## **Getting Charged About Electric Vehicles Residential Charging Stations**

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Electric vehicles are becoming more and more popular. They are less expensive to operate, better for the environment, and cheaper to repair than traditional gas-powered vehicles. One factor that may deter potential buyers is the lack of readily available charging stations. Many owners have turned to installing their own charging stations at home. However, those in communities such as homeowners and condominium associations. may face resistance. Helping clients understand the regulations for electric vehicle charging stations is another valueadded service of the professional insurance agent.

Global sales of electric vehicles surged 43% in 2020, even though traditional vehicle sales dropped during the pandemic year (www.theguardian.com). Although the purchase price of electric vehicles can be \$19,000 more than the traditional gas-powered version, the cost to operate electric vehicles is 50-70% lower (www.nrdc.org). Changes in regulations and requirements to reduce emissions Is another reason for the increased popularity of electric vehicles. California has legislation requiring all new vehicles sold there be emission-free by 2035

As of early 2021, seven states (CA, CO, FL, NJ, NY, OR and VA) had legislation governing electric vehicle charging stations, or, more technically, electric vehicle supply equipment (EVSE). New York is one of the states that require residential communities with homeowner associations to allow unit owners to install charging stations. In October 2020, New Jersey adopted legislation regulating the presence of electric vehicle charging stations in community associations. For association managers, a review and revision of the governing documents as they relate to charging station laws is very important.

If there are multiple electric vehicle own-

ers in the community, a community charging station may make sense. Proper allocation of the electricity costs may be a concern. There are stations that can monitor usage and charge the user accordingly. Another option would be



a monthly fee paid by each unit owner who uses the charging station.

Electric vehicle owners planning to install their own charging station should also review local and community laws prior to commencing work. Another consideration is electric capacity as some charging stations require higher voltage. The owner must pay for the installation and, if they move, eventual removal of the charging station, as well as the electricity that is used. Installation should be done by a qualified and insured contractor. The federal government offers tax credits, up to 30% of the cost, for individuals and businesses that install electric vehicle charging systems. The credit is retroactive to 2017 and applies to stations purchased and installed by the end of 2021.

There are three different levels of charging stations, which impacts the charging speed and the cost. Level 1 uses standard household 120 volt connection, so no special wiring is required. Level 2 uses a 240 volt connection, similar to what an electric oven or dryer may use. Charging speed for Level 2 is much faster than Level 1. For example, a vehicle that takes 20 hours to charge at Level 1 takes only 3 hours at Level 2. Level 3 stations require high voltage and are very expensive to install, thereby making them impractical for individual homeowner use, and suited for commercial usage. In addition, Level 3 charging on a regular basis can damage the vehicle's batterv.

The range a car can be driven on a single charge varies on the type of vehicle and where it is driven. The EPA ratings for 2020 vehicles range from 110 to 373 miles. The time it takes to charge varies depending on the type of battery and vehicle. New electric cars typically come with a 100,000 mile warranty for their batteries.

Charging stations may be installed in common areas, such as parking lots and garages. As such, they would be considered additions/alterations. Insurance is recommended and often required for the charging station. Proof of insurance protecting the association must often be carried by the charging station owner. Depending on the location, charging stations may be subject to different perils. Weather can impact outdoor stations. Vandalism and theft of the charging cable are two other common exposures. In addition, the owner of the station may be held liable if someone trips over the cable and gets injured.

Electric vehicles are probably here to stay. Access to charging stations is a determining factor in their popularity. Home based charging stations are convenient, but not without important regulatory considerations. Helping clients understand the regulations and requirements is another sign of the true insurance professional.

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