every four of the European Union vehicle stock will be electric. For the U.S., the number of EVs on the roads is projected to reach more than 26 million in 2030, an enormous increase from around 2 million in 2021 ([EEI Edison Electric Institute](#)).

Governmental programs foster transition

To meet net zero emissions targets, governments recognize the importance of e-Mobility and stimulate accelerated growth by providing subsidies and tax waivers to economically justify the purchase of an electric car or truck.

The Biden administration launched the NEVI program, investing billions of dollars to deploy at least 500,000 public chargers across the U.S. In Europe, similar plans have been put in motion like with AFIR, which fosters the installation of fast chargers every 60 km along main roads.

How to combat range anxiety?

But despite these positive developments, range anxiety remains a blocking point to many EV purchase decisions today. Although most EVs are **charged at home** followed by charging stations at work, publicly accessible charging stations are increasingly needed to provide the same level of convenience and accessibility as for refueling conventional vehicles. According to **S&P Global Mobility**, the public and semi-public infrastructure will grow from 2 million to 14 million charging stations in 2030, of which more than 20% will be DC fast chargers. China is leading public deployment with more than 50% of share, Europe and North America follow suit.

A great benefit of charging an EV away from home and work is that drivers can and should charge wherever they park, for instance at convenience stores, supermarkets, public parking, entertainment venues and hotels. And, EV drivers will most likely shop or want to take a break to eat and drink where they can charge their batteries. The charging station revenue in the US is forecasted to grow at 32% CAGR between 2023 and 2028 to around \$2B (**Statista Market Insights, 2023**). This is a great opportunity for forecourt owners and retailers to open new revenue streams by offering EV drivers a range of new services and amenities while they wait for their vehicles to charge. According to the **Global Automotive Consumer Study by Deloitte**, 36% of EV drivers are prepared to wait between 21 and 40 minutes to charge the battery from zero to 80%, with a quarter prepared to wait even longer up to 1 hour. During the dwelling time, most EV drivers buy coffee, beverages, and meals and use bathroom facilities, while 55% appreciate Wi-Fi connectivity and 42 % lounge or a sitting area. All this contributes to driving in-store traffic and increasing revenue.

Only a reliable charger is a good charger

Having more public charging stations along the roads is just one coincide. Reliability is the other part. Nothing is more frustrating than a charger being out-of-order, which just makes the whole range anxiety problem worse. Studies show that hardware issues make up 50% of all failed charging attempts followed by payment system failures. The charger is a customer-facing piece of self-service technology and simply needs to work 24/7. Moreover, each charging session – be it positive or negative – will reflect on the brand of the store, gas station or hotel the charger belongs to. Customers are loyal, but trust can be easily damaged. So, “always-on” as part of gaining and retaining drivers’ trust will be the next major trend for e-Mobility. And what you need for this is a



proactive support and maintenance approach, where you constantly monitor what is going on in your charging infrastructure, so you can take action the moment something is about to go wrong especially since in a self-service environment, the first person to notice an error is usually the consumer. This type of proactive and preventative services approach combined with smart spare parts logistics will decrease the number of charger failures and increase uptimes, resulting in a positive charge experience and happier, loyal EV drivers who trust your brand.

If you want to learn more about reliable charging infrastructures, please [visit our website for more information](#).

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