

Essential



Lead batteries are an irreplaceable link to connect, protect, transport and power our way of life. Without this essential battery technology, modern life would come to a halt.

Connecting Our World

Lead batteries safeguard the vital telecommunications and data systems that keep us connected and our economy stable.

- ⊕ Lead is one of the dominant battery chemistries **used to support a U.S. communications infrastructure** worth more than \$1 trillion.
- ⊕ Lead batteries provide **nearly 90%** of the **backup power** required for 24/7 telecommunications.
- ⊕ When the power goes out, lead batteries **ensure** the **internet stays on**.
- ⊕ Lead battery energy storage systems moderate the variability of electric grids to **keep online communication consistently accessible**.
- ⊕ **The New York Stock Exchange, Google** and other major entities rely on lead battery backup power to **protect massive online data repositories**.

Protecting Our Lives

Lead batteries support the backup recovery systems that protect lives, investments and data in an emergency.

- ⊕ In times of crisis, lead batteries **provide critical backup power for 911 call centers and emergency response teams**. This includes energy for emergency lighting, and powering helicopters and other lifesaving vehicles.
- ⊕ **The U.S. military** relies on lead batteries **to help keep our troops safe** by powering vehicles used for bomb detection and disposal.



In hospitals worldwide, lead batteries **save lives by providing emergency power** for lifesaving equipment during temporary power outages.

“Data is critical. Data is growing at a rapid rate, and energy storage [and] battery backup systems are key in keeping our data centers available.”

— Alan French, Vice President of Engineering, QTS Data Centers

Essential for
Connecting

Essential for
Protection

Essential for
Transportation

Transporting Our Economy

Lead batteries reliably power the transportation and logistics networks that move the people and materials that fuel our economy. The industry itself also provides thousands of green-economy jobs.

- ⊕ **Every U.S. mass-produced car and truck (over 275 million)**, including every electric vehicle and approximately **60% of all forklifts**, contains and relies on lead batteries.
- ⊕ The global automotive industry produces **more than 85 million new vehicles** annually. On average, **each vehicle will use three to four lead batteries** over its lifespan.
- ⊕ Lead batteries help to safely **transport Americans via public transportation 34 million times** each weekday.

Powering Our Energy Future

Lead batteries are an established, economical and primarily domestically sourced battery technology. They can meet our growing energy storage needs today – and tomorrow, via an industry that is uniquely poised to scale-up for future demands.

- ⊕ The U.S. lead battery industry has a **robust, coast-to-coast network** for efficient manufacturing, collection, recycling and reuse. The industry is a model of circular economic success for other battery chemistries and industries.
- ⊕ Lead batteries are **highly cost effective**. They provide superior cost-benefit value in comparison to other energy storage chemistries.
- ⊕ The lead battery industry's firm foundation in the marketplace equips it for the **responsiveness and scalability** needed to meet our country's renewable energy storage needs.



Lead batteries provide **over 70%** of the world's rechargeable energy storage needs.

Learn more at EssentialEnergyEveryday.com

* Visit EssentialEnergyEveryday.com/about/sources to view source information and learn about the benefits of advanced lead batteries.

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Powered by Sustainable Lead Batteries