

**FORM 51-102F3
MATERIAL CHANGE REPORT**

ITEM 1. *Name and Address of Company*

Next Hydrogen Solutions Inc. (“**Next Hydrogen**” or the “**Company**”)
6610 Edwards Blvd.
Mississauga, Ontario
L5T 2V6

ITEM 2. *Date of Material Change*

December 17, 2025

ITEM 3. *News Release*

A press release was disseminated on December 17, 2025 through the newswire services of Globenewswire.

ITEM 4. *Summary of Material Change*

On December 17, 2025, the Company announced that it had closed its previously announced non-brokered private placement of 46,069,198 common shares of the Company at a price of CAD\$0.45 per share raising gross proceeds of approximately \$20.7 million (inclusive of the Shares for Debt Transaction and the Debenture Conversion, as described in Exhibit “A”).

ITEM 5.1 *Full Description of Material Change*

See Exhibit “A”.

ITEM 5.2 *Disclosure for Restructuring Transactions*

Not applicable.

ITEM 6. *Reliance on Subsection 7.1(2) of National Instrument 51-102*

Not applicable.

ITEM 7. *Omitted Information*

No significant facts have been omitted from this report.

ITEM 8. *Executive Officer*

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

ITEM 9. *Date of Report*

December 22, 2025

Notice on Forward Looking Information

Certain statements in this material change report constitute forward-looking statements within the meaning of applicable securities laws. Forward-looking statements are frequently characterized by words such as "plan", "continue", "expect", "project", "intend", "believe", "anticipate", "estimate", "may", "will", "potential", "proposed" and other similar words, or statements that certain events or conditions "may" or "will" occur. Forward-looking statements in this material change report include statements regarding: the Offering and the use of proceeds of the Offering. Such forward-looking statements are based on the current expectations of management of Next Hydrogen. Actual events and conditions could differ materially from those expressed or implied in this material change report as a result of known and unknown risk factors and uncertainties affecting Next Hydrogen, including risks regarding the industry in which Next Hydrogen operates, economic factors, the equity markets generally and risks associated with growth and competition. Additional risk factors are also set forth in the Company's management's discussion and analysis and other filings available via the System for Electronic Document Analysis and Retrieval (SEDAR Plus) under Next Hydrogen's profile at www.sedarplus.ca. Although the Company has attempted to identify certain factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended. No forward-looking statement can be taken as guaranteed. The forward-looking information contained in this material change report is made as of the date hereof and the Company is not obligated to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, except as required by applicable securities laws. Because of the risks, uncertainties and assumptions contained herein, readers should not place any undue reliance on forward looking information.

The forward-looking statements contained in this material change report are made as of the date of the material change, and Next Hydrogen does not undertake any obligation to update publicly or to revise any of the included forward-looking statements, whether as a result of new information, future events or otherwise, except as expressly required by securities law.

This material change report shall not constitute an offer to sell or the solicitation of an offer to buy any securities in any jurisdiction.

**EXHIBIT “A”
NEWS RELEASE**

Next Hydrogen Closes \$20.7M Equity Private Placement led by Smoothwater Capital Corporation

MISSISSAUGA, December 17, 2025 (GLOBENEWSWIRE) – Next Hydrogen Solutions Inc. (“Next Hydrogen” or the “Company”) is pleased to announce the successful closing of its previously announced non-brokered private placement (the “Offering”) of 46,069,198 common shares of the Company (“Common Shares”) at a price of CAD\$0.45 per share (the “Offering Price”), raising gross proceeds of approximately \$20.7 million (inclusive of the Shares for Debt Transaction and the Debenture Conversion, as described below).

The Offering was led by an affiliate of Toronto based Smoothwater Capital Corporation (“Smoothwater”), which has now become the Company’s largest shareholder holding approximately 47.9% of the issued and outstanding Common Shares, ensuring that Next Hydrogen is Canadian owned and controlled.

This financing marks a decisive milestone as Next Hydrogen transitions into a commercially focused, capital-efficient business delivering its next-generation alkaline electrolyzers to market. With a strengthened balance sheet, a fully funded business plan and a proven commercial product now operating in a paying customer environment, Next Hydrogen is focused on becoming cash-flow positive and having broad market adoption of its hydrogen electrolyzer system.

Next Hydrogen intends to use the net proceeds from the Offering to support growing sales and production of its commercially deployed NH-150 electrolyzer, along with the continued development of the larger NH-500 system which is expected to unlock substantial industrial opportunities. In addition, the net proceeds are intended to expand customer engagement and strengthen channel-partner relationships, along with general corporate purposes. Together, these initiatives reinforce a capital-light, scalable model in which Next Hydrogen focuses on electrolyzer stack design while leveraging strategic manufacturing and system-integration partnerships for high-volume deployment.

As a Canadian-controlled public company, Next Hydrogen has successfully developed, installed and is operating its NH-150 electrolyzer in a customer environment, validating its technology as a commercially deployable clean hydrogen solution. The Company’s pressurized alkaline electrolyzers deliver world-class performance, including high current density operation, strong turndown and load following capabilities and cell performance that exceeds U.S. DOE targets, delivering industry-leading green hydrogen production economics.

Purpose-built for direct integration with intermittent renewable power sources such as wind and solar, Next Hydrogen’s system enables true end-to-end green hydrogen production. The Company’s modular architecture supports scalable deployment across a wide range of project sizes and allows the technology to be adapted for multiple applications and industries, including industrial decarbonization, energy storage, transportation and power-to-X solutions, resulting in lower levelized cost of hydrogen for customers. Together, these capabilities position Next Hydrogen as a Canadian clean-technology champion with the potential to support domestic energy security while enabling exportable, globally competitive hydrogen solutions.

The Offering enhances Next Hydrogen’s ability to accelerate deployments with major Canadian and international customers while advancing its strategy to build long-term shareholder value and reinforce Canadian leadership in clean hydrogen technology.

Canadian federal and certain provincial governments continue to advance supportive frameworks and meaningful incentives for clean hydrogen, including an investment tax credit of up to 40% of the capital cost of an eligible clean hydrogen project. This creates a supportive regulatory environment, recognizing clean hydrogen’s role in driving economic growth and energy security. This progress provides a strong foundation for scaling clean hydrogen solutions and building a globally competitive Canadian hydrogen industry, while ongoing

policy development, collaboration and support for R&D remain key to fully realizing the sector's potential in a competitive global market.

Immediately after the closing of the Offering, Stephen Griggs, CEO of Smoothwater, joined the Company as Executive Chair of the Board, bringing deep experience in operational discipline, driving profitable growth across Canadian public companies and public company governance. In addition, Paul Currie, who has been advising the Company throughout this private placement process, has also joined the Board of Directors. Mr. Currie is a seasoned business executive with significant global experience from senior officer and director roles and was formerly a mergers and acquisitions and restructuring partner for one of the leading global accountancy firms. Susan Uthayakumar left the Board following the closing of the Offering.

"Next Hydrogen has entered a new phase," said Mr. Griggs. "By focusing on what we do exceptionally well - designing high-performance electrolyzer modules - and partnering with established channel partners and manufacturers for high-volume electrolyzer production and balance-of-plant, we will deliver superior products in a scalable, capital-light business model. Next Hydrogen will now pursue meaningful commercial opportunities with discipline and speed while continuing our innovations in water electrolysis."

Allan Mackenzie, who stepped down today as Chair of the Board and remains a director, added: "We are very pleased to welcome Stephen Griggs as Executive Chair. His governance expertise and focus on disciplined value creation will be highly complementary to the management team as we enter this next stage of commercial scaling. Paul Currie will bring proven experience that will help guide Next Hydrogen as it pivots from a development focused entity to a commercial product focused business. He has extensive global experience with large technology and manufacturing companies that will add value to the Company as it moves forward. On behalf of the Board, I want to express our sincere gratitude to Susan Uthayakumar for her exceptional contributions. Susan played a critical role in guiding Next Hydrogen through an important period of product maturation and early commercialization. Her experience, steady judgment, and unwavering commitment have meaningfully strengthened our foundation for growth."

"With our NH-150 electrolyzer operating successfully in a commercial setting, we have demonstrated that a Canadian-developed hydrogen solution can compete with the best globally," said Raveel Afzaal, President & CEO of Next Hydrogen. "Our technology is designed for scalable deployment, direct intermittent renewable integration, and long-term regulatory alignment, giving us confidence as we expand across multiple industrial applications."

A total of 42,323,590 Common Shares were issued pursuant to the Offering at the Offering Price for gross cash proceeds of approximately CAD\$19.0 million. No finder's fees or commissions will be paid in connection with the Offering. A consulting fee of \$50,000 was paid to Paul Currie by the issuance of 111,111 Common Shares at the Offering Price on closing of the Offering for prior consulting and advisory services.

In connection with the Offering, the Company has concurrently entered into debt exchange agreements (the "**Debt Exchange Agreements**") with each of the directors or officers of the Company (the "**Creditors**") to settle an aggregate of CAD\$560,527.37 of indebtedness outstanding under loan agreements with each of the Creditors, including principal loan amounts, accrued interest and loan setup fees (the "**Debt**"), in consideration for the issuance of 1,245,610 Common Shares (the "**Debt Shares**") at a deemed price of \$0.45 per Common Share (the "**Shares for Debt Transaction**"). The Debt comprises the outstanding balance owed by the Company to the Creditors under such loan agreements.

In addition and in connection with the Offering, the Company has concurrently entered into debenture conversion agreements (the "**Debenture Conversion Agreements**") with certain holders of debentures of the Company (the "**Debentureholders**") to settle an aggregate of CAD\$1,125,000 principal amount of debentures with such Debentureholders, in consideration for the issuance of 2,499,998 Common Shares (the "**Debenture Shares**") at

a deemed price of \$0.45 per Common Share (the “**Debt Conversion**”). \$1,600,000 of these debentures remain outstanding.

Pursuant to the Debt Exchange Agreements and the Debenture Conversion Agreements, the Debt Shares and the Debenture Shares have been issued at the same price as the Offering in accordance with TSX Venture Exchange (the “**TSXV**”) policies and subject to TSXV approval. No new control person of the Company has been created pursuant to the Shares for Debt Transaction.

The closing of the Offering resulted in the creation of a new Control Person (as such term is defined in the policies of the TSXV). Smoothwater Partners NHX Limited Partnership, a Toronto based affiliate of Smoothwater, subscribed for 33,333,334 Common Shares under the Offering representing 47.9% of the issued and outstanding Common Shares. Pursuant to TSXV policies, the Company received written disinterested shareholder approval, excluding votes from Smoothwater and any of its affiliates, in connection with the creation of Smoothwater Partners NHX Limited Partnership as a Control Person of the Company.

Concurrently with closing of the Offering, the Company also entered into an investor rights agreement with Smoothwater. Pursuant to the investor rights agreement, Smoothwater has the right to nominate and have elected up to 3 directors to the Board for so long as Smoothwater and its affiliates continue to beneficially own at least 30% of the issued and outstanding Common Shares (on a non-diluted basis), including one who will serve as Chair of the Board (who shall at Smoothwater’s option be an Executive Chair), for so long as Smoothwater and its affiliates continue to beneficially own at least 20% of the issued and outstanding Common Shares (on a non-diluted basis). In addition to payments as Chair of the Board, Stephen Griggs will receive an initial grant of 1,000,000 options to purchase Common Shares and a corporation controlled by Mr. Griggs is entitled to a management fee of \$225,000 per year. Smoothwater will also have certain approval rights, as further set out in the investor rights agreement, provided that Smoothwater and its affiliates continue to beneficially own at least 30% of the issued and outstanding Common Shares (on a non-diluted basis), pre-emptive rights and information rights, as further set out in the investor rights agreement, provided that Smoothwater and its affiliates continue to beneficially own at least 5% of the issued and outstanding Common Shares (on a non-diluted basis), and registration rights as set out in the investor rights agreement, provided that Smoothwater and its affiliates continue to beneficially own at least 10% of the issued and outstanding Common Shares (on a non-diluted basis). A copy of the investor rights agreement has been filed on the Company’s profile on SEDAR+.

All securities issued in connection with the Offering (including the Shares for Debt Transaction and the Debenture Conversion) are subject to a hold period of four months and one day from December 17, 2025 in accordance with applicable securities laws.

Each of the directors of the Company (other than Allan Mackenzie) was issued 117,510 Debt Shares in connection with the Shares for Debt Transaction. In addition, Allan Mackenzie, Raveel Afzaal, the Chief Executive Officer of the Company, and Rohan Advani, the Chief Financial Officer of the Company, were issued (directly or indirectly) 587,554 Debt Shares, 47,004 Debt Shares and 23,502 Debt Shares, respectively, in connection with the Shares for Debt Transaction. Allan Mackenzie, Adarsh Mehta and Anthony Guglielmin, each a director of the Company, were also issued (directly or indirectly) 1,111,111 Debenture Shares, 444,444 Debenture Shares and 111,111 Debentures Shares, respectively, in connection with the Debenture Conversion. Finally, Allan Mackenzie, Adarsh Mehta and Raveel Afzaal subscribed for 1,111,111 Common Shares, 1,000,040 Common Shares and 22,222 Common Shares, respectively, under the Offering. Upon closing of the Offering (inclusive of the Shares for Debt Transaction and the Debenture Conversion), the directors and officers of the Company owned or controlled (directly or indirectly) the following percentages of the issued and outstanding Common Shares: Raveel Afzaal (0.3%); Walter Howard (0.5%); Allan Mackenzie (9.7%); Jens Peter Clausen (0.2%); Adarsh Mehta (4.3%); Susan Uthayakumar (0.2%); Anthony Guglielmin (0.7%) and Rohan Advani (0.1%).

The Company has relied on the exemptions from the valuation and minority shareholder approval requirements of Multilateral Instrument 61-101 – *Protection of Minority Security Holders in Special Transactions* (“MI 61-101”) contained in sections 5.5(b) and 5.7(1)(a) of MI 61-101 in respect of such insider participation.

This news release does not constitute an offer to sell or a solicitation of an offer to buy the securities in any jurisdiction where such an offer, solicitation or sale would be unlawful. The TSXV has in no way passed upon the merits of the Offering and has neither approved nor disapproved the contents of this press release.

About Next Hydrogen

Founded in 2007, Next Hydrogen is a designer and manufacturer of hydrogen electrolyzers using water and electricity to generate clean hydrogen for use as an energy source. Next Hydrogen’s unique cell design, supported by 40 patents, enables high current density operations and superior dynamic response to efficiently convert intermittent electricity, particularly from renewables such as wind, solar and nuclear, into hydrogen. Next Hydrogen’s technology delivers commercial solutions to economically decarbonize transportation and industrial sectors.

For further information contact:

Next Hydrogen Solutions Inc.

Raveel Afzaal, President and Chief Executive Officer

Email: rafzaal@nexthydrogen.com

Phone: 647-961-6620

www.nexthydrogen.com

Neither the TSXV nor its Regulation Services Provider (as that term is defined in the policies of the TSXV) accepts responsibility for the adequacy or accuracy of this release.

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 use of proceeds of the Offering and the Company’s focus and go-forward business plans; the risks associated with the hydrogen industry in general; uncertainty with respect to the timing of any contemplated transactions or partnerships, or whether such contemplated transactions or partnerships will be completed at all; the timing for any submissions or correspondences with applicable securities laws regulators; whether the uncertainty of estimates and projections relating to costs and expenses; failure to obtain timely necessary regulatory approvals and all

required TSXV 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.