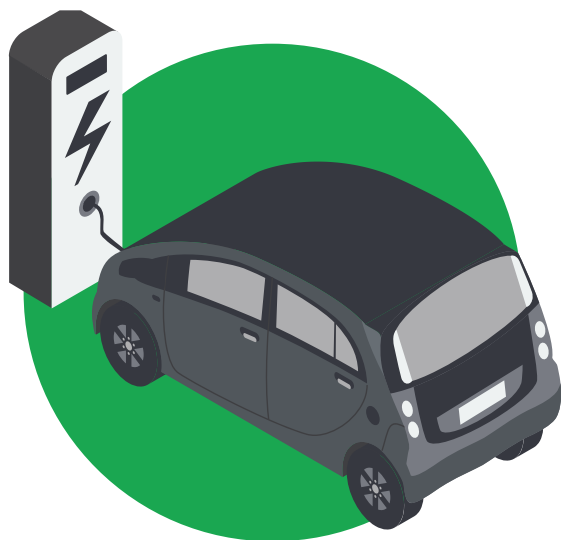




THE RECHARGEABLE SOCIETY: The Shift Happening Around Us

We are in the midst of a rapid shift to a Rechargeable Society, in which battery-powered technologies are embedded in nearly every aspect of modern life.

This transition is reshaping how people work, communicate, move, and power the tools and devices they rely on every day. With any major technological shift comes a new class of risks.

Growing Use of Lithium-Ion Powered Devices

Adoption is accelerating

Lithium-ion batteries power:



Smartphones, tablets, and laptops



Wearables and medical monitors



Power tools and household equipment



E-mobility devices like scooters and e-bikes



Critical infrastructure systems, backup power, and energy storage technologies



Personal grooming devices such as toothbrushes and razors



Electric vehicles

65,000+

gig workers in New York City alone rely on e-bikes and e-scooters to make deliveries.

Understanding the Risk

Battery fires and the awareness gap

While efficient and widely used in rechargeable electronics, lithium-ion batteries can enter thermal runaway if they are damaged, improperly charged, poorly manufactured, or counterfeit.

Thermal runaway:

This is a rapid and uncontrollable chemical reaction that can lead to:

- Sudden ignition
- Extreme heat
- Fast-spreading flames
- Difficult-to-extinguish fires
- Re-ignition hours or days later

These fires can engulf a room in seconds and behave differently than typical household fires, requiring new approaches to prevention and response.

Public understanding has not kept pace with technology:

50% know nothing about lithium-ion batteries

60% don't realize these batteries power everyday devices

44% are unaware of overheating risks

Advancing Safety in a Rechargeable Society

Powered by standards, education, and advocacy

Backed by a global network of more than 4,000 experts, UL Standards & Engagement advances battery safety through science-based standards.



Educating the public and policymakers on how to reduce risks in a Rechargeable Society



Informing policy discussions so they reflect real-world battery hazards



Supporting safer adoption as rechargeable technologies continue to expand

By providing greater clarity for manufacturers and confidence for consumers, we help ensure battery powered devices can be used more safely every day.

The Rechargeable Society is not slowing down, and safety must move forward with it.

Standards

UL Standards & Engagement develops standards that help drive safety and accelerate progress, giving manufacturers the foundation for innovation and offering consumers greater trust in the products they choose.

ULSE has developed more than 80 standards addressing the safety of lithium-ion batteries and the devices that rely on them, across design, manufacturing, use, and disposal.

Standards help:

- Preserve access to the battery-powered technologies people rely on every day
- Promote innovation by giving manufacturers clarity to design and scale responsibly
- Grow consumer trust by setting clear, verifiable expectations for safety

Examples:



UL 2272 Personal E-mobility Devices



UL 2271 Light Electric Vehicles



UL 1642 Lithium-Ion Batteries

About UL Standards & Engagement

UL Standards & Engagement is a nonprofit safety organization that convenes experts and leaders across the world to deliver impact through standards, education, and advocacy. Since 1903, we have developed nearly 1,700 standards and guidance documents for products ranging from fire doors to autonomous vehicles. ULSE enables innovation and grows trust by convening experts and informing policymakers and regulators as we work toward a safer, more secure and sustainable future. Visit **ULSE.org** for more information.

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