

VITAL POWER: ADVANCED LEAD BATTERIES

A SAFE, SUSTAINABLE AND LOW-COST SOLUTION TO POWER OUR PLANET

Meeting the growing demand for energy in the EU requires efficient energy storage technologies. Today's lead batteries provide the answer 24/7. They are the proven energy storage leader for vital industries such as transportation, energy and communications.



SUSTAINABLE

Lead batteries are the most recycled consumer product in the EU, with an unending product lifecycle. Modern lead battery manufacturing and recycling facilities are innovative, clean and operate responsibly to support safe, clean communities.

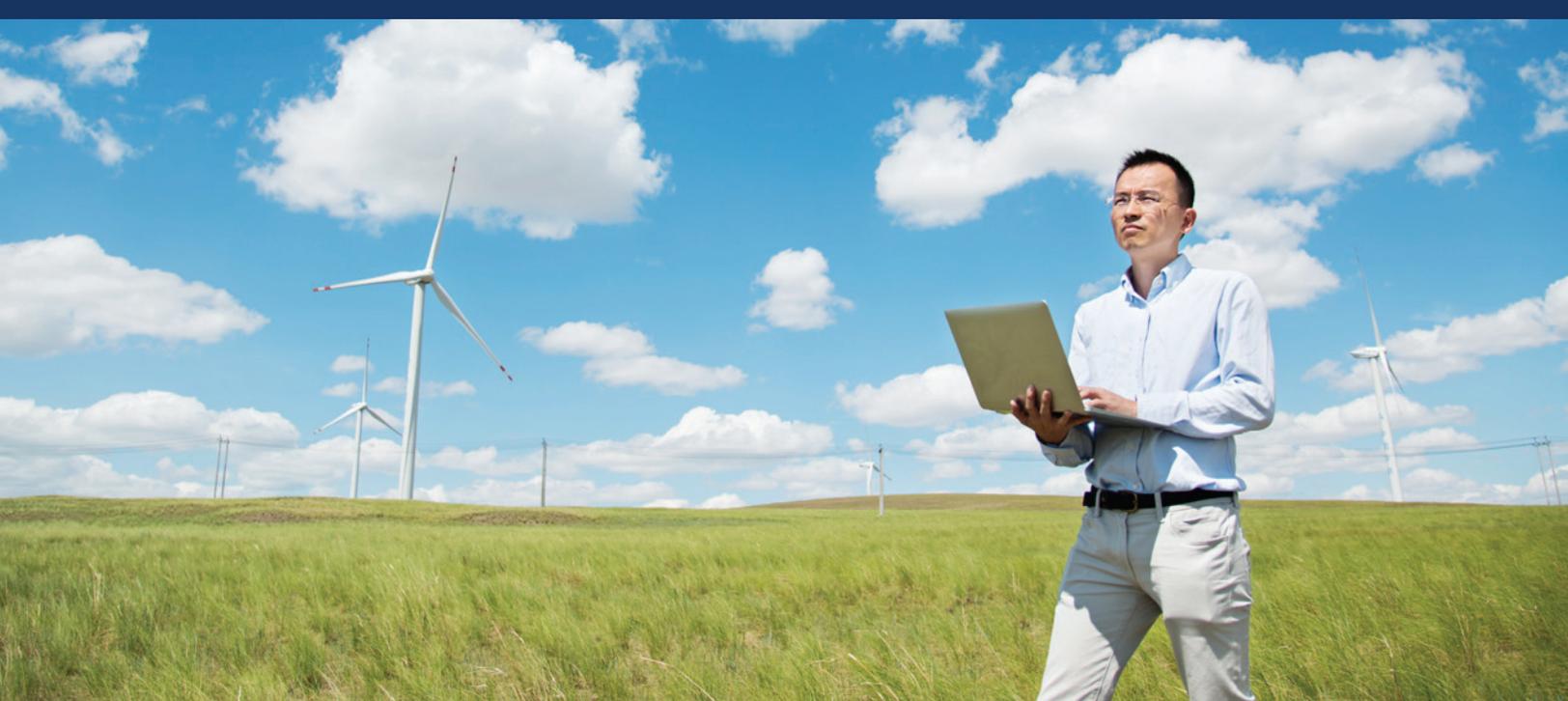
- + Lead batteries have a **99% recycling rate**, making them the most recycled consumer product in the EU.
- + A new lead battery, on average, is comprised of more than **80% recycled lead battery material**.
- + **Lead batteries are used worldwide** in hybrid and electric vehicles to store and optimise renewable energy and as a vital energy source in remote areas.



ESSENTIAL

Lead batteries are an essential, irreplaceable link in connecting, powering and protecting our way of life. They safeguard critical communications, power transportation and logistical networks that fuel our economy, and support back-up power systems that protect life, investments and data in an emergency.

- + Every mass-produced car and lorry and more than 65% of all forklifts contain and rely on lead batteries.
- + In thousands of hospitals across the globe, **lead batteries save lives by providing emergency power** for life-saving equipment.
- + Lead batteries ensure that when the power goes out, the internet stays on – supporting a communication infrastructure of **worth billions of Euros**.



INNOVATIVE

Lead batteries continue to advance, meeting our changing energy needs and pushing the boundaries of what is possible to ensure peak performance and power for everyone.

- + Lead battery life has **increased by 30-35%** in the last 20 years.
- + **Innovative advances in lead batteries** have allowed for greater use in renewable wind and solar applications.
- + By **2020, millions of tonnes** of vehicle greenhouse gas emissions will be eliminated each year through the use of advanced start-stop lead batteries.



SAFE

Unlike newer battery technologies, lead batteries have a long history of reliable use in critical industries such as transportation, communications, security, medical, and aviation. Lead battery technology is straightforward and well understood. When used properly, consumers can be confident that lead batteries are a safe energy source for their everyday energy needs.

- + **Lead batteries operate reliably** at wide-ranging ambient temperatures and in every geographical location from hot desert conditions to cold arctic environments.
- + Lead battery manufacturing operates under some of the most rigorous and extensive **worker and environmental protection standards** in the world.
- + Modern closed-loop recycling **safely recovers valuable materials** for use in new batteries, under tight environmental controls and **without landfilling**.