

Element One Targets Earth's Oldest Clean Energy Source with Dual-Pathway Natural Hydrogen Strategy

written by Raj Shah | September 10, 2026

Company is targeting the nearly 100-million-tonne global hydrogen market by advancing both the exploration for naturally accumulated hydrogen that could be extracted using methods similar to traditional oil and gas drilling and technology designed to stimulate hydrogen generation from iron-rich hard rock

September 10, 2026 ([Source](#)) – Element One Hydrogen & Critical Minerals Corp. (CSE: EONE) (“Element One” or the “Company”) is pleased to provide an overview of its differentiated, dual-pathway strategy for pursuing opportunities within the global hydrogen market, where annual demand reached nearly 100 million tonnes in 2024 (figures from [International Energy Agency's 2025 Global Hydrogen Review](#)).

Element One is pursuing two distinct but complementary approaches to natural hydrogen:

- **Exploration for naturally accumulated hydrogen** that may have migrated through the subsurface and become trapped in geological formations that could be extracted using methods similar to traditional oil and gas drilling; and
- **Stimulation of hydrogen generation from iron-rich hard rock**, using technology intended to accelerate in real time naturally occurring water-rock reactions known as

serpentinization.

Two Pathways to Natural Hydrogen

Natural hydrogen can be produced in several ways, when water reacts with iron-rich minerals found in certain ultramafic rocks, during the natural decay of uranium and thorium in the subsurface and from deep mantle degassing. These natural geological processes can release hydrogen over long periods of time.

In some geological settings, hydrogen may migrate away from its source and accumulate beneath impermeable rock layers. These occurrences can potentially be explored using approaches similar to those employed in conventional subsurface resource exploration.

In other settings, hydrogen may be generated directly within reactive ultramafic rock formations by increasing the contact between water and suitable iron-rich minerals. Element One's technology strategy is designed to investigate whether these naturally occurring reactions can be accelerated through use of proprietary catalysts and controlled to support continuous or repeatable hydrogen generation.

*"Our strategy is not dependent on a single theory of how the natural hydrogen industry will develop," commented **Brad Kitchen, CEO and President of Element One.** "We are advancing the tools required to search for accumulated hydrogen while also supporting the development of technology intended to generate hydrogen directly from reactive hard-rock systems."*

"We believe this dual approach is one of Element One's most important competitive advantages. It gives our shareholders exposure to both sides of the emerging natural hydrogen opportunity-exploration and technology-while creating the

potential to recover valuable critical minerals from the same geological systems.”

Exploring for Hydrogen Accumulations

Element One intends to improve the identification and ranking of geological settings capable of generating, transporting and trapping natural hydrogen.

The Company's intention is to integrate multiple geological and geophysical factors, including:

- The presence of hydrogen-generating source rocks;
- Structural pathways capable of supporting hydrogen migration;
- Potential reservoir rocks;
- Geological traps and seals; and
- Indicators of active or historic subsurface fluid movement.

The Company intends to apply this systematic approach to its existing areas of interest in British Columbia and Alaska and to potential future natural hydrogen opportunities throughout North America.

Stimulating Hydrogen Generation from Hard Rock

Element One is also advancing its interest in proprietary technology designed to stimulate hydrogen-producing reactions within naturally occurring iron-rich rock systems.

Through its agreement with Stone to H₂, Inc. and its sponsored research relationship with Columbia University, the Company is supporting laboratory research focused on geologic hydrogen stimulation and the potential co-recovery of technology-critical metals.

Importantly, the same iron-rich rocks capable of producing hydrogen may also contain magnesium, nickel and other valuable minerals. This creates the possibility of developing integrated systems capable of producing clean energy while recovering critical-mineral products from the same feedstock.

LIFE Private Placement Update

The Company announces that it has increased to size of the private placement previously announced on August 9, 2026 to 7.0 million units. Each LIFE unit being issued at \$0.10 per unit consists of one common share in the capital of the company and one 20 cent share purchase warrant. Each warrant issued under the LIFE offering shall entitle the holder thereof to acquire an additional common share at a price of 20 cents for a period of 36 months from the date that is 61 days following the closing date of the LIFE offering. The Company has filed an amended and restated offering document to reflect the Offering upside. The Company further announces that it has closed the first tranche of the Offering of 3,500,000 Units of the Company.

About Element One Hydrogen & Critical Minerals Corp.

Element One Hydrogen & Critical Minerals Corp. (CSE: EONE) is building an integrated North American natural hydrogen and critical minerals platform focused on advancing secure, domestic energy and critical minerals supply chains. Through a growing portfolio of strategic resource assets, proprietary technologies and industry partnerships, the Company is advancing the exploration, development and commercialization of natural hydrogen, magnesium and other critical minerals. Element One's projects span British Columbia, Washington State and Alaska and are supported by collaborations with world-class research institutions, including Columbia University, and strategic partnerships with industry, Indigenous communities and

government.

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For further information visit our website at www.e1-h2.com.

On behalf of the Board of Directors

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Forward-Looking Information

This news release contains “forward-looking information” within the meaning of applicable Canadian securities laws. Forward-looking information includes, but is not limited to, statements regarding the Company’s exploration, testing, engineering, development, commercialization and marketing plans; proposed pilot-scale and demonstration-facility activities; the potential production of magnesium, magnesium compounds, hydrogen and other critical minerals; the scalability and commercial viability of technologies; future field programs; and anticipated timing of the Company’s activities.

Neither the Canadian Securities Exchange nor its Regulation Services Provider accepts responsibility for the adequacy or accuracy of this release.