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Press Release

VW SUBSIDIARY EMBRACES AUTOMATED ENERGY TRADING WITH VOLUE SOLUTIONS

ELLI STARTS INTRADAY TRADING WITH BATTERIES THROUGH EPEX USING SOLUTIONS FROM VOLUE

Using an optimisation and trading solution from Volue Energy GmbH, VW subsidiary Elli is starting intraday energy trading with vehicle batteries. The Volue solution comprises the "BoFiT" optimisation module and the "VAT-P" trading module for automated transaction processing. Marketing battery capacity on the EPEX intraday power exchange facilitates high proceeds and will also benefit Elli's customers, because, due to economies of scale, Elli will achieve better trading profits for customers with marketable battery capacity. The energy trading solution has already proved itself on a small scale and went live on July 12, 2023. Elli is starting by marketing batteries in a trial set-up from Volkswagen Group After Sales in Baunatal, Hesse. This will hold a battery capacity of up to 335 MWh. Further "power centers" are planned.

Aachen (Germany), July 13, 2023 – Volkswagen Group Charging GmbH, known by the brand name Elli, is not only responsible for the VW Group's energy and charging solutions, but also handles the battery business: In future, Elli would like to breathe new life into second-life and waste batteries taken out of circulation and use these for energy trading in stationary battery solutions called "power centers".

PowerCo, Elli's sister company, is already working on a vertically integrated value chain for battery storage devices. On the one hand, Elli would like to offer marketing solutions to its own customers and those of PowerCo and, on the other, an alternative use for second-life batteries. It would also be conceivable to use batteries that don't meet the extremely high criteria for vehicle installation.

Demonstrator with old batteries from Volkswagen Group After Sales

Elli is testing the value chain for the future power centers with a trial storage set-up in Baunatal from Volkswagen Group After Sales, which was successfully connected to Elli's battery control system in June 2023. Elli is using the trial set-up, which has a capacity of up to 335 kWh, to start operational trading and to gain experience of technical energy storage for future, larger projects.

Cheap charging, profitable discharging

Without an IT solution, it is practically impossible to find the best window for charging and discharging (i.e., buying and selling on the power exchange market). This is because it is hard to predict power surpluses with low prices and the demand peaks, which allow for high proceeds, because of the high proportion of wind and solar power generation with its severe fluctuations. As a result, Elli was looking for a solution that would help to identify the optimal times to buy and sell, and to automate trading on the power exchange market. The solution should also be compatible with charge management and battery monitoring, to enable seamless, systematic management of trading and battery management.

Optimisation and trading solution from one source

Elli struck gold with Volue Germany GmbH in its search for a suitable IT solution. Ingo Müller, Senior Vice President Energy at Elli: "Volue offers a complete portfolio of solutions for trading with battery storage devices. The team's phenomenal trading expertise quickly convinced us that to choose Volue was to choose the market leader." Elli is using the IT solutions "Volue BoFiT" and "Volue Algo Trader Power" (VAT-P).

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Volue BoFiT generates optimisation proposals for energy trading

The battery storage and the charging characteristics are both included in Volue BoFiT, as well as the market, i.e., the short-term exchange market EPEX SPOT. In combination with charge management and monitoring, BoFiT determines how much power can be bought or released and whether the conditions are favourable for buying or selling power on the exchange. This optimisation also draws on a variety of forecasts. This means Elli does not have to seize spontaneous opportunities, but rather can achieve higher profitability thanks to trading recommendations based on predictions.

Automated energy trading with Algo Trader

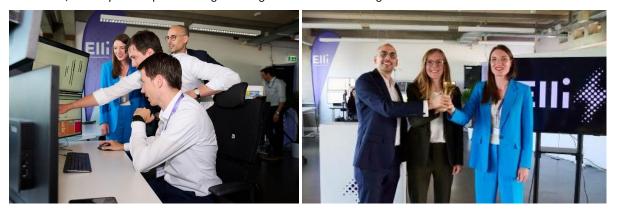
Volue Algo Trader Power takes the trading recommendations calculated by BoFiT and manages trading on the exchange. This ranges from generating bids to completing the transaction, which means there is nothing for Elli to do. Volue's solutions have already proved themselves on a small scale. They were tested on a group of batteries with a capacity of around ten ID.3s. "With such a small trial set-up we were not expecting any notable profits, but the system is representative. We were able to try out all the features successfully and see how it would work with charge management," reports Serge Runge from Volue, who supervised the implementation. "Because our solution is already being used for battery systems, the modelling was easy. So, we were quickly able to focus on how the tools work in combination with charge management."

Quick implementation of the optimisation and trading solution

The experience of marketing power stores was reflected in the rapid progress of the project. Luisa von Lonski, Head of Energy Flexibility Trading and the responsible project manager at Elli, is full of praise: "From the first conversations to the professionally managed project and successful launch, Volue was phenomenal to work with."

One year to come up with the ideal trading strategy

In an initial market phase, Elli wants to build trading know-how and gain experience of the Volue solutions – so that it can then develop trading strategies that will meet the requirements that internal and external customers have of storage solutions. The BoFiT solution from Volue also helps with this, as it can run through a variety of scenarios, initiate simulations on the basis of assumed figures for future power centers and compare these to actual market events. This makes it easy for the Elli team to see what outcomes would be achievable with one trading strategy or another. So, it is easy to set up the envisaged scaling of asset-backed trading.



Images

Left: The Elli trading team Right: Ingo Müller, Senior Vice President Energy Elli, Kora Töpfer, Head of German Public & Regulatory Affairs EPEX SPOT, Luisa von Lonski, Head of Energy Trading Elli Copyright: Volkswagen AG; free of charge for use in the press

The image data can be downloaded using this link.

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ABOUT ELLI (VOLKSWAGEN GROUP CHARGING GMBH) | WWW.ELLI.ECO

The Elli brand, with around 300 employees, takes care of customers' needs at the interface between energy and mobility. Elli, as part of the Volkswagen Group, offers a broad range of energy and charging solutions in Europe and acts as a mobility service provider. The current product portfolio includes charging solutions for private customers and companies – from the company's own home chargers and the flexible fast-charging stations (Flexpoles) to charging services and innovative smart green electricity tariffs. For charging in public spaces, Elli provides digital solutions and services for a seamless charging experience. Elli, which was founded in 2018, has offices in Berlin, Wolfsburg and Munich.

ABOUT VOLUE | WWW.VOLUE.COM

Based on 50 years of experience, Volue is a market leader in innovative technologies and services that power the green transition. Over 700 employees work with more than 2,200 customers on energy, power grid, water and infrastructure projects that ensure a sustainable, flexible, and reliable future. The company is headquartered in Oslo, Norway, and is active in over 40 countries.

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