

ASX Announcement ([ASX: AXE](#))

17 October 2025

Archer partners with Emergence Quantum to accelerate quantum technology development

Highlights

- Archer has signed a collaboration agreement with Emergence Quantum, a pioneering company developing cutting-edge technologies in quantum computing, sensing, and advanced computing systems.
 - Emergence Quantum brings global experience to provide solutions for government and companies, including its work with IONQ (NYSE: IONQ), a recognised leader in quantum computing.
 - The partnership will focus on graphene and carbon-based materials to accelerate the development of next-generation quantum and advanced electronic devices.
 - A phased Innovation and Commercialisation Program will guide research, development, and prototype demonstration.
 - The collaboration strengthens Archer's position as a leading Australian innovator in quantum materials and carbon-based device technology.
-

Archer Materials Limited ("Archer", the "Company", "ASX: AXE"), a quantum technology company developing advanced semiconductor chips for quantum technology and medical diagnostics, has today signed a collaboration agreement with Emergence Quantum, a quantum innovation company supporting some of the world's leading quantum companies, including IONQ (NYSE: IONQ) and others.

Under the agreement, Emergence Quantum will help Archer develop a strategic technology program to guide joint research, development, and commercialisation of next-generation quantum materials and devices. The goal is to turn cutting-edge scientific discoveries into practical technologies with real-world impact, focusing on graphene and related carbon materials to enable new device designs and innovative applications in quantum and advanced electronics.

Emergence Quantum brings proven expertise in strategic quantum technology development. With world-class leadership and a multidisciplinary team, the company has demonstrated its ability to accelerate the translation of breakthrough science into commercially viable products.

Phased Innovation and Commercialisation Program

A phased Innovation and Commercialisation Program will guide research, development, and prototype demonstration.

Phase I: Build a strong foundation by mapping graphene's potential in quantum and non-quantum domains, defining technical directions, and preparing for targeted development and funding.

Phase II: Transition to execution, with a focus on experimental validation of high-impact concepts and delivering prototype demonstrations in key application areas.

Commenting on the partnership with Emergence Quantum, Dr Simon Ruffell, CEO of Archer, said,

"Graphene and carbon-based materials offer a powerful platform for enabling quantum devices that are both scalable and commercially relevant. By combining Archer's unique expertise in quantum carbon films, including graphene, with Emergence Quantum's world-class capability and leveraging their experience we're setting the stage for rapid advancement in quantum materials and devices."

Commenting on the Collaboration with Archer, Dr. Thomas Ohki, CTO/CSO of Emergence Quantum said

"We're excited to work with Archer on this ambitious program. Our work with large multinational quantum companies has shown how strategic partnerships can accelerate quantum technology development. We see significant opportunity to bring that same momentum to Archer's graphene-based innovation."

The Board of Archer authorised this announcement to be given to ASX.

Investor enquiries

Luke Maffei
+61 403 193 579
luke.maffei@automicgroup.com.au

Media enquiries

Dylan Mark
+61 475 783 675
dylan.mark@automicgroup.com.au

About Archer

Archer is a next-generation quantum technology company building advanced semiconductor devices for quantum computing, quantum sensing, and medical diagnostics. Its carbon-based platform is designed to integrate with existing semiconductor manufacturing processes, allowing Archer to build a scalable pathway to commercial quantum applications in global markets.

About Emergence Quantum

Emergence Quantum is a specialised quantum innovation firm focused on accelerating the path from research to real-world applications in quantum computing, quantum sensing and energy efficient compute. Emergence Quantum works with industry and research leaders globally to advance strategic quantum technology development and has supported IONQ and others in its mission to scale quantum computing capabilities.