xoriant

Success Story

Closing the Loop: Powering the Circular Economy Transformation of the Largest Chemical Producer in the World

How a digital platforms for effective battery component recycling helped the chemical giant towards achieving critical environmental, social, governance (ESG) goals and to meet EU Battery Passport regulations.

A top European supplier of chemicals in the automotive industry, our client consistently showcases the ability to surpass market growth expectations and a commitment to bring down its CO_2 footprint.

Challenges

The client wanted to create an effective repurposing method for the components used in the production of lithium-ion batteries, to create a more sustainable and eco-conscious future.

Recycling battery components is complex given their hazardous nature	Resource reclamation from batteries without a recycling system is difficult	Improperly disposed batteries contributed to soil contamination and environmental peril

Collaboration

Xoriant team, leveraging its strong technical expertise and experience, offered a comprehensive solution for sustainable battery management and compliance

Workbench
Implement ESG compliance with our battery recycling platform— streamlining transfer, dismantling, and component segregation for sustainability

Catena-X
Help build Catena-X solution to ensure collaboration and data consistency, emphasizing carbon footprint reporting using Catena-X

Battery Passport
Integrate Battery Passport, adhering to EU standards to ensure cross-border compliance and enable full battery history extraction

Battery Box Tracking
Develop battery box tracking to ensure optimal battery health, monitoring voltage levels for reliable power supply to critical equipment

Business Value

Enhance
Data integrity, real-time analytics, visibility, and traceability with all data consolidated.

Slash
CO_2 footprint by reusing and recycling valuable battery resources to create new ones.

Achieve
A faster time-to-market, establish a circular economy, and meet immediate sustainability goals.

Ensure
Compliance readiness, streamline processes, reduce regulatory risks, and boost operational efficiency.

Technology Stack

Java | Springboot | ReactJS | Postgres | Azure Event Hub | MongoDB Power BI | Python