

2023 FIREFIGHTER SAFETY STAND DOWN



June 23, 2023

Public Education



Lithium batteries are generally safe and unlikely to fail, but only so long as there are no defects, and the batteries are not damaged. When lithium batteries fail to operate safely or are damaged, they may present a fire and/or explosion hazard. Damage from improper use, storage, or charging may also cause lithium batteries to fail. Ensure lithium batteries, chargers, and associated equipment are tested in accordance with an appropriate test standard (e.g., UL 2054) and, where applicable, [certified by a Nationally Recognized Testing Laboratory](#) (NRTL), and are rated for their intended uses

Energy Storage Systems in the Home

Use of energy storage systems in the home can be a great way to add reliability to the home's power system.

Recommendations for doing so safely include the following guidelines and recommendations:

- Installed equipment shall be listed per UL 9540 and installed per the listing and manufacturer's instructions.
- Use a licensed contractor who is familiar with energy storage systems and the associated hazards. Homeowners should never make a DIY battery pack and energy storage system.
- Work with local code officials (such as an electrical and/or building inspector) to highlight the requirements of home ESS systems found in the National Electric Code® (NEC®) and [NFPA 855](#), Standard for the Installation of Energy Storage Systems

DID YOU KNOW?

According to the US Department of Energy, in 2019, about 18 percent of electricity generated at utility-scale electricity generation facilities in the United States was from renewable energy sources.

That sporty 1991 Camaro Z28 muscle car?
That classic 1969 VW bus?
It could be an EV (there are conversion and modification kits available)

- When purchasing devices, be sure that the equipment has the Underwriters Laboratories Mark. The UL mark shows that the product has been safety tested.
- Follow the manufacturer's instructions for charging and storage.
- **Do not charge a device under your pillow, on your bed, or on a couch.**
- Always use the manufacturer's cord and power adapter made specifically for the device.
- Keep batteries/devices at room temperature. Do not place in direct sunlight.
- Store batteries away from anything flammable.
- If a battery overheats or you notice an odor, change in shape/color, leaking, or odd noises from a device discontinue use immediately. If safe to do so, move the device away from anything that can catch fire and call 9-1-1.
- Do not keep charging the device or device battery after it is fully charged.
- Only charge one device or device battery at a time to prevent overloading the circuit.
- Store e-bikes, e-scooters, and batteries away from exit doors and anything that can get hot or catch fire.
- Only have device repairs performed by a qualified professional.



Fatal Crash

[Lithium-ion Battery, How does it work?](#)
[MeritSun Lithium-ion Battery Factory Tour](#)
[Good bye Lithium? WHAT!](#)