

**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 12, 2024

ITEM 3. *News Release*

A press release was disseminated on December 13, 2024 through the newswire services of Globenewswire.

ITEM 4. *Summary of Material Change*

On December 12, 2024, Mr. Guglielmin, a director and an insider of the Company, acquired \$50,000 principal amount of unsecured, convertible 10.0% debentures (“**Debentures**”). Mr. MacKenzie, a control person and an insider of the Company, acquired \$500,000 principal amount of Debentures.

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 13, 2024

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 Solutions Inc. Announces Closing of Private Placement of Unsecured Convertible
Debentures**

MISSISSAUGA, December 13, 2024 (GLOBENEWSWIRE) - Next Hydrogen Solutions Inc. (TSXV: NXH, OTC: NXHSF) (“**Next Hydrogen**” or the “**Company**”), announced today that it has completed a closing of its previously announced offering (the “**Offering**”), on a private placement basis, of 10% unsecured convertible debentures of the Company (the “**Debentures**”). Pursuant to the Offering, the Company has issued and sold 2,725 Debentures for aggregate gross proceeds to the Company of C\$2,725,000.

“We are grateful to our shareholders for driving a successful outcome for this strategic offering,” said Raveel Afzaal, President & CEO. “This offering coupled with (1) \$4.8M in approved government grants and \$1.7M in advanced discussions and (2) up to \$5M working capital debt financing Letter of Interest from EDC provides us with good visibility to meet our capital requirements for 2025. In addition, we are in advanced strategic discussions which include technology licensing opportunities in attractive geographies which have the potential to capitalize us for 2026 and beyond.”

The Debentures shall mature on the earlier of the following to occur: (i) 24 months from the date of issuance; (ii) on (x) a sale, merger, arrangement, amalgamation, business combination, or other transaction or series of transactions which results in a person other than the shareholders of the Company immediately prior to such transaction holding more than 50% of the votes attributable to the shares of the surviving issuer or acquiring corporation; or (y) the sale, lease, transfer, exclusive license, or other disposition of all of substantially all of the assets of the Company, unless such sale, lease, transfer, license or disposition is to a wholly-owned subsidiary of the Company; or (iii) on any demand for payment as a result of an event of default under the terms of the Debenture.

The Debentures shall bear interest at a rate of 10.0% per annum from the date of issue, calculated and paid in cash on a semi-annual basis. The holders of the Debentures may elect to convert the principal and all accrued, but unpaid interest under the Debenture into that amount of common shares of the Company (“**Common Shares**”), computed on the basis of the outstanding principal and all accrued, but unpaid interest under the Debenture divided by the conversion price, which shall mean: (i) in respect of the principal amount of the Debenture outstanding, \$1.00 per Common Share; and (ii) in respect of any interest accrued but unpaid thereon, \$1.00 per Common Share or the last closing price of the Common Shares listed for trading on the TSX Venture Exchange (the “**TSXV**”) before the date of conversion, whichever is greater. Any conversion of interest accrued but unpaid thereon into Common Shares will be subject to the prior approval of the TSXV.

Mr. MacKenzie, a control person and director of the Company, has subscribed for \$500,000 principal amount of Debentures in the Offering. Mr. Guglielmin, a director and an insider of the Company, has subscribed for \$50,000 principal amount of Debentures in the Offering. 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.

The proceeds of the Offering will be used for working capital and for general corporate purposes.

The Company has not paid any finder’s fees in connection with the Offering.

The completion of the Offering remains subject to the final approval of the TSXV. All securities issued pursuant to the Offering are subject to a statutory four month hold period from their date of issuance.

None of the securities issued in connection with the Offering will be registered under the United States Securities Act of 1933, as amended (the “**1933 Act**”), and none of them may be offered or sold in the United States absent registration or an applicable exemption from the registration requirements of the 1933 Act. This press release shall not constitute an offer to sell or a solicitation of an offer to buy nor shall there be any sale of the securities in any state where such offer, solicitation, or sale would be unlawful.

About Next Hydrogen

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 40 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.

Contact Information

Raveel Afzaal, President and Chief Executive Officer
Next Hydrogen Solutions Inc.
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.

Notice regarding forward-looking statements:

Certain statements in this press release 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 press release include statements regarding: the Offering, the use of proceeds of the Offering, approved and potential government grants and the Letter of Interest from EDC with respect to a working capital debt financing. 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 press release 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; risks associated with the Corporation’s ability to fulfil the technical, environmental, social and governance, financial and commercial due diligence required by EDC, risks associated with the ability to negotiate the government grants or the EDC working capital debt financing on terms acceptable to the Corporation and risks associated with such grants or working capital debt financing closing as planned or at all. 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 press release 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.