Fev

Press Release

FEV Consulting receives sustainability award for innovation in battery recycling

Media Contact Marius Strasdat T +49 241 5689-6452 strasdat@fev.com



Aachen, May 2024 – FEV Consulting, the management consulting firm of FEV Group, was recognized with the Sustainability Award in Automotive 2024 for the development of "CycleBat" mid-May. The innovative solution enables manufacturers of electric vehicles to accurately predict the cost of recycling and the environmental impact of their batteries. The award was presented by the ATZ/MTZ Group and management consultants Arthur D. Little at the 18th International MTZ Congress on Future Powertrains in Chemnitz on May 15, 2024.

Recycling will play an essential role in optimizing the ecological footprint of battery cells for electric vehicles in the future. However, very few manufacturers have so far considered the costs associated with extended producer responsibility (EPR) when designing cells or calculating lifecycle costs.

Focus on ecological and economic implications

"FEV Consulting has developed 'CycleBat', the latest tool for the sustainable transformation of electric vehicles. It enables OEMs to quantify and justify the positive effect of 'design for recycling' measures when designing new batteries," said Alexander Nase, Managing Director of FEV Consulting. "Without this quantitative evaluation of 'design for recycling', these measures are currently impossible to implement with regard to costs and performance constraints."

The "CycleBat" model, which has been developed and validated together with industry partners from the entire battery value chain, takes into account the entire life cycle of a vehicle battery, with a particular focus on the end of life. Starting with recycling technologies and the development of a corresponding ecosystem and the consideration of economies of scale, "CycleBat" can be used to model the entire costs and make the ecological footprint of battery recycling visible. This is compared with the corresponding market potential. "CycleBat" is based on FEV Consulting's extensive knowledge and experience on both the manufacturer and the market side. The parameters can be adapted to the respective customer.

Alexander Nase is certain: "Lower costs and improved material recovery will make battery recycling competitive. In the future, manufacturers will even be able to sell discarded batteries to increase their value instead of having to pay disposal fees."

Comprehensive portfolio for the development of sustainable propulsion technology

FEV presented its expertise and portfolio for the climate-neutral mobility of the future at the MTZ Congress in Chemnitz on May 14 and 15. Dr. Norbert W. Alt, COO of FEV and member of the

conference advisory board, chaired the session "Renewable energy sources and charging technology". A current example of FEV's innovative spirit is the efficient and cost-saving electric dual-rotor drive developed jointly with the Munich-based start-up DeepDrive, which the two companies presented to an interested audience. In the "Charging" session, FEV also presented the "Techno-economical sizing of local energy systems applied to a fast-charging hub in Germany" and in the "Fuel Cell" session the "Aging for Optimal System Design in Fuel Cell Heavy-Duty Trucks".

Footage:



Caption: Recognized for sustainability: With the help of "CycleBat", developed by FEV, manufacturers of electric vehicles get a realistic picture of the economic as well as ecological impact and follow-up costs of their batteries at an early stage. Dr. Philipp Seidel from Arthur D. Little presented the award to Dr. Hagen Wegner, Markus Volkening and Dr. Norbert W. Alt from FEV (left to right). Source: Uli Regenscheit | ATZlive

About FEV

FEV has always pushed the limits.

FEV is a globally leading engineering provider in the automotive industry and internationally recognized leader of innovation across different sectors and industries. Professor Franz Pischinger laid the foundations by combining his background in academia and engineering with a great vision for continual progress. The company has supplied solutions and strategy consulting to the world's largest automotive OEMs and has supported customers through the entire transportation and mobility ecosystem.

As the world continues to evolve, so does FEV.

That's why FEV is unleashing its technological and strategic expertise into other areas. It applies its forward thinking to the energy sector. And its software and system know-how will enable the company to lead the way making intelligent solutions available to everyone. FEV brings together the brightest minds from different backgrounds and specialties to find new solutions for both current and future challenges.

But FEV won't stop there.

Looking ahead, FEV continues to push the limits of innovation. With its highly qualified over 7,500 employees at more than 40 locations globally, FEV imagines solutions that don't just meet today's needs but tomorrow's. Ultimately, FEV keeps evolving – to a better, cleaner future built on sustainable mobility, energy and software that drives everything. For the company's partners, its people and the world. **#FeelEVolution**