Press Release: Liquium

New Zealand's Liquium raises over $2m to tackle one of the world's hardest-to-decarbonise industries: ammonia

Auckland, New Zealand | Liquium, a New Zealand-based deep-tech company developing next-generation catalysts for industrial ammonia production, has raised over $2 million as it accelerates international validation and scale-up of a technology targeting one of the world's most emissions-intensive industrial processes.

The round has been led by Climate Venture Capital Fund 2 (CVCF 2), alongside existing investors. The investment marks the first deployment from CVCF 2, and follows the fund's initial backing of Liquium in its first vintage. Across both funds, Climate Venture Capital Fund now holds an approximately 17 percent stake in the company, signalling high-conviction follow-on support as Liquium moves from laboratory performance into industrial-scale validation.

Ammonia sits quietly behind much of the modern world. Globally, more than 180 million tonnes is produced annually. Ammonia underpins global food systems through fertiliser, and is emerging as a potential low-carbon fuel. Yet its production accounts for roughly two percent of global carbon dioxide emissions, largely due to the fossil fuel sources to isolate the hydrogen and required high energy needs to power the century-old Haber-Bosch process.

Liquium's technology targets that problem at its source.

Rather than attempting to replace existing ammonia plants, the company has developed a family of proprietary catalysts to greatly improve the efficiency of the Haber-Bosch process itself. For producers, even small percentage efficiency gains can translate into hundreds of millions of dollars in energy savings over the life of a plant.

Early validation work indicates Liquium's catalyst has demonstrated a potential improvement of more than 2x in ammonia productivity compared with incumbent commercial catalysts under relevant operating conditions.

Liquium's unique catalysts and huge potential performance gains have attracted the attention of key players in the ammonia market, from engineering companies, fertiliser producers, shipping lines, mining companies and others. Liquium is currently working with a number of large-scale industrial partners across Europe, Australia and North America, under structured agreements to validate the catalyst performance in environments that reflect real-world production and solve the key barriers to market adoption. Looking ahead, Liquium is investigating additional and larger scale trials with international market participants over the coming year.

Liquium chief executive, Dr Paul Geraghty, said the capital raise reflects growing confidence that the company's approach can translate scientific performance into industrial impact.

"Ammonia production is a conservative, capital-intensive industry, and for good reason," Geraghty said. "Our focus has always been on working with that industry. Our results suggest we could deliver very large efficiency gains with the aim to be a drop in solution and not requiring producers to rebuild their plants from scratch. That combination is what makes adoption of our technology so appealing and impactful at global scale. Importantly, considering the enormous clean energy market and ammonia uptake lowering green premiums and improving productivity is likely one of the fastest and most effective ways to help reduce global energy emissions."

The new funding will be used to expand Liquium's technical team, scale catalyst manufacturing capacity, and support larger and longer-duration validation campaigns with international partners. It will also support preparation for Liquium's next investment campaign planned to commence later in 2026.

Liquium chair John Worth said the follow-on investment reflected both technical progress and disciplined governance.

"Deep industrial technologies succeed or fail on credibility," Worth said. "This round supports the next phase of proof, while maintaining the standards of governance and validation required by global industrial partners."

Climate Venture Capital the Second
For CVCF 2, the investment marks the fund's first capital deployment and builds on its earlier conviction in Liquium's approach to industrial decarbonisation.

"Ammonia is one of the largest, least-discussed climate problems. It's hiding in plain sight," said Dr Jez Weston, Partner at Climate Fund. "Liquium stands out because it tackles the existing system rather than hoping to replace it. The science is strong, the pathway to adoption is short, and the potential emissions savings are enormous."

Unlike many climate startups focused on software or downstream optimisation, Liquium operates squarely in the realm of hard science. Its intellectual property is built around catalyst chemistry, materials engineering and process integration, creating long-cycle defensibility in an industry where incremental improvements can deliver outsized economic and emissions benefits.

As geopolitical pressures, fertiliser price volatility and energy security concerns converge, interest in lower-cost, lower-emissions ammonia production is growing rapidly. Liquium's bet is that better chemistry, rather than wholesale reinvention, may offer one of the fastest routes to technology adoption to decarbonising a critical global industry.

Ends

Why this matters

- **Scale**: Ammonia production accounts for around two percent of global CO_2 emissions. Small efficiency gains compound at massive scale.
- **Adoption**: Liquium's catalyst is designed to retrofit into existing plants, lowering barriers to industrial uptake.
- **Economics**: Improved catalyst performance reduces energy input, cutting both emissions and production costs.
- **Geopolitics**: Lower-cost, lower-carbon ammonia supports food security and emerging clean fuel markets worldwide.

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About Liquium

Liquium is a company specialising in the development of innovative catalysts to facilitate the production of ammonia. Liquium's unique range of catalysts are designed to boost the productivity and energy efficiency of industrial ammonia production via the Haber-Bosch process. These catalysts have shown improved performance compared to a well-known commercial catalyst and the company is focused on scaling-up catalyst manufacture and conducting larger ammonia production validation trials. Reducing the cost of ammonia production is the most effective way to support decarbonisation of the existing industry and promotes the adoption of low-carbon ammonia as a clean fuel for heavy industries.

Learn more at: https://www.liquium.nz/

About Climate Venture Capital Fund

Climate Venture Capital Fund is a New Zealand-based venture capital fund series investing in high-growth technology companies that reduce greenhouse gas emissions at scale while delivering strong commercial returns.

CVCF 2 is the second fund in the series, following a first vintage that has invested in ten companies across New Zealand and Australia. Managed by 2040 Ventures, Climate Venture Capital Fund applies a disciplined, independently governed framework to climate impact assessment, alongside a strong focus on building globally competitive companies.

Learn more at: https://climatevcfund.com
