

Nyobolt launches pioneering compact supercharger 'Bolt-ee' to tackle EV charging infrastructure dilemma

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Cambridge, UK: 17th November 2023 – Nyobolt, the pioneering UK-based developer of ultra-fast-charging batteries, today launches its advanced battery technology to be rolled out as an electric vehicle (EV) mobile DC supercharger. Following the showcase of its six minute ultra-fast-charging EV, Nyobolt has developed a compact battery integrated supercharger delivering up to 300kW DC charge power - called, 'Bolt-ee' - to resolve the biggest challenge in the transition to EVs: the charging infrastructure. Bolt-ee can be recharged in six minutes and has a battery life of over 10,000 charging cycles.

Globally, 14% of all new cars in 2022 sold were electric, up from 9% in 2021. In order to accommodate the adoption of EVs and match the convenience of petrol refuelling, a significant increase in the availability of charging points is clearly required. However, obstacles such as planning permission, vast amounts of trenching and connection to the grid have all delayed progress. Nyobolt's supercharger offers a solution by eliminating the need for trenching and civil works. In effect, Nyobolt's mobile charger means every parking bay can potentially become a charging bay, not just those with charging points that are connected directly to the grid.

Analysis suggests that the European Union will need at least 3.4 million operational public charging points by 2030 to enable a complete switch from ICEs to EVs, outlining the disparity in the charging infrastructure as we transition to EVs. The number of charge points in the US is forecast to rise from about 4 million currently to 35 million in 2030 and in China, an advanced charging infrastructure system will be in place by the end of 2025 to meet the demand for more than 20 million electric vehicles. This number could be reduced if fast DC charging is available without stressing the grid where people live and work and adding convenience over slow chargers. There have been positives in the shift towards EVs, but it is clear that the next hurdle that must be addressed is how these cars are charged.

Sai Shivareddy, CEO and co-founder at Nyobolt, said: "Nyobolt has already cracked the challenge of substantially reducing battery charging times, having achieved a six-minute charge car, and developed smaller battery packs that can deliver faster and higher power charging, but this is not where the challenge ends. As our world accelerates, immediate access to fast-battery charging is a necessity. Our technology meets this urgent call by driving the present into a charged future."

The deployment of mobile battery integrated superchargers have other real world uses beyond supporting the expansion of charging infrastructure. Flat batteries currently represent around 2% of EV driver callouts. With a lightweight, compact charger, recovery vehicles would be able to add Nyobolt's charger to their tools, without taking up large amounts of space and adding weight.

Professor Clare Grey, Chief Scientist and co-founder at Nyobolt, says: "Nyobolt's vision has always been to support a seamless transition to clean energy. There are a number of fantastic and innovative manufacturers out there, creating the EVs of the future. Nyobolt's ready-to-deploy technology, which will go into production in early 2024, will help accelerate the adoption of EVs, by improving the user experience with faster, more accessible charging."

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About Nyobolt

Co-founded in 2019 by Professor Dame Clare Grey DBE, FRS and CEO Dr Sai Shivareddy Nyobolt is unlocking the potential of battery technology to power innovations that can't wait.

Nyobolt's world-leading team has taken a systems level approach to develop batteries capable of charging in minutes by pioneering new materials, cell designs, efficient software control and power electronics.

The technology is manufacturable and scalable right now allowing innovators to electrify new products and services that previously have been impossible to develop across application sectors including fast-charge EVs, robotics, motorsports and heavy-duty applications,

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