



Palmiresíduos Accelerates Battery Module Testing with CeLLife Lite

Client

Palmiresíduos

Description

Portugal's leading industrial waste and battery recycling operator, specializing in the collection, treatment, and reuse of industrial waste across a broad range of sectors.

Problem

Slow and limited testing processes for EV battery modules. This creates bottlenecks in assessing reused EV battery modules and delays operational decisions around reuse, resale, or recycling.

Solutions

CeLLife Lite with EFP™ Technology

CeLLife Lite offers an ultra-fast, AI-powered diagnostics solution that accurately determines the condition of EV modules and removes testing bottlenecks.

Benefits

- Single compact setup
- Accurate results in seconds
- AI-based module health and fault diagnostics
- Ensuring 100% testing coverage

CRITICAL CHALLENGES

Before battery modules can be efficiently reused or recycled, they must be thoroughly tested for safety, aging, and fault conditions. However, current testing solutions are typically slow (hours or days per module), expensive to scale, and require battery expertise to interpret results. Additionally, significant temperature fluctuations during testing essentially hinder reliable on-site analysis.

SOLUTION & IMPLEMENTATION

With CeLLife Lite, Palmiresíduos now performs complete health diagnostics on 100% of incoming EV modules. A single 5-second test operated with flexible probes captures module's Electrical Fingerprint (EFP™), which is instantly analyzed by CeLLife's AI engine to provide clear, traceable insights from any EV module.

This capability enables Palmiresíduos to test and grade continuously increasing volume of modules efficiently, maximize second-life recovery, and minimize waste. With throughput and traceability optimized for industrial-scale operations, the company is advancing a more sustainable and profitable battery value chain.

