Allye launches second Max prototype at UK Construction Week

More powerful, more sustainable and improved technology; edges closer to commercial use.

Alley Max Gen2

LONDON, UK, October 2, 2023 /EINPresswire.com/ -- • The second Max functional prototype has been completed in just two months, and is exclusively unveiled at UK Construction Week, the UK's largest built environment event, at the NEC Birmingham,

• The Max is the first Battery Energy Storage System (BESS) to feature mixed lithium-ion chemistry, uniquely combining nickel rich and LFP repurposed battery packs from electric vehicles that are recovered from the automotive recycling supply chain, saving 7t of CO2 emissions for every pack that is repurposed

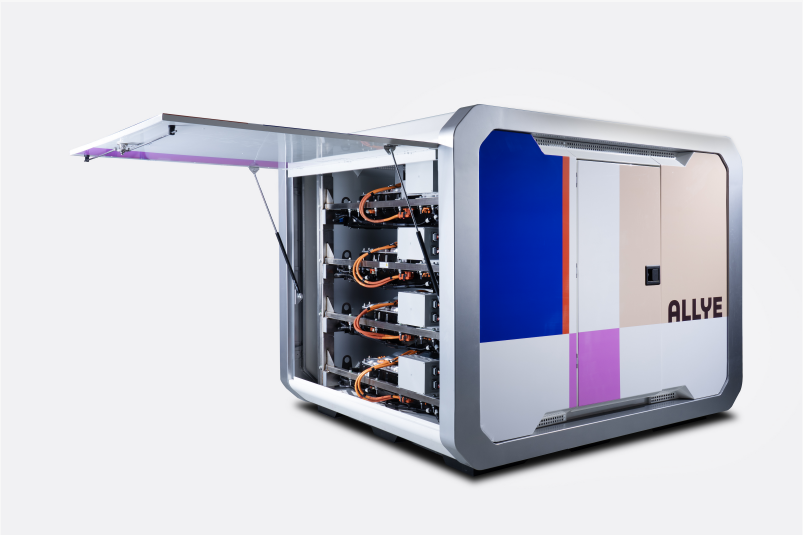
> With the latest version of the Max unveiled at UK Construction Week, Allye is demonstrating how our smart energy storage solutions lower costs, reduce emissions and accelerate the energy transition"
> *Jonathan Carrier, CEO of Allye*

• The latest version of the Max has been redesigned and re-engineered following extensive testing and the successful completion of on-grid and off-grid trials with a range of blue-chip organisations,

• Allye steps closer to delivery of Max to first commercial customer in November – a huge milestone for the business.

Clean tech startup Allye, the smart battery technology platform for distributed energy storage at the grid edge, unveils its updated Max battery energy storage system (BESS), with increased sustainability credentials, at UK Construction Week, the UK's largest built environment event held at the NEC Birmingham from 3-5 October.

Featuring an all-new design, this latest iteration of the Max has been engineered and built in less than two months, following several months of testing and in-field trials in collaboration with a range of major corporations who see the value in decarbonising their existing operations.



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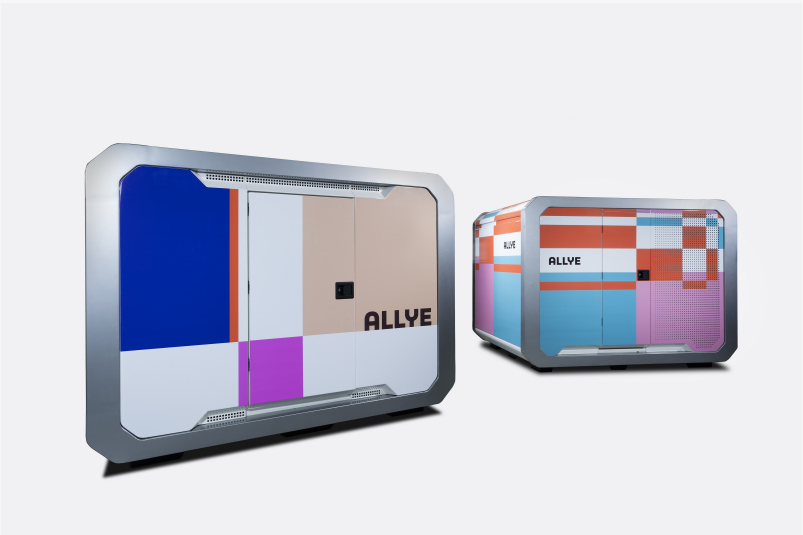

Alley Max Gen2 and Gen1

The second Max system will undergo final testing ahead of installation at Allye's first commercial customer in November under its innovative Energy-Storage-as-a-Service (ESaaS) business model. With ESaaS, Allye is making battery energy storage more accessible and affordable for commercial and industrial users, eliminating the upfront capital investment to provide immediate returns for customers by saving them up to 50% on their energy bills using our intelligent software.

Jonathan Carrier, CEO of Allye commented: "We are delighted to unveil our latest version of the Max at UK Construction Week. Since we unveiled the Max in July, we've been inundated with interest from a range of industries that see the value in our smart energy storage to lower costs, reduce emissions and help accelerate the energy transition for the grid. We've conducted a range of trials that has tested the full performance envelop of the Max, which I'm delighted to confirm we passed with flying colours. We've also continued to demonstrate the capability of our team to execute at speed, re-engineering our design to incorporate feedback from the market and learnings from the trial. We have great momentum as we head toward series production next year."

Allye Energy is exhibiting the Max alongside Munro Vehicles and the MK_1 full electric 4x4 at stand Z400 in the dedicated Net Zero section at UK Construction Week. Together, Allye and Munro will showcase the potential for innovative, sustainable technology to decarbonise heavy industries and the built environment through zero emission electric power and capability.

With a capacity of more than 300kWh, a three-phase output of 120kVa, and gross weight over

just over 3 tonnes, including trailer, this latest version of the Max is more powerful, more capable and more efficient thanks to improved technology and engineering innovation to lower energy costs by up to 50% and reduced environmental impact.

Trials have been carried out both on-grid and off-grid, providing clean, silent power for a range of applications to successfully reduce electricity costs, eliminate emissions and improve total cost of ownership.

The first mixed lithium-ion chemistry battery energy storage system
The Max is the world's first BESS to combine multiple batteries of different lithium-ion chemistries into a single system. This second version of the Allye Max combines three nickel-rich repurposed EV batteries with one LFP repurposed EV battery. Using its proprietary system control, Allye maximises system efficiency by harnessing the performance characteristics of each chemistry through independent control. Allye's approach optimises system lifetime by operating the BESS from only the LFP pack at lower, constant loads. In colder environmental conditions, the Max provides power from the nickel-rich batteries while pre-charging the LFP pack improving efficiency.

More powerful, starting at 120kVA and up to 700kVA
The base power capability of the Max has been improved to 120kVA with 200kVA and high-power variants in development. The power output of a single Max unit can also be customised depending on the customer needs and end application. The Max can also be connected in parallel to increase energy capacity and increase total power output to 700kVA. The maximum weight with trailer is well just over 3t allowing the Max to be towed by a standard vehicle and with a standard driver's licence

Improved design and efficiency with integrated PV solar panels
The Max now features integrated solar panels for local generation which will supply power for low voltage systems. Allye has also further enhanced the bold design of the Max, which has been so widely praised for its refinement, strength and integrity. For example, the cutaway detail that cleverly channelled cables downwards to reduce the risk of trip hazard is now mirrored at the top to create greater symmetry. The form has evolved further with the latest iteration of the 'grid skin' design, conveying the role of the Max in supporting the grid, while provide a premium and authentic aesthetic.

Collectively the grid needs an Allye; smart technology and distributed batteries, deployed at scale, to realise a change in the system. The Max is the first in a range of intelligent BESS that will work across the grid to provide automated demand side response, increased flexibility, and range of services so the whole system can benefit and drive down electricity costs for end users.

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