

An Arca engineer measures carbon dioxide entering mine waste in Australia earlier this year

Arca Announces Agreement with Microsoft for Nearly 300,000 Tonnes of Durable Carbon Removal

Vancouver, 29 October 2025

Arca, an Industrial Mineralization company, today announced an offtake agreement with Microsoft to deliver nearly 300,000 tonnes of durable carbon dioxide removal (CDR) over 10 years.

This agreement is a significant development for Arca's solution in Industrial Mineralization - a carbon removal pathway that leverages existing industrial infrastructure and repurposes alkaline waste streams to capture and permanently store atmospheric CO2 as stable carbonate minerals.

The Honourable Tim Hodgson, Minister of Energy and Natural Resources said:

"The next generation of clean growth will be built by Canada's first-class innovation ecosystem – companies like Arca, which are turning Canadian ingenuity into global leadership. Carbon removal technologies are not only strategic tools we can use to tackle climate change, they create good jobs and position Canada at the forefront of the global opportunity of a low-carbon economy."

Arca's first commercial projects repurpose the byproducts of mining (mine tailings and waste rock), accelerating a natural geochemical process called carbon mineralization, the transformation of gaseous CO2 into solid mineral form. By doing so, Arca delivers measurable, independently verified, and highly durable carbon removals while making mine waste safer, and creating employment opportunities for host communities.

Arca completed its first full-scale mineralization demonstration project at an active mine site in 2025. Arca continues to expand its pipeline of mineralization projects as it seeks to advance the pathway from pilots to million-tonne operations. Microsoft's long-term commitment accelerates this trajectory.

"Arca was built on the foundation of more than 20 years of academic research, dozens of field trials and collaborations with more than 30 mining companies around the world," said **Dr. Greg Dipple, Arca co-founder and Head of Science**.

Why Industrial Mineralization Matters

- **Abundant industrial waste as feedstocks:** Billions of tonnes of historical industrial byproducts are already at the surface of the Earth.
- **A light footprint:** There are many opportunities to integrate into existing industrial sites, with minimal energy, land and water requirements.
- **Geological durability:** Removes CO₂ for millennia, with robust MRV to ensure transparency.
- Co-benefits for industry and communities: Reduces environmental risks, creates
 employment opportunities for host communities, and transforms waste liabilities
 into valuable assets.

"We have a unique opportunity to utilize one form of waste (mine tailings) to neutralize another (excess atmospheric CO₂). The result is less waste and a healthier environment", said Paul Needham, Arca CEO. "This agreement with Microsoft validates Industrial Mineralization as a viable pathway for durable carbon removal with the potential to scale and meaningfully contribute to global climate goals".

Phil Goodman, Director of Microsoft's Carbon Dioxide Removal Program, said:

"This offtake agreement diversifies Microsoft's carbon removal portfolio into a pathway that combines scalability and permanence. Area brings notable scientific expertise and has proven they can sequester carbon through their demonstration project, giving us confidence to enter into a multi-year agreement. We are pleased to support Area in advancing industrial mineralization."

About Arca

Arca is an Industrial Mineralization company that leverages pre-existing industrial infrastructure and alkaline waste to accelerate the natural process of carbon mineralization and permanently remove carbon dioxide from the atmosphere.

Arca's cost-efficient system creates highly durable (10,000+ year) removals supported by robust third-party verification. By partnering with heavy industry like mining and steel production, Arca is building the foundation for gigatonne-scale carbon removal.