

Next Hydrogen and Casale Sign MOU to Develop Green Ammonia and Methanol Systems

MISSISSAUGA, Ontario, Sept. 11, 2023 -- Next Hydrogen Solutions Inc. ("**Next Hydrogen**") ([TSXV:NXH](#), [OTC:NXHSE](#)) and Casale SA ("**Casale**"), have signed a non-exclusive memorandum of understanding to develop green ammonia and methanol systems that integrate Next Hydrogen's electrolysis technology and products.

Under this agreement, the companies will bring together their collective experience and capabilities to accelerate and scale-up green ammonia and methanol plants connected to renewable energy sources. Next Hydrogen has deep expertise in electrolysis and is launching its next generation of large-scale, low-cost green hydrogen systems. Casale has a strong track record of technologies innovation in fertilizer production processes and plants, and is ideally positioned to exploit the advantages of Next Hydrogen's new electrolysis products. This collaboration provides a compelling pathway to producing clean, zero-emission ammonia and methanol from green renewable energy power sources.

In the first phase of the project, Casale and Next Hydrogen will work together on technology development, integration and validation testing of integrated green ammonia systems with an aim to accelerate the path to future market demonstration projects.

"We are pleased to establish this collaboration with Next Hydrogen and look forward to harnessing the benefits of their products into Casale's ammonia and methanol portfolio of systems," said Ermanno Filippi, Chief Technology Officer of Casale.

"We are delighted to work closely with Casale, a world leader in the fertilizer marketplace" says Raveel Afzaal, President and CEO of Next Hydrogen. "Collaboration with such an innovative leader in green ammonia provides an opportunity to accelerate adoption of our green hydrogen products."

About Next Hydrogen Solutions

Founded in 2007, Next Hydrogen is a designer and manufacturer of electrolyzers that use water and electricity as inputs to generate clean hydrogen for use as an energy source. Next Hydrogen's unique cell design architecture supported by 39 patents enables high current density operations and superior dynamic response to efficiently convert intermittent renewable electricity into green hydrogen on an infrastructure scale. Following successful pilots, Next Hydrogen is scaling up its technology to deliver commercial solutions to decarbonize transportation and industrial sectors. For further information: www.nexthydrogen.com

About Casale

Casale, operating since 1921, is a global provider of technologies and integrated engineering solutions to produce fertilizers and other base chemicals. Casale is among the few licensors that can provide the entire fertilizer production chain of ammonia, urea, nitric acid, nitrates, phosphates, in addition to key chemicals such as melamine, methanol. Being focused to build sustainable plants for a better planet, our portfolio now also includes innovative technologies to produce green and blue ammonia, methanol, and hydrogen. Casale delivers a complete range of solutions for new plants and for plants revamping. For further information: www.casale.ch.

Contact Information

Raveel Afzaal, President and Chief Executive Officer
Next Hydrogen Solutions Inc.
Email: rafzaal@nexthydrogen.com
Phone: 647-961-6620

Casale SA

Email: info@casale.ch

Cautionary Statements

This news release contains "forward-looking information" and "forward-looking statements". All statements, other than statements of historical fact, are forward-looking statements and are based on expectations, estimates and projections as at the date of this news release. Any statement that involves discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions, future events or performance (often but not always using phrases such as "expects", or "does not expect", "is expected", "anticipates" or "does not anticipate", "plans", "budget", "scheduled", "forecasts", "estimates", "believes" or "intends" or variations of such words and phrases or stating that certain actions, events or results "may" or "could", "would", "might" or "will" be taken to occur or be achieved) are not statements of historical fact and may be forward-looking statements. Forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable, are subject to known and unknown risks, uncertainties, and other factors which may cause the actual results and future events to differ materially from those expressed or implied by such forward-looking statements. Such factors include, but are not limited to: the risks associated with the hydrogen industry in general; delays or changes in plans with respect to infrastructure development or capital expenditures; the uncertainty of estimates and projections relating to costs and expenses; failure to obtain necessary regulatory approvals; health, safety and environmental risks; uncertainties resulting from potential delays or changes in plans with respect to infrastructure developments or capital expenditures;

currency exchange rate fluctuations; as well as general economic conditions, stock market volatility; and the ability to access sufficient capital. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on the forward-looking statements and information contained in this news release. Except as required by law, there will be no obligation to update the forward-looking statements of beliefs, opinions, projections, or other factors, should they change.