

26<sup>th</sup> November 2025

ASX RELEASE

## Binding Joint Collaboration Agreement with GeoKiln

- HyTerra recognises the role that technology can play in accelerating geological hydrogen production in the subsurface.
- Like other energy sectors (i.e. oil and gas, geothermal), early application of key technological advances can accelerate projects and maintain a competitive edge.
- GeoKiln has developed MSSH™, Manufactured Subsurface Hydrogen which is a thermally engineered geologic hydrogen process designed to accelerate naturally occurring reactions and generate hydrogen predictably within the subsurface.
- The Parties have agreed to collaborate over the next twelve (12) months to assess and demonstrate a world-first test of geologic hydrogen generation using MSSH™ within a drilled wellbore.
- GeoKiln will fund the demonstration test using the MSSH™ process and obtain required permits and approvals.

**HyTerra Limited (ASX: HYT)** (HyTerra or the **Company**) is pleased to announce a signed binding agreement with GeoKiln Energy Innovation Inc (**GeoKiln**) to further enhance HyTerra's global competitive advantages as a leading geologic hydrogen explorer, supported by hydrogen system analysis, advanced subsurface interpretations, and operational delivery.

GeoKiln is a globally leading company in engineered hydrogen and a 2025 Breakthrough Energy Fellow<sup>1</sup>. GeoKiln's intent is to unlock the next onshore energy revolution by producing clean, low-cost hydrogen directly from iron-rich rocks using proven oil and gas technology.

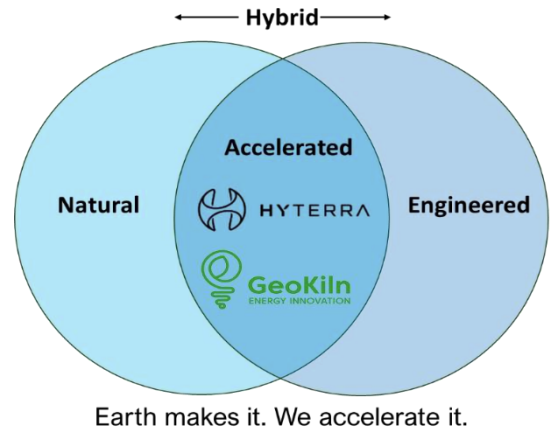


<sup>1</sup> <https://www.breakthroughenergy.org/fellows-projects>. For five years, the Breakthrough Energy Fellows program has backed bold innovators at the earliest stages of building climate solutions. From the lab bench to the real world, Fellows get the support, mentorship, and network they need to turn breakthrough ideas into scalable impact.

## Early Use of Technology for Commercialization

HyTerra recognizes the potential for technology to play a role in commercialization of geologic hydrogen. HyTerra intends to investigate using a hybrid approach to accelerate naturally occurring hydrogen using technology such as GeoKiln's MSSH™.

Geologic Hydrogen companies are primarily focused on either naturally occurring hydrogen or engineered (manufactured) hydrogen generated by applying technology downhole. HyTerra and GeoKiln are focused on acceleration through a hybrid approach, leveraging lessons learnt when oil and gas companies (i.e. enhanced recovery techniques) to accelerate commercialization decisions. Furthermore, this gained subsurface knowledge opens further portfolio opportunities in new markets.



## GeoKiln and MSSH™, Manufactured Subsurface Hydrogen

GeoKiln Energy Innovation is a Houston TX-based clean-technology company advancing the frontier of geologic hydrogen. Built by a team with decades of experience in subsurface engineering, thermal technology, and geological modelling, GeoKiln brings together the scientific depth and operational expertise needed to turn hydrogen generation within the subsurface into a practical reality. Their work is grounded in rigorous science, proven engineering, and a commitment to transforming geologic hydrogen from a natural curiosity into a scalable energy resource.

GeoKiln developed MSSH™, Manufactured Subsurface Hydrogen, is a thermally engineered geologic hydrogen process designed to accelerate naturally occurring reactions and generate hydrogen predictably within the subsurface. Their competitive edge is the integration of advanced geologic modelling, thermochemical simulation, and engineered thermal control, allowing them to recreate and accelerate the natural processes that form hydrogen over geologic time. GeoKiln's team has a proven track record in global energy projects and leading-edge thermal engineering research, enabling them to bridge the gap between scientific theory and commercial deployment. This combination of deep subsurface expertise and engineered precision positions GeoKiln as a leader in engineered geologic hydrogen.

## Key terms of the Agreement

HyTerra and GeoKiln will jointly assess combined data within 90 days of execution of the agreement, then complete a field assessment to define key geologic criteria and testing parameters. The parties will then conduct the MSSH™ demonstration within 12 months of execution and analyse the results to determine pathways to commercialization.

HyTerra will provide geological data and access to a suitable existing or new well for the field demonstration. GeoKiln will supply its MSSH™ technology and hardware, conduct modelling, well

design and field deployment, collect and analyse test data. GeoKiln will cover all MSSH™-related expenses including construction, equipment, mobilisation and operational costs, and obtain all required permits for the testing.

The agreement is otherwise on standard terms in relation to intellectual property protection, termination, indemnities and limitation of liability.

**Alexei Tcherniak, CEO, GeoKiln Energy Innovation** said “Our collaboration with HyTerra marks a pivotal moment for the geologic hydrogen industry. GeoKiln’s mission is to apply sound science and engineered precision to unlock hydrogen generation within the subsurface in a predictable and commercially viable way. By combining our MSSH™ engineering technology with HyTerra’s exploration, appraisal, and operational expertise, we are laying the groundwork for the world’s first controlled field demonstration of thermally engineered geologic hydrogen. This is where hydrogen exploration meets hydrogen generation.”

**Benjamin Mee, Executive Director of HyTerra** said “This key collaboration with GeoKiln is a significant step forward for HyTerra as it brings together two companies that complement each other’s values, skillsets and expertise to deliver commercial outcomes. We have spent quality time investigating how a hybrid approach to hydrogen can accelerate projects using our internal datasets. The goal is to provide additional value for HyTerra shareholders while doing our part to support the geologic hydrogen sector.”

More details are available on Geokiln’s website: <https://www.geokiln.com>

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**This announcement has been authorised for release by the Board of Directors.**

**For more information:**

Benjamin Mee  
Executive Director  
[info@hyterra.com](mailto:info@hyterra.com)

Avon McIntyre  
Executive Director  
[info@hyterra.com](mailto:info@hyterra.com)

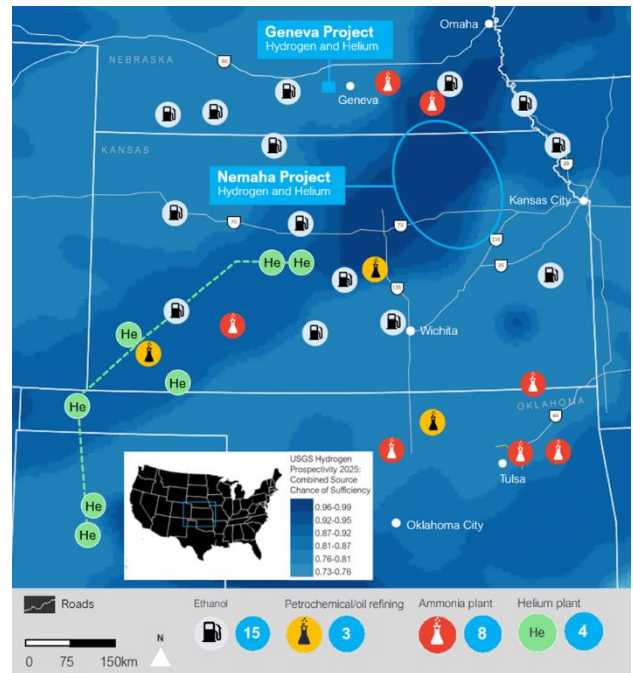
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## HyTerra. A World of Opportunity.

**Exploring for geologic hydrogen and helium resources near major industrial hubs.** HyTerra was the first company to list on the ASX with a focus on geologic hydrogen, which is generated naturally by the Earth. Geologic ('white') hydrogen potentially has much lower production costs and carbon emissions than man-made hydrogen.

Our Nemaha Project in Kansas, USA, holds 100% owned and operated leases across the emerging Nemaha Ridge geologic hydrogen and helium play fairway. Our Geneva Project in Nebraska, USA, is a 16% earn-in interest in a Joint Development with Natural Hydrogen Energy LLC targeting geologic hydrogen and helium. Both projects could be connected via existing transport infrastructure to multiple nearby off-takers, including ammonia manufacturers and petrochemical plants.

For more information, please see the latest corporate presentation: [www.hyterra.com](http://www.hyterra.com)



## Important Risk Commentary:

It is important to note that there remains both geological and potential development risks with these projects and the Company's commercial and business objectives. This is an emerging frontier with the potential to unlock significant low-carbon hydrogen gas supplies but with equally significant risk and uncertainty. Key risks include the presence, concentrations, recovery, and commercial potential of both hydrogen and helium gases. For more information on risks please refer to the ASX release 'Entitlement Issue Prospectus' on April 8th, 2024: <https://wcsecure.weblink.com.au/pdf/HYT/02793318.pdf>.

## Forward Looking Statements:

This release may contain forward-looking statements. These statements relate to the Company's expectations, beliefs, intentions or strategies regarding the future. These statements can be identified by the use of words like "anticipate", "believe", "intend", "estimate", "expect", "may", "plan", "project", "will", "should", "seek" and similar words or expressions containing same. These forward-looking statements reflect the Company's views and assumptions with respect to future events as of the date of this release and are subject to a variety of unpredictable risks, uncertainties, and other unknowns. Actual and future results and trends could differ materially from those set forth in such statements due to various factors, many of which are beyond our ability to control or predict. These include, but are not limited to, risks or uncertainties associated with the discovery and development subsurface gas reserves, cash flows and liquidity, business and financial strategy, budget, projections and operating results, gas prices, amount, nature and timing of capital expenditures, including future development costs, availability and terms of capital and general economic and business conditions. Given these uncertainties, no one should place undue reliance on any forward-looking statements attributable to HyTerra, or any of its affiliates or persons acting on its behalf. Although every effort has been made to ensure this release sets forth a fair and accurate view, we do not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. Nothing contained in this announcement, nor any information made available to you is, or and shall be relied upon as, a promise, representation, warranty or guarantee as to the past, present or the future performance of HyTerra.