The Electrification of Transportation

With all new cars in California expected to be at zero-emission by 2035, innovative vehicle-charging provider powerhouse, EV Connect, is broadening its reach.

Electric vehicles are here to stay -- nationally and globally -- and California is leading the charge in the U.S.

Governor Newsom issued an executive order requiring all new cars sold in California to be zero-emission by 2035 to fight climate change. However, there is considerable infrastructure required to accommodate the number of plug-in electric vehicles (PEVs) that will inevitably increase market share as the technology improves and more drivers recognize it as a viable option.

Worldwide, the market is also surging with Chinese carmaker Nio – a competitor of Tesla – releasing staggering sales numbers. Nio’s shares have surged by 1,000 percent this year, more than double the rate of increase for Tesla, the $420 billion producer of the Model 3, S and X, according to Reuters.

It’s been a gradual embrace but as technology, performance, and design improve, consumer acceptance of electric vehicles grows. A Consumer Reports and the Union of Concerned Scientists survey shows “that 63 percent of Americans are interested in electric vehicles, and 31 percent would consider one for their next purchase.”

The interest is clearly there as the evolution of the vehicles continues – but what about the infrastructure? Can we develop a world where drivers of EVs can find places to charge as easily as the gasoline-fueled among us can find service stations?
Enter El Segundo-based EV Connect, a major player in the “electrification” of transportation.

Founded in 2010 with the mission to “build a better planet by enabling electricity as a transportation fuel,” EV Connect provides turnkey charging solutions for businesses that are deploying EV charging stations as a customer amenity, and want to provide a seamless experience for the company and its consumers.

The company provides a cloud software platform that manages a network of charging stations “at the highest levels of reliability and availability,” says Patrick Macdonald-King, COO of EV Connect.

They do that in three different ways. First is the EV Connect network – primarily driven by small- and medium-sized clients such as workplace and multi-unit dwellings, or apartment buildings, hospitals, education institutions and retail parking locations. Most of the people are not in the business of charging but they want companies like EV Connect to provide stations as an amenity.

“We offer them an end-to-end charging-station experience where we manage installation and deployment and maintain however many charging stations they choose, and provide 24/7 customer support once the stations are up and running,” Macdonald-King says.

The second option is a white-label solution, primarily offered to charging station operators who want to run their own networks. “They can brand the EV Connect software with their own look and feel,” Macdonald-King says.

Thirdly is a platform service. For instance, if clients want to build their own user experience through a mobile app, they can use EV Connect’s Application Programming Interface Gateway (APIs) and tap into EV Connect’s station data and analytics that enable them to use the company’s strong backend.

“One example of this would be regional providers of public charging or vehicle OEMs who want to capitalize our scalable software
and build their own driver experience. Another example are corporations such as Hilton Hotels that want to use it as part of their rewards program, or a gym chain that might want to have EV charging benefits integrated with its membership program,” Macdonald-King says. “There are many options to meet client needs.”

He iterates that much of the push for adoption today is from programs driven by utilities. “More than $1 billion in programmatic money is being offered right now between New York and California alone,” he says. The incentives are resulting in the proliferation of charging stations that help resolve one of the primary hurdles for consumers.

“One of the issues that has prevented consumers from early adoption is ‘range anxiety,’” Macdonald-King says. “People worry if they can go as far as they need to go and if they’re going to get stuck. Gas stations are ubiquitous to the point at which we rarely have to plan for fueling when we go out. As technology and battery storage improve, EVs are getting more mileage than ever and the batteries are bigger and more productive. With greater distance, capacity and availability of charging stations, driver confidence is growing. Add to that government incentives and the industry will continue to expand.”

One of the ways EV Connect is rising to meet the demand is the release of its LADWP Bundle, designed specifically for customers of the Los Angeles Department of Water and Power (LADWP). The bundle – developed with Minnesota-based EVOCHARGE – is the first from EV Connect’s Partner Program, which was designed to “simplify charge-station deployment, improve the ownership experience for site owners, and ensure both charge station and charging network interoperability, as well as enhance the EV driver experience.”

Benefits of the bundle include:

• Faster and easier deployment of EV infrastructure at public locations including apartments, hospitals and throughout disadvantaged communities;

• End-to-end integration of hardware, software and installation resulting in a turn-key solution that also has an extended five-year warranty and 24-hour customer support;

• Optimal use for Los Angeles drivers by making stations more accessible and improving the charging experience overall;

• Easier leveraging of the EV charging incentive programs even for those decision makers who are not EV experts.

“One of the big growth factors for us is when apartment buildings and office buildings are petitioned by employees and tenants to offer stations as an amenity,” Macdonald-King says. “Add in incentive programs and it becomes very attractive for the building owners and managers. For instance, the LADWP bundle offers up to a $4,000 rebate for each charging station. That means that an office building deploying 10 new charging stations could be looking at $40,000 in funding from LADWP to help cover implementation costs.”

Offering charging stations as amenities has the potential to not just raise the value of an apartment complex, office building, or shopping center, but it can attract EV-driving tenants and consumers for that reason alone. The utility companies also benefit by having an avenue to access electricity usage data through the EV Connect platform to help them with grid planning, too.

“Utility companies need to continually collect intelligence to understand the impact charging stations have on the grid,” Macdonald-King says. “Part of our software application provides data and analytics to assist with planning and usage so providers can understand the levels of power they’ll need today as well as how it is going to scale for tomorrow.” — By Susan Belknapp, California Business Journal.

Editor’s note: President-Elect Joe Biden has pledged to add as many as 500,000 charging stations nationwide over the next few years and convert the federal government’s fleet to electric vehicles.