CREW NETWORK CREW Network Industry Brief Vol. 4 • Issue 1 • January 2022

Where are the Plugs?

By Mary Gerding, Managing Director, Environmental Risk & Placement, Hylant

Is commercial real estate preparing for electrical recharging capability within the realm of announcements by automakers to stop selling gas powered vehicles by 2035?

The United States Congress passed the Infrastructure Investment and Jobs Act in November of 2021. The majority of funding is directed towards rebuilding America's transportation systems and reducing emissions, including a hefty $7.5 billion USD earmarked for a national network of electric vehicle (EV) charging stations.

In December 2021, the Environmental Protection Agency (EPA) announced ramped up vehicle mileage standards, set to climb to a 2026 target of 40 miles per gallon. These initiatives push EV momentum including plans to retain and/or boost EV tax incentives and the current White House goal of electric/hybrid models reaching 17% of all new vehicles sold in 2026.

While American response is overwhelmingly in support of ambitious climate policies, many doubt these sweeping EV visions will make it to fruition. Government entities and car companies have made big announcements about the future of electric and hybrid vehicles before. Mandates have been rolled back and repealed; car companies have even blamed consumers for not making their targets.

Commercial real estate is rightfully taking a cautious approach. We continuously strive to provide the amenities dictated by the market we serve. EV stations in the past were seen as a nice to have; however, we are seeing an uptick in EV charging requirements within leases. Landlords will take advantage of utility or government provided incentives to offset the capital burden of adding charging stations. A challenge will be the difference between capital appetite to meet any dictated minimums versus what's truly needed to meet demand.

Retrofitting existing parking spaces requires an electrical backbone which may or may not be accessible, netting wildly variable costs per EV station. Landlords will not only look to the occupier or tenant for off set of installation costs, but also for the increase in utility expense.

Proactive Landlords are adding designated EV parking hubs with a pay to use system; yet feeling their way in implementing consequences to discourage folks from overstaying or simply parking—blocking access for those with an immediate need. High-capacity charging stations can "fill-up" an EV battery in anywhere from 10 to 60 minutes.

A July 2021 paper by ITTC addresses the home, workplace and public charging station needs through 2030 in conjunction with U.S. government objectives. The study is based on growth from 1.8 million EVs in 2020 to 26 million EVs in 2030. To support these vehicles, public and workplace charging must grow from approximately 216,000 chargers to 2.4 million in 2030; including a mix of 1.3 million workplace chargers, 900,000 public Level 2 chargers, and 180,000 high-capacity fast chargers. The associated costs amount to $28 billion.

Parking facility owners were hit hard by the pandemic. Yet coveted space in dense urban settings could pay forward for both the lot owner (higher fees) and the EV user (convenience, safety). Car and Driver Magazine estimates a dedicated 240-volt circuit home garage installation runs between $750 and $1,750 (deemed a Level 2 charging system). Assuming your current electrical supply can handle the load, charging your EV may require coordination with other in-home electric systems including HVAC, the hot water heater, and your dryer. A depleted EV battery can take up to 8 hours to charge at Level 2.

EV is perceived as a large-scale chicken-egg dilemma. Consumers don't want electric cars without convenient and reliable recharging and commercial landowners don't want to add charging infrastructure without reliable demand and remuneration.

Be this as it may, EV is coming. Consumer reports suggest two-thirds of Americans are open to buying an EV so long as their range worry is quelled. Battery technology is advancing, access to charging stations is expanding, online resources and smart phone apps are available for planning trips, and support for protection of non-renewables is growing. Predictions are that EV maintenance costs are half in comparison to a combustion engine.

Is it necessary for commercial real estate to retrofit parking with charging capability? The Associated Press estimates that 80% of 2020 EV charges occurred at home. Perhaps high-capacity public charging stations become the new gasoline stations, although it is a nice on-site amenity to have and statistically, the public is counting on us.

Contributing writers: Maria Sicola, Managing and Founding Partner, Heybrook West, and Sonia Sharma, RPA, Manager, Hines