

Press Release
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New study shows that repurposed EV batteries are key to shaping a sustainable energy future

In today's society of advancing electric vehicle (EV) technology, the management of end-of-life batteries presents both challenges and opportunities.

Each year, thousands of fires caused by batteries in waste management facilities or vehicles are reported in the United Kingdom and Australia.

These incidents, along with others worldwide, highlight the hazards of improper disposal and underscore the urgent need for sustainable solutions.

A new study authored by Aman Kumar, an MSc in Energy Management student at [ESCP Business School](#), explores innovative approaches by industry leaders like B2U Storage Solutions and Allye Energy.

These companies are at the forefront of transforming retired EV batteries into assets that not only extend battery life but also contribute significantly to a circular economy.

The proliferation of lithium-ion batteries, essential for EVs and energy storage systems, is projected to increase manufacturing capacity substantially by 2030.

However, with a typical lifespan of 15–20 years, these batteries, if not repurposed or recycled, could pose environmental and safety risks when disposed of improperly.

"Repurposing EV batteries for secondary applications such as battery energy storage systems (BESS) is a pivotal strategy," Kumar explains. "It not only maximises the remaining capacity of these batteries but also supports grid stability and enhances renewable energy integration."

Key Findings:

- **Environmental Impact:** Improper disposal of lithium-ion batteries poses significant environmental risks and contributes to hazardous incidents globally.

- **Circular Economy Benefits:** Companies like B2U Storage Solutions and Allye Energy are pioneering the repurposing of EV batteries, reducing costs associated with new battery production and recycling.
- **Industry Innovation:** B2U Storage Solutions has successfully deployed large-scale storage facilities using second-life batteries, demonstrating cost-effectiveness and reliability in energy markets.
- **Collaborative Efforts:** Partnerships between car manufacturers and energy solution providers, such as Allye Energy, showcase innovative uses of retired EV batteries, contributing to reduced emissions and sustainable energy practices.
- **Economic Impact:** Repurposing EV batteries can significantly reduce the capital expenditure required for new battery systems, cutting costs for both businesses and consumers.

"As the world accelerates towards sustainable energy solutions, the role of repurposed EV batteries in stabilising grids and supporting renewable energy sources cannot be overstated," says Kumar. "These initiatives not only mitigate environmental impact but also offer economic advantages, making them a win-win for both businesses and consumers."

For more information on this study and to explore the potential of repurposed EV batteries in the energy transition, please visit [ESCP's Energy Management Centre website](#).

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