



Creating the global leading battery takeback & trading technology

What makes a battery truly sustainable?

The battery is responsible for 50% of the cost of an electric vehicle or energy storage and for almost 70% of its lifecycle carbon emissions. The most powerful lever to reduce the carbon footprint and increase the profitability of a battery is a second life/use.

The world needs circular batteries.

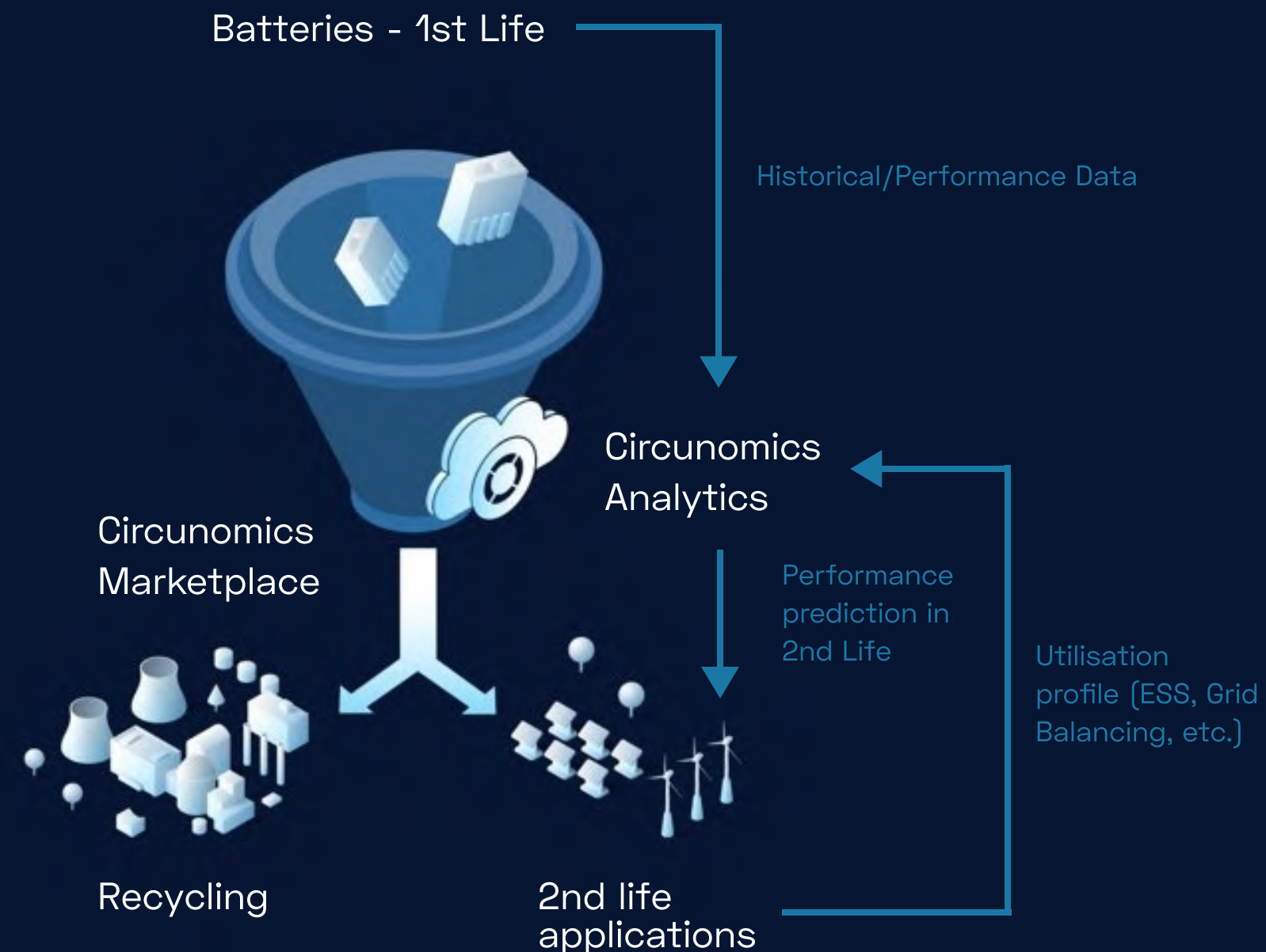
To make this a reality, automakers and energy companies need a partner to manage millions of used batteries. Currently, they have no partner to transport, test, dismantle, remanufacture, and recycle tens of thousands of used batteries.

This is what Circunomics is changing.



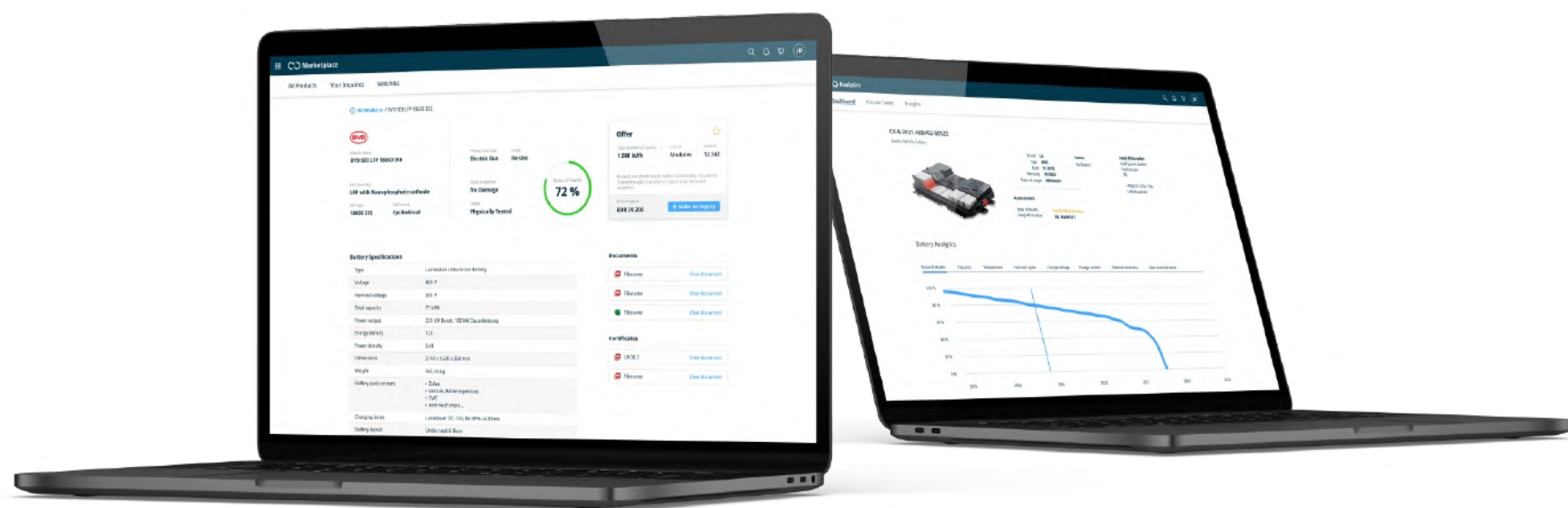
How Circunomics can help generating maximum profit from batteries

Circunomics is based on two main components. Circular Analytics (1st life analytics & 2nd life simulations) and a marketplace for trading batteries into a second life. Deciding whether a battery is suitable for second life can be complex, especially for large volumes, and buyers want to know how well these batteries will perform in their application. Circunomics helps battery owners (OEMs) and buyers take those decisions at scale.



Circunomics

The Intelligent Battery Marketplace



Our core products

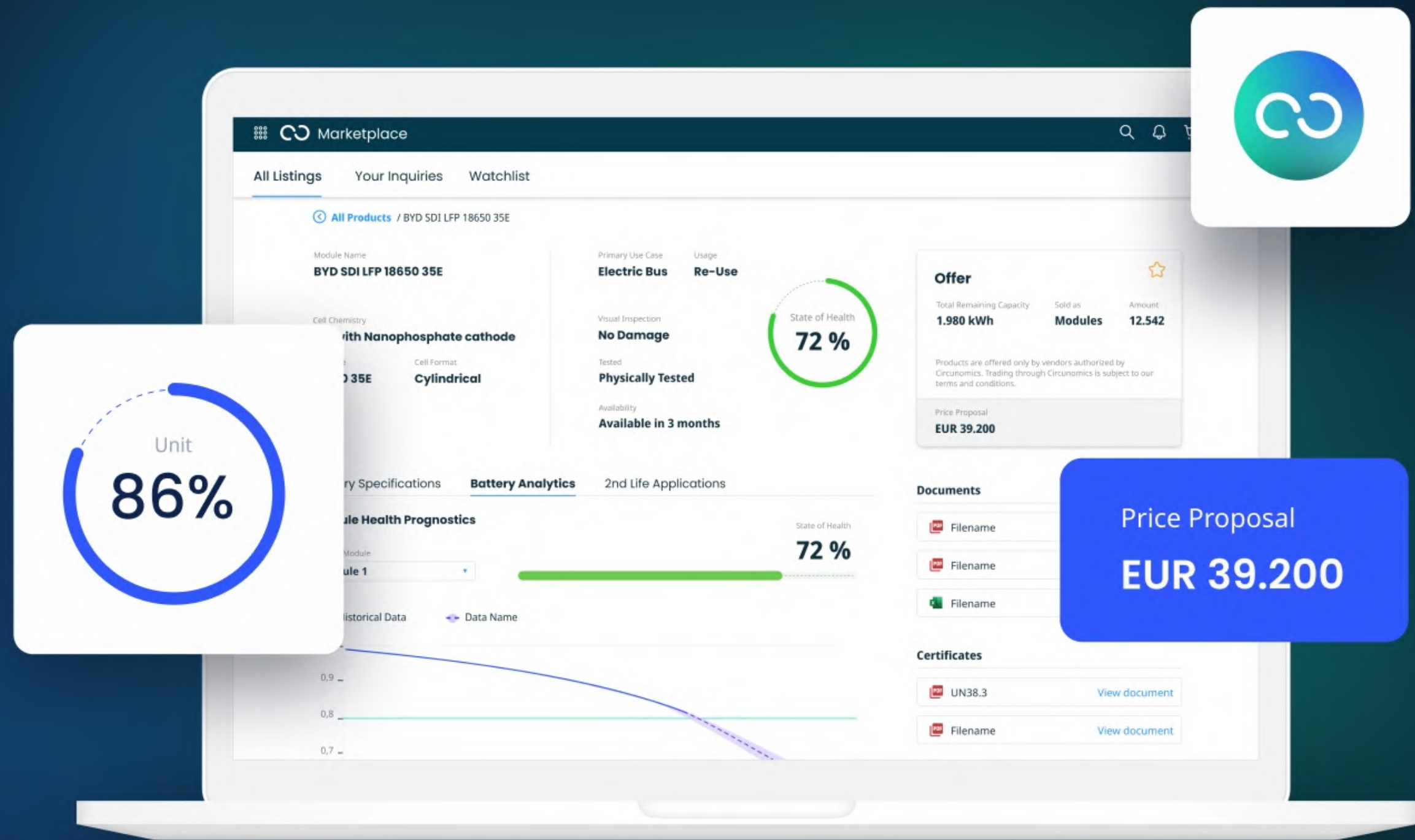
- 1 Battery analytics**
 - 1st life analytics (SoH prediction)
 - 2nd life analytics and simulations (best possible usecases for 2nd life)
- 2 Intelligent battery marketplace**
 - Matching first life supply with 2nd life demand
 - Standardized digital and legal process

What makes our solution unique?

- 1 Algorithm**
Our model integrates a physical model and a data-based model to ensure high accuracy of simulation. Additionally we use data from 2nd life applications to predict the possible 2nd life use case
- 2 Connected to a marketplace**
The first AI-powered battery marketplace. We use our analytics to streamline the end-of-life processes.
- 3 Works with existing OEM IT**
Fast integration in OEMs legacy systems; analytics can run 'on-premise' to ensure data protection.

Remote battery monitoring and health prognostics

- State of Health prediction at 97% accuracy – just from data, no physical testing needed
- Proprietary library of digital twins from of many available tier 1 cells on EU market
- Predicting residual value based on market demand and battery characteristics




The screenshot displays the Circunomics Marketplace interface for a BYD SDI LFP 18650 35E battery module. Key features include:

- State of Health:** A green circular gauge showing 72%.
- Offer:** Total Remaining Capacity of 1.980 kWh, Sold as 12.542 Modules, and a Price Proposal of EUR 39.200.
- Battery Analytics:** A 'Unit' gauge showing 86%.
- Visual Inspection:** No Damage.
- Tested:** Physically Tested.
- Availability:** Available in 3 months.
- Documents:** A list of files with 'Filename' labels.
- Certificates:** A list of certificates including UN38.3.

The most-advanced second-life simulation on the market

- Simulating the remaining capacity of used batteries for the most-frequent second life energy storage applications
- Automated matching of best-fitting second life use case



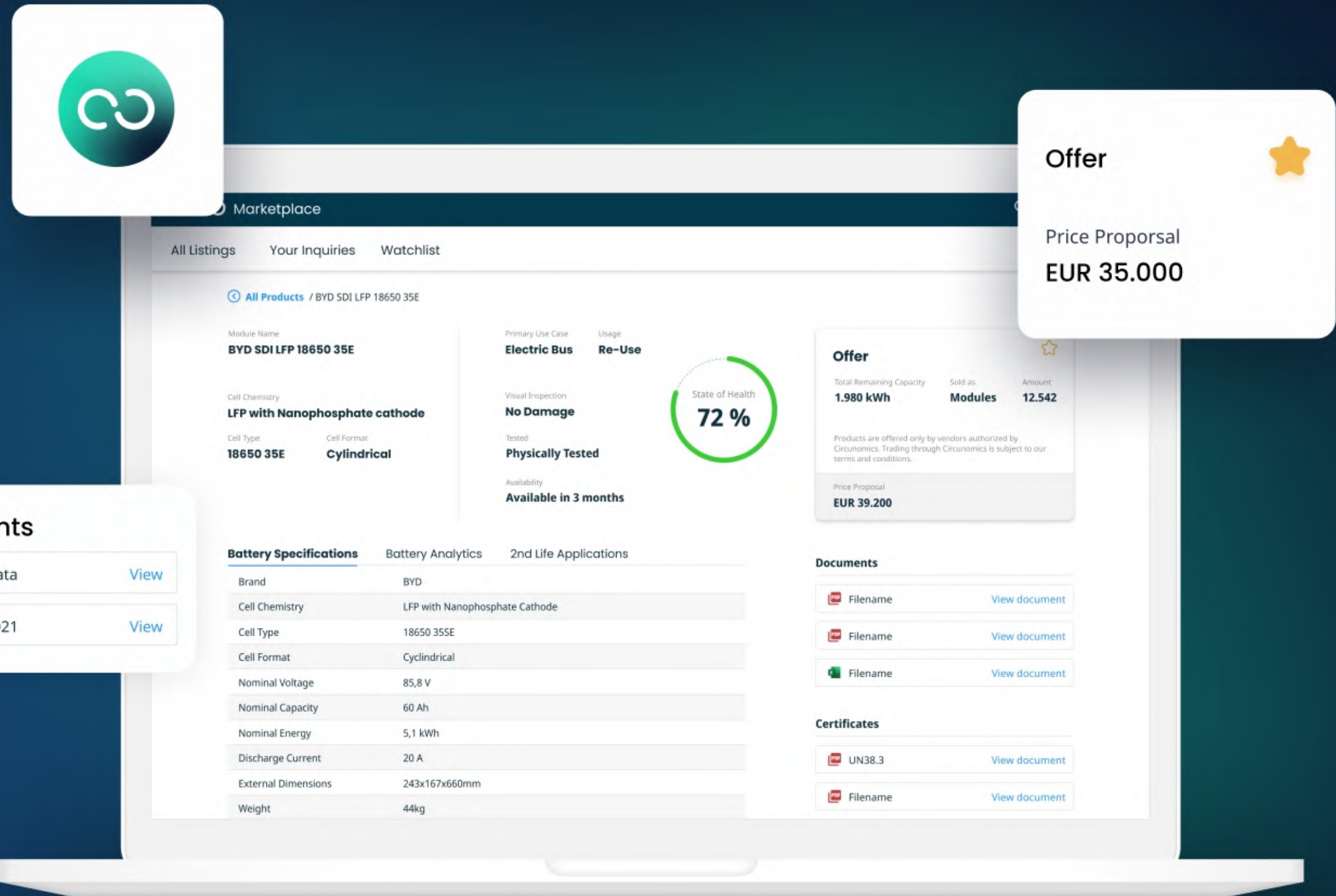
The screenshot displays the '2nd Life Applications' section of the software. It includes a 'Choose Module' dropdown set to 'Module 1', a 'State of Health' indicator at 72%, and 'Choose 2nd Life Applications' options with 'Home Storage' selected. 'Choose Power' is set to 150 W. 'Energy per cycle' is 100 kWh. 'DoD-SoC Windows' are set to 20% and 80%. A 'Remaining Cycles' gauge shows 150. Three line graphs are visible: 'Instant Power [kW]', 'Current [A]', and 'Voltage [v]'. A 'Documents' section lists files with 'View document' links, and a 'Certificates' section shows a certificate for 'UN38.3'.

Power
150 W

Remaining Cycles
150

Trading used batteries with certainty about their quality

- All data and documents in one place
- Access to a quality second-life buyer network with +1.5 GWh demand
- Seamless integration of TES logistics system



The screenshot displays the Circunomics Marketplace interface for a specific battery listing. The main content area shows the following details:

- Module Name:** BYD SDI LFP 18650 35E
- Primary Use Case:** Electric Bus
- Usage:** Re-Use
- Cell Chemistry:** LFP with Nanophosphate cathode
- Visual Inspection:** No Damage
- Cell Type:** 18650 35E
- Cell Format:** Cylindrical
- Tested:** Physically Tested
- Availability:** Available in 3 months
- State of Health:** 72% (indicated by a green circular gauge)

On the right side, an **Offer** section is visible, showing:

- Total Remaining Capacity:** 1.980 kWh
- Sold as:** Modules
- Amount:** 12.542
- Price Proposal:** EUR 39.200

Below the main details, there are sections for **Documents** and **Certificates**, each with a list of items and 'View document' links.

Overlaid on the interface are three callout boxes:

- Documents:** A box with two items: 'Battery Data' and 'Testing 2021', each with a PDF icon and a 'View' link.
- Offer:** A box with a star icon, the text 'Offer', and 'Price Proporsal EUR 35.000'.
- Marketplace:** A box with the Circunomics logo and the word 'Marketplace'.

Business model

Offering

ANALYTICS

MARKETPLACE

Pricing



We are charging €/battery/year per digital twin



We are charging 10% commission per trade

~1€/KWH

SMALL CUSTOMERS

6€/BATTERY

LARGE CUSTOMERS

~290€/BATTERY

SECOND LIFE FEE

Exemplary Customers



ARTHUR

VARTA

umicore



Saubermacher



Memberships & Associations



Achievements

Awards & Grants

Circunomics received some of the most prestigious startup awards, e.g. Google Circular Economy Accelerator, KfW Award Gründen 21 - Landes und Bundessieger, 3rd place Spark Award from McKinsey & Handelsblatt.

Circunomics-led consortium awaiting final decision for non-dilutive € 1.8 million R&D grant from BMWi in 2022.

Commercialization

Circunomics is Europe's most advanced battery marketplace. Currently 50 MW on the platform and additional 50 MW supply incoming. MoUs with ESS Manufacturers and multiple Recyclers, starting pilots with several OEMs. Together with Shell we signed a Co-Sales agreement to tackle the enormous Automotive OEM as well as energy sector.

Fundraising

Circunomics raised € 2.2 million from industry experts like Dr. Peter Mertens (former CTO at AUDI and Volvo, investor in multiple NASDAQ-listed companies), Bram Schot (Former CEO Audi, Non-Executive Board Member Shell), Blue Minds Company and recycling company (TES). Circunomics was co-founded by Next Mobility Labs.

Selected investors and partners



INVESTOR

Dr. Peter Mertens, former CTO AUDI & Volvo

"I have **invested** in Circunomics, because I am convinced they will solve a very tough industry problem that OEMs won't solve themselves. Their in-depth knowledge on battery circularity is unmatched."



INVESTOR

Bram Schot, Former CEO Audi, Multi-Board Member

"I think Circunomics' circular economy approach is the right way to go - we need more concepts like this. I'm happy to contribute to Circunomics' success with my investment, experience and network."



INVESTOR

Bernhard Raberger

Managing Partner of The Blue Minds Company Group, focused on renewable energy consulting and investments. Former Executive Vice Chairman and CFO of Enerjisa Group; Supervisory Board Member of DenizBank AG; Board Member of Oolu; Board Member of Pexapark; Advisory Board Member of has.to.be;

Leadership team



Felix Paul Wagner

CEO

Bachelor in business administration
+ professional degree in IT Systems.
I have 10+ years experience in digital business
for large corporates in the mobility sector e.g.
Hyundai, Lux Air, Mateco etc. and founded an
Australian solar tech startup in Melbourne.



Jan Born

CTO

Diploma in computer science. Strong focus on
the business value of technology, transferring
knowledge into practice. Over 15 years of
professional experience, most recently as CTO &
MD of mediaman. Numerous projects for
Mercedes-Benz, Porsche, Hyundai. Partner at
Next Mobility Labs.

Team highlights

Voices from the Circunomics engine room



“We’ve attracted world-class talents from top universities.”

Manan Mathur, B.Tech. & MBA., Market Insights & Product Development



“We are a modern and diverse team from 10 nations.”

Dr. Hamid Badri, Sr. Data Scientist



“We’ve built a 5-star hiring process and working culture.”

Jenny Gaekel, MBA, HR Manager

- Our onboarding process is rated 5/5 from our new employees
- We get a net promoter score of 100% from our employees
- Our assessment center is best in class according to industry experts

Thank you

Join Circunomics on the mission to establish the global leading battery marketplace.

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