

PERSONAL INSURANCE

## **Electric Vehicle Infrastructure**

### **Navigating Fire Safety Challenges**



As the adoption of electric vehicles (EVs) continues to rise, the expansion of electric vehicle (EV) charging infrastructure becomes a critical component of supporting this transition. However, with this development comes fire safety challenges requiring careful consideration. It is imperative to be proactive to help ensure the safety their premises and occupants.

### **Understand the Risk**

One of the primary concerns with EV charging infrastructure is the fire risk posed by the high energy density of lithium-ion batteries used in electric vehicles. These batteries, while efficient and powerful, can catch fire or explode under certain conditions, and such incidents can be extremely difficult to control.

### **Compliance and Assessment**

Compliance with fire safety regulations is an essential first step in mitigating risks. Conduct thorough fire risk assessments tailored to EV charging installations by identifying potential fire hazards and determining appropriate preventive measures.

### **Location**

The location of EV charging points plays a significant role in minimizing fire hazards. External locations are generally safer, as they can be positioned a distance away from buildings and critical infrastructure. If internal stations are necessary, consider placing them in detached single-story structures or areas with fire-rated compartmentation to help contain potential fires and prevent the spread to other parts of the building.

### **Fire Protection**

Considering the specific challenges posed by lithium-ion batteries, fire protection strategies may need to be updated or enhanced. Explore options such as installing sprinkler systems, upgrading fire detection systems and ensuring the availability of extinguishers and emergency response procedures.



## Charging Equipment Maintenance and Standards

To help reduce the risk of charger malfunctions leading to fires, ensure all charging equipment is installed, used and maintained according to local safety standards and manufacturer guidelines. It is encouraged to schedule regular inspections and maintenance.

## Housekeeping

Housekeeping is another critical component of fire prevention. Keeping charging areas clear of combustible materials can significantly reduce the risk of fire spread if an incident occurs.

## Consultation with Brokers and Insurers

When planning EV charging installations, seek advice from brokers and insurers to develop appropriate property protection strategies. They can also help determine adequate coverage for potential fire-related risks.

By taking a proactive approach to fire safety, property owners and stakeholders can mitigate the risks associated with the expansion of EV charging infrastructure. From assessing compliance with fire regulations to maintaining proper equipment and consulting with experts, each of these steps plays a crucial role in safeguarding both property and occupants from potential fire hazards.



## How Brown & Brown Can Help

Connect with our Brown & Brown team to learn about our knowledge in your industry, how we build our risk mitigation strategies and how we can aid your business in building a cost-saving program.



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