

Bramble Energy Partners with Tripod Technology to Advance Hydrogen Production with £1.5M Initiative

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UK-based cleantech company Bramble Energy has announced a strategic partnership with Taiwan's Tripod Technology Corporation and Tripod Nanotechnology Corporation to launch a £1.5 million initiative aimed at revolutionizing hydrogen production. The project, named **POWER: Printed Circuit Board Optimised Water Electrolysis with Reduced Platinum Group Metals (PGM), will leverage Bramble Energy's innovative printed circuit board AEM electrolyser (PCBEL) technology.**

Co-funded by Innovate UK and Taiwan's Department of Industrial Technology through the UK-Taiwan CRD 2024 programme, this collaboration will focus on refining the PCBEL cell and stack design, integrating advanced catalysts, and developing next-generation membrane electrode assemblies. The primary objective is to significantly reduce the cost of anion exchange membrane (AEM) electrolyser stacks by enhancing durability and operational flexibility.

A significant milestone achieved by Bramble Energy includes the successful demonstration of a 25MW stack utilizing a less corrosive potassium hydroxide solution, which simplifies handling, reduces safety requirements, and expands material selection options.

Tom Mason, CEO of Bramble Energy, stated, "We are thrilled to announce this £1.5 million project to advance our groundbreaking PCBEL technology. By combining cutting-edge engineering with a commitment to affordability and sustainability, we are pushing the boundaries of cost, performance, and durability, accelerating the commercialization of our electrolyser technology." He further emphasized the project's potential to "deliver a low-cost, scalable, and reduced precious-metal solution to hydrogen

production, marking a pivotal moment for the hydrogen economy and driving the transition to a clean energy future.”

Bramble Energy’s PCBEL technology has already achieved the Clean Hydrogen Partnership’s 2030 targets for performance and critical raw material content, utilizing the printed circuit board supply chain to achieve a volume cost of \$200/kW for AEM stacks.

Aleck Lin, Vice-President of Tripod Technology, commented, “As a global leader in PCB manufacturing, Tripod Technology is excited to participate in this pioneering project focused on advanced AEM electrolyser development. In collaboration with Bramble Energy, Tripod and Tripod Nano will focus on innovating catalyst and membrane electrode technology to enhance performance and material sustainability. This partnership underscores our commitment to technological leadership and global decarbonization, ensuring a stable and scalable material supply for the clean energy transition.”