

Eatron Technologies and About:Energy win funding to extend electric vehicle battery lifetime

- [Eatron Technologies](#) and [About:Energy](#) to develop first-of-its-kind AI-powered decision-engine for battery management systems (BMS)
- UK companies will collaborate on the pioneering aiMAGINE project, which will deliver extended battery lifetimes, ease of integration, and reduced time-to-market
- Funded as part of UKRI's Faraday Battery Challenge £11 million package to cement the UK's position as a global leader in AI-powered BMS
- Link to images: https://bit.ly/AboutEnergy_Eatron

5th December 2023 – [Eatron Technologies](#) and [About:Energy](#) have been awarded funding from UKRI's Faraday Battery Challenge to develop a first-of-its-kind AI-powered decision engine that delivers increased battery longevity, accelerates time-to-market, and cements the UK's position as a global leader in AI-powered intelligent battery management systems.

Current battery management systems (BMS) rely on simple, empirical methods that sacrifice accuracy in return for reduced computational effort. Conventional AI-powered methods, meanwhile, remain challenging to integrate within the BMS due to their complexity, demanding training process, and the need for large volumes of input data.

The new project – dubbed aiMAGINE – brings together About:Energy's pioneering high-fidelity electrochemical battery models that achieve rapid and accurate calibration with Eatron's unique edge and AI-powered cloud platform. Combined they will deliver highly accurate assessments of state-of-charge (SoC), state-of-health (SoH) and patented remaining useful life (RUL) predictions.

AI complements the electrochemical models, enhancing predictions by accounting for complex physical behaviours that cannot be modelled. As a result, the pioneering new AI-powered decision engine (AI-DE) will provide highly accurate operational parameters to the BMS, significantly increasing battery pack longevity and simplifying integration.

"Implementing our novel AI-powered intelligent battery software layer with this revolutionary AI-DE can extend a battery pack's first life by up to 20%," said Dr Umut Genc, CEO of Eatron. "This makes it possible for OEMs to design optimally-sized, more cost-effective battery packs, and this actively contributes to our sustainable e-mobility goals by reducing raw material consumption and CO₂ emissions."

"The use of our advanced electrochemical models vastly streamlines AI model training, and this facilitates both ease of integration and a reduced time-to-market for OEMs and Tier 1s," said Dr Kieran O'Regan, Co-Founder and COO of About:Energy. "The high-fidelity modelling reduces the need for physical experiments while delivering a clearer, more accurate picture of battery health. Armed with this information, an AI-DE-equipped BMS can deliver not just a longer battery lifetime, but faster charging times, too."

Eatron and About:Energy will capitalise on their existing relationships with OEMs and Tier 1 suppliers to develop the system for use in both 2- and 4-wheeled electric vehicles. The two businesses collaboratively applied for the grant after sowing the seeds for a partnership at the Battery Technology Global Business Innovation Programme in Japan, where Innovate UK brought together some of the UK's most promising innovators in the battery development and technology space.

The funding from UK Research and Innovation's Faraday Battery Challenge, delivered by Innovate UK, is part of an £11 million package that aims to accelerate the development and commercialisation of state-of-the-art battery technologies in the UK and support growth of the supply chain in the UK battery sector. It forms a key part of the UK Government's net zero transport goals and supports job creation in cutting-edge AI technologies and increased consumer confidence in electric vehicles.

For further press information or to arrange an interview, please use the media contacts below.

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About Eatron Technologies

Eatron is a fast-growing technology company dedicated to unlocking the full potential of batteries with intelligent software for all vehicle and battery manufacturers worldwide. Eatron develops AI-powered edge-to-cloud connected software platforms for better, safer, durable, and greener batteries in automotive, mobility and beyond. More information is available at www.eatron.com.

About About:Energy

About:Energy is a leading battery software company headquartered in London. The company has focused on building a portfolio of battery measurement and modelling capabilities to provide a software solution for battery design and use. About:Energy provides organisations with the tools to streamline their R&D, reducing time-to-market and enhancing battery system performance. About:Energy's data informs better decision-making across the value chain, from mine to end-of-life. These activities include battery system design, lifetime prediction, and cell optimisation. For About:Energy's media kit, please click [here](#).

About The Faraday Battery Challenge

The Faraday Battery Challenge is investing in research and innovation projects and facilities to drive the growth of a strong battery business in the UK. It aims to develop battery technologies that are: cost-effective, high performing, longer range, faster charging, long-lasting, safe and sustainable. With an overall budget of £541 million, it aims to make the UK a science superpower for batteries by supporting the UK's world-class battery facilities. It is also growing innovative businesses that are developing the battery supply chains. It is part of the UKRI Challenge Fund.