

# Giving Batteries a Second Chance

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### 1 Expert in Battery Lifecycle YEARS Services Solutions

### Catering to EV and BESS Markets

Founded in 20 15 with a mission to support our customers in the energy and transportation sectors' transition to renewables and electric mobility.

and vast experience managing industrial batteries Deep expertise throughout the full life cycle, including end-of-life management.

One - stop shop for comprehensive lifecycle services and stewardship **solutions** that enable safe, sustainable, and cost - effective use of industrial batteries.

Advanced asset management software solutions specifically built for the battery and battery energy storage industries.

## 25+ GWh

Commissioned and Serviced

320+MWh

**Decommissioned** 

3000+MT

Responsibly Recycled



# Renewing Failed Batteries Rebuilding Value

Renewance Reman and Repair



### Unlocking Value through Remanufacturing Degraded but not done!

#### Why Remanufacture

Batteries fail prematurely for many reasons, many wind up prematurely recycled.

Remanufacturing can be more cost-effective and environmentally responsible.

Extends asset life span and reduces waste.

Avoids unnecessary recycling or disposal.

Supports regulatory and ESG compliance for OEMs and asset owners.

#### **Customer Benefits**

Asset Value Recovery

Enhanced lifecycle economics

Lower carbon footprint

Reduced downtime and managed CAPEX

#### Why Renewance

We provide	
Battery Repair & Remanufacturing	Restoring non - functional or degraded batteries to operational or like - new condition, extending asset life and reducing premature recycling.
Teardown & Root Cause Analysis	Conducting structured inspections and failure analyses to support OEMs, insurers, and asset owners in understanding battery performance issues.
Battery Diagnostics & Performance Recovery	Leveraging advanced tools and field expertise to identify degradation patterns and recover lost capacity wherever feasible.
Field Engineering & Technical Support	Deploying experienced engineers and technicians to troubleshoot systems, perform in -situ repairs and support warranty claims

### Battery Remanufacturing and Recertification Process



### Battery Collection & Logistics

Case Created via
RenewanceConnect<sup>TM</sup>
Custom, US DOT compliant
packaging (including DDR)
Battery shipped to
RenewanceCenter TM



### Incoming Inspection & Diagnostics

Detailed intake process.

Validate field failure reports.

Identify performance degradation or part failures.



### Repair & Recertification

Defective, worn or obsolete parts are replaced systematically.
Install newer firmware.
End of line recertification testing



### Storage & Monitoring

Safe storage in approved packaging.

Regular SoC maintenance
Full tracking in
RenewanceConnect<sup>TM</sup>



### Distribution Return to Customer

Voltage adjustment to match application.

Outbound logistics for redeployment.

Comprehensive documentation



### Typical Battery Testing & Remanufacturing Activities

- Visual inspection and mechanical integrity checks
- BMS data review and performance benchmarking
- Electrical testing (voltage, resistance, insulation)
- Leak detection and pressure testing
- Thermal system function checks (cooling/heating)
- Module and cell rebalancing
- Firmware updates and configuration validation
- Reassembly and sealing per OEM specifications
- Final system testing and safety verification







# Where Renewance Reman Delivers Customers & Services

### International EV Fleet OEM

#### **Battery Recertification**

Actively managing remanufacturing campaign for fleet of electric busses.

Recover non-functional packs, inspect, diagnose, repair and recertify.

Inventory of recertified battery packs available to replace field failures. Significant cost reductions vs. buying new.

### Major Battery OEM for EV Market

#### Factory Recall

Latent quality defect in delivered battery fleet Repaired batteries per factory recall procedures Assisted OEM with factory campaign to get the fleet back in operation

#### Major Heavy Equipment OEM

Battery Teardown Inspection, RCA, Repair

Premature field failures impacting the fleet Returned packs to Renewance to support RCA. Repaired and recertified usable battery packs.

#### Leader in Mobile Power Solutions

#### **Battery Repair**

Failed components in battery packs
Replaced BMS cards and battery cells to repair battery packs
Assisted in the operational readiness of battery packs

### Alternative Energy Infrastructure OEM

#### **Battery Repair**

Faulty units due to failure of PCB
Replace damaged PCB and modules | Harvested parts from unusable battery packs to repair other battery packs for recertification



# Thank You!

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