

ACELERON

UK Innovator Aceleron receives support from TU Darmstadt & UGhent to Enhance its Energy Storage Solutions

THE STEPS BUSINESS SUPPORT PROGRAMME

The goal of the STEPS project is to help small and medium-sized enterprises (SMEs) in the North-West Europe region (NWE) bring their energy storage products to the market and increase their competitiveness. STEPS is part of the Interreg NWE programme financed by the European Regional Development Fund (ERDF). The programme consists of two phases, the first of which offers product enhancement support from universities across the NWE region to the top 40 applicants. 20 of these SMEs will be supported with a second phase aimed towards development and demonstrating their technology at suitable testbeds. One of the SMEs supported is Aceleron.

Aceleron was supported by the Technical University of Darmstadt in Germany as well as Ghent University in Belgium to enhance its energy storage solutions. The support was successful in delivering solutions for quantification of the benefits arising from residential battery usage.

STEPS is an abbreviation of Storage of Energy and Power Systems

We aim to support 40 innovative SMEs in North-West Europe



Aceleron & STEPS

Aceleron is an award-winning clean technology company founded in 2016 in Birmingham by Dr. Amrit Chandan and Carlton Cummins. After long investigations on existing battery packaging approaches, Aceleron patented a unique compression technology for the battery assembly. The new technology facilitates a simplified maintenance of the battery pack. Just recently Aceleron brought a new innovative standalone battery named Essential to the market, seen in image above. The Essential has a wide range of applications from transportation like motorhomes to stationary uses like remote telecom stations.

In the framework of STEPS, Aceleron was supported by the Technical University of Darmstadt in Germany as well as Ghent University in Belgium to enhance its energy storage solutions. The support focused on the quantification of the benefits arising from residential battery usage. Aspects like the reduction of the electricity network usage as well as the potential decrease of greenhouse gas emissions were covered. In this context, ways to graphically deliver energy related information to the end users were analysed. Furthermore, opportunities to interconnect battery systems exploiting internet of the things technologies were reviewed.

Dr. Laura Allerston from Aceleron gave a short interview to Panagiotis Mouratidis from Technical University of Darmstadt about their participation in STEPS and their future plans.

Sustainable Lithium Battery Packs

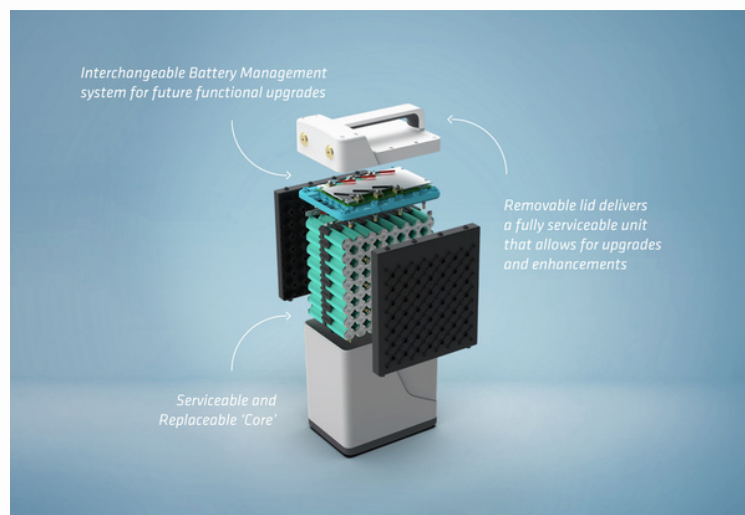
How does Aceleron contribute to a circular economy with its energy storage solutions?

Anticipating a future with tonnes of unnecessary battery waste, Aceleron designed a battery pack that is built with sustainability in mind. The world's most sustainable lithium battery packs in a full circular economy approach, serviceable, upgradable and recyclable. The company produces first-life packs in the UK that can be maintained through their lifetime, reducing the need for early recycling which is the case with most lithium batteries. Furthermore, Aceleron also works with waste centres to produce second life battery packs that work well in certain applications, which saves waste right at the source, bringing the cells into the circular economy.



How does the STEPS Business Support Programme help you enhance your products?

The programme was able to provide support in Aceleron's process of producing a data solution for their home energy battery, the support in particular brought the Aceleron viewpoints from others which would not have been accessed otherwise. In addition, particular information around emissions reductions and how best to calculate and communicate such with customers was highly beneficial.



What are your business expectations and ambitions for the future?

Aceleron aims to accelerate the global shift to cleaner energy by creating storage technology which is accessible to all. In the coming years, it plans to expand from its current country operations in the UK and Kenya, to other African countries, Europe and India.



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