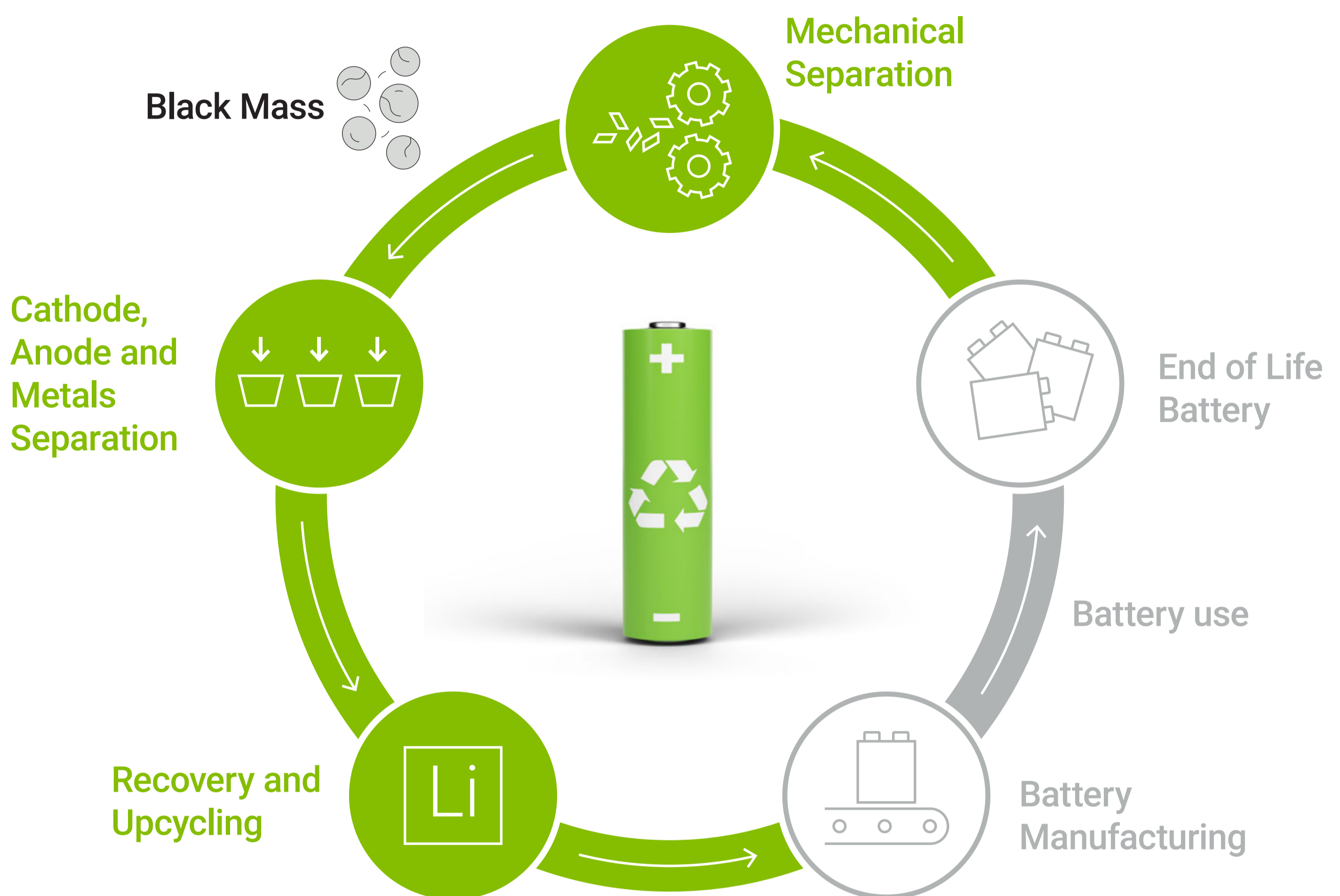
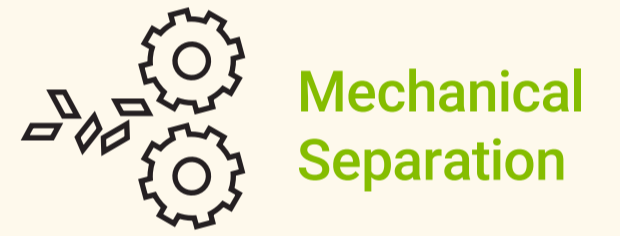


5 Reasons You Need Onsite Metals Analysis Capabilities for Battery Recycling



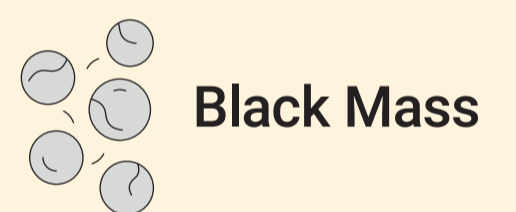
1 Monitoring airborne particulates

Mechanical separation e.g. shredding, creates airborne particulates, hazardous to human health and the environment. ICP-OES can be used to monitor air filters to ensure regulatory compliance.



2 Analyzing black mass

The powder from separation, known as “black mass”, is widely refined through hydrometallurgical and pyrometallurgical processes. ICP-OES effectively measures impurities to ensure the final product quality meets specifications.



3 Monitoring and optimizing recycling processes

Efficient separation is vital for effective downstream processing. Onsite ICP-OES enables real-time monitoring and optimization at each stage, maximizing material recovery like feedstock chemicals.



4 Ensuring QC of input chemicals

Purity of chemicals used in battery recycling is crucial to avoid introducing contaminants in the final product. For example, leaching – a common purification step – uses strong acids and solvents to isolate compounds.



5 Monitoring environmental discharges

Thorough chemical analysis of emissions and waste can be achieved using ICP-OES to ensure the correct and safe disposal of these by-products.



eBook: A Practical Guide to Elemental Analysis of Lithium Ion Battery Materials Using ICP-OES

Battery materials are often difficult to analyze due to dirty sample types and require specific approaches to ensure accurate measurement.

Download this ebook to learn tips and tricks overcome common issues faced when analyzing battery materials.

