

Batterfly

BBTAN(Bus Battery & Total Accumulation of Net-zero)

/EV Battery Safety Control and fleet management services, and Residual Value Assessment Al Platform

DEAL4EV(Data-driven Evaluation & Analysis of Life-cycle For EV) /Battery Residual Value Certificate Issuance Service (+Carbon Emission Indexing Service Combination)

Competitive Advantage

Leveraging the world's first big data from electric bus route operations, we applied machine learning to identify 17 key degradation factors and their relative weights influencing EV battery deterioration and residual value (currently under global patent filing). Additionally, through long-term operational and charging data analysis of electric taxis and passenger EVs, we developed customized battery degradation models based on driving and charging types. Built on this proprietary technology, our platform offers advanced services including battery safety monitoring, life extension, degradation prediction, health diagnostics, residual value certification, and carbon emission indexing.

Service/Product Introduction

- Batterfly is Korea's first integrated platform built on full-lifecycle EV battery data, covering operational data collection and monitoring, residual value and degradation analysis, and second-life/recycling.
- Leveraging EV operation and charging big data, our Al diagnostic algorithms lead customers seeking safety management, performance evaluation, and second-life/recycling services.











Established 2022, 02, 17,

Address 474 Gwangnaru-ro, Gwangjin-gu, Seoul, Kiwoom Hall 301

Site Batterfly.co.kr, Batterfly.us

Employees 10 people

Investment

USD 0.15 million

Differentiation

Static data-centric/real-time monitoring and authentication platform, the first domestic/foreign Al-based electric vehicle/battery real-time driving data collection/analysis (Electric route bus, EV Taxi)

Main customer and market analysis

- Europe: EV fleet management and certification market for electric vehicle and battery transactions
- ••• United States: Electric school bus operators and the EV safety and monitoring service market USA: California Electric School Bus Safety/Control Services Market

Business model

- BBTAN (Subscription-based, Usage Fee): Enhances EV bus operation control by improving driver habits, extending battery lifespan, and enabling real-time health checks to respond effectively to emergencies such as battery fires or failures.
- DEAL4EV (Certification Fee, SaaS Subscription): Provides battery residual value certification and carbon emission reduction tracking for EV repair shops, used EV trading markets, and secondary battery reuse/recycling markets, thereby improving value distribution.
- Volt Harvest (Platform Fee, Transaction Fee): Creates added value beyond EV end-of-life by enhancing reusability of EV batteries and components through Al-based performance improvement and enabling blockchain-based distribution and trading of reused parts.

Global corporate collaboration plan

Development of EV battery service business models with European companies and establishment of a Battery Passport framework, signed partnership agreements with local partners and initiated business/technology collaboration through PoC.



Company introduction and future vision

Batterfly is a specialized AI solution company focused on battery safety monitoring and residual value assessment. Originating as the 9th in-house venture of LG CNS in July 2021, we began developing our prototype and later established our corporation in February 2022, followed by a full spin-off in May. By leveraging the world's first big data from electric bus route operations and applying machine learning, we offer services such as battery life extension, health diagnostics, and carbon emission indexing. We have accumulated one of the largest collections of EV battery operational data among Korean startups and continue to build a strong portfolio of AI technology patents and business models. By utilizing lifecycle (LCA) data across the full EV/battery value chain—from operation and retirement to reuse—we are establishing and implementing business models aimed at becoming a global leader in the industry.