RISBAT

Safer, smarter Li-ion battery recovery

Duration:
2025-2026

Budget:
€1.28M

Project Number:
24613

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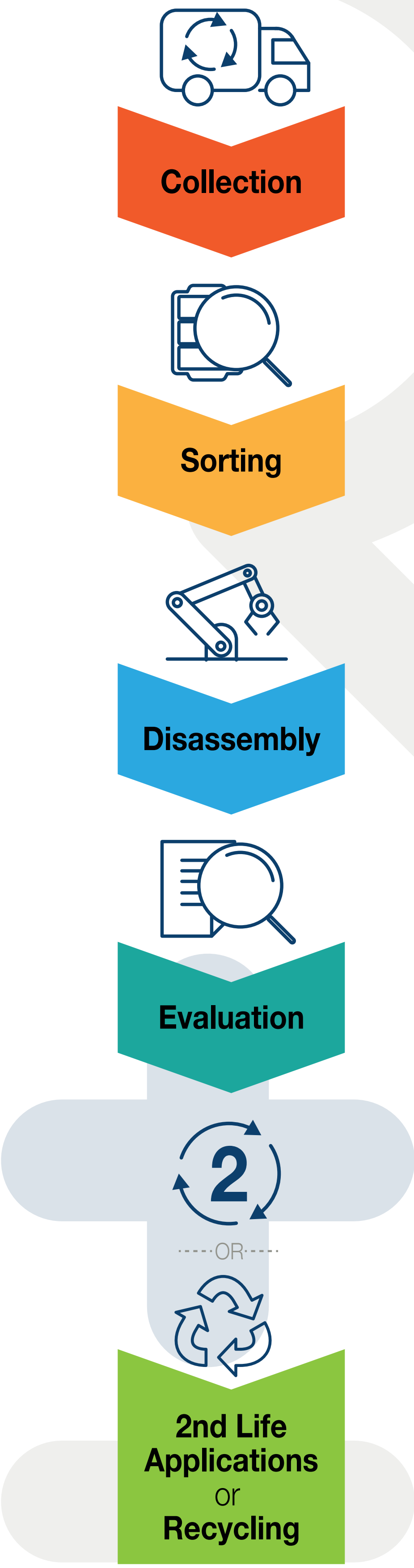
RISBAT Solution



Growing battery challenge in the RIS countries:

A comprehensive analysis of the battery value chains in Greece, Portugal, and Romania reveals that they face critical and similar structural obstacles that constrain the safe and efficient management of EoL LIBs.

Key among these is the widespread absence of infrastructure for dismantling and discharging large-format batteries, inconsistent or non-existent chemistry identification at intake points, inadequate and unsafe storage facilities, and a complete reliance on cross-border shipments for pre-treatment.

These deficiencies create safety hazards, such as increased fire risk during prolonged storage, but also hinder the development of a circular battery value chain.

New Battery regulation demands urgent action:

Key points of the Regulation (EU) 2023/1542:

- Harmonised EU-wide rules
- New battery categories
- Higher collection & recycling targets
- Mandatory second-life evaluation
- Digital Battery Passport
- Due-diligence obligations
- Stronger traceability and reporting

A key focus of the project is the implementation of the new Regulation (EU) 2023/1542 supporting the EU's mission to promote safe, compliant, and circular battery management.

Through its activities RISBAT will develop standardized procedures and share lessons learned for sustainable and efficient end-of-life battery recycling and recovery across participating countries.

Safer, smarter Li-io

RISBAT's integrated, safe, and cost-efficient pre-treatment.

RISBAT is developing a technological solution directly adapted to the operational realities of the RIS region.

The integrated system features assisted chemistry identification, state-of-health assessment and controlled discharge, digital sorting, reusability evaluation and semi-automated dismantling.

This pre-treatment chain enables safer operations, lowers transport and handling costs, and streamlines recycling and second-life application.

Collection:

- Safe collection of mixed chemistries
- Risk-based condition classification
- Documentation aligned with EU rules

Sorting & Reuse evaluation:

- Assisted chemistry identification
- State-of-Health assessment
- Controlled discharge
- Digital sorting
- Second-life suitability protocols

Robotic disassembly:

- Semi-automated dismantling
- High-throughput, scalable process
- Reduced safety risks

RISBAT's Impact

40%

Increase reusability by 40%

Support compliance with Regulation (EU) 2023/1542

Co Li

Secure 50% of critical raw materials

Increase capacity in the RIS region by 2000 tons/year

€ € €

Safe and efficient pre-treatment reduces handling costs

on battery recovery

Consortium

The partnership, led by Re-Battery, advances innovation in regions with emerging end-of-life Li-ion battery management through technology transfer and capacity building.

Producer Responsibility Organisations, Re-Battery, Electrão, and SNBR Association combine operational knowledge with cutting edge innovations of the technology partners SORTBAT and HIRO Robotics. SE&C IKE and the National Institute of Chemistry ensure the wide dissemination of the project.

Coordinated European strategy

RISBAT leverages the EUCOBAT network -the European association of national battery PROs- as a strategic channel for outreach, policy alignment, and collaboration.
All three RISBAT PRO partners — **Re-Battery** (Greece), **Electrão** (Portugal) and **SNRB** (Romania) — are full members of **EUCOBAT**,
which currently unites around 30 national collective systems across Europe.

Contact

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