



Next Hydrogen Solutions Inc.
Management's Discussion and Analysis

For the second quarter ended

June 30, 2026

Dated August 17, 2026

General Information

The following is the management discussion and analysis ("MD&A") of Next Hydrogen Solutions Inc. (the "Company") which provides a comparative overview of the Company's performance for the six months ended June 30, 2026 with the corresponding six-month period ended June 30, 2025, and reviews the Company's financial position as at June 30, 2026. Throughout this MD&A, the term "Company" or "Next Hydrogen" shall mean Next Hydrogen Solutions Inc. and all of its wholly-owned subsidiaries. This discussion should be read in conjunction with the Company's MD&A, audited consolidated financial statements and accompanying notes as at and for the year ended December 31, 2025, as well as the unaudited condensed interim consolidated financial statements of the Company for the second quarter ended June 30, 2026 ("interim consolidated financial statements").

The Company's functional and presentation currency is the Canadian dollar. All financial information presented has been rounded to the nearest dollar, except per share amounts and where otherwise indicated. The Company's interim consolidated financial statements for the second quarter ended June 30, 2026, were approved by its Board of Directors on August 17, 2026. Readers are cautioned that certain information included herein is forward-looking and based upon assumptions and anticipated results that are subject to uncertainties. Should one or more of these uncertainties materialize or should the underlying assumption prove incorrect, actual results may vary significantly from those expected. See "Forward Looking Statements" and "Risks and Uncertainties".

Unless otherwise indicated, the information in this report is dated as of August 17, 2026. Additional information relating to the Company is available on SEDAR+ at www.sedarplus.ca.

Operational Highlights

Management highlights a number of recent milestones that demonstrate progress in 2025 and 2026:

- In July 2026, Next Hydrogen announced that President and Chief Executive Officer, Raveel Afzaal, will transition from the CEO role in Fall 2026. The Company announced on August 17, 2026 that it has appointed Jocelyn Moyer as the President and Chief Executive Officer effective September 1, 2026, at which time Mr. Afzaal will leave the Company as an officer and director. Ms. Moyer holds a Bachelor of Engineering and Management in Mechanical Engineering from McMaster University and a Master of Business Administration from Harvard Business School. She began her career in front line plant and operations management and in supply chain optimization with major companies including Maple Leaf Foods and PepsiCo. She also worked from 2016 to 2022 at Bain & Company advising senior executive teams of industry leading companies on critical strategic issues. Ms. Moyer joined Heliolytics in 2022 as Director of Strategy and Operations and became General Manager in 2023, shortly before its acquisition by Zeitview. She held progressively senior roles at Zeitview, leaving as SVP Strategy and Operations in May 2026.
- In June 2026, Next Hydrogen announced a collaboration agreement with Fusion Fuel Cycles Inc. ("FFC"), to demonstrate purpose-built electrolyzers for the fusion industry. The collaboration builds on the two contracts awarded by FFC to Next Hydrogen in March 2026. Under these contracts, Next Hydrogen will engineer and deliver an electrolyzer for the extraction of tritium — the fuel of fusion — from heavy water, to be integrated into FFC's overall fusion fueling system. The collaboration represents an important step

in advancing Next Hydrogen's technology for specialized fusion applications and deepening its engagement with FFC.

- In March 2026, Next Hydrogen was awarded two contracts with a combined value of approximately \$3.75 million to demonstrate our advanced electrolyzer technology solution within a highly specialized nuclear fusion application. Under these agreements, Next Hydrogen will deliver a customized electrolyzer system tailored to the stringent performance, reliability and operating parameters required within advanced nuclear environments. Revenue under these contracts is expected to be fully earned by Q1 2027, with the majority earned during 2026. The award further validates the technical differentiation of the Company's electrolyzer platform and its suitability for some of the most demanding industrial applications.
- In December 2025, Next Hydrogen closed a non-brokered private placement ("Private Placement") of 46,180,309 common shares at \$0.45 per share, raising gross proceeds of approximately \$20.7 million (inclusive of \$560,527 in debt conversion and \$1,125,000 in debenture conversion). The offering was led by an affiliate of Smoothwater Capital Corporation, which became the Company's largest shareholder with approximately 48.1% ownership. Stephen Griggs, CEO of Smoothwater, joined the Company as Executive Chair of the Board. This financing positions the Company to accelerate commercialization of its NH-150 electrolyzer which is in commercial operation, to continue research and development of its technology and to execute a capital-light growth strategy to achieve cash-flow positivity.
- In July 2025, Next Hydrogen announced the successful commencement of operations of its first-of-a-kind electrolyzer for hydrogen fueling at a major distribution centre in Bolton, Ontario. This was the inauguration of Ontario's largest onsite clean hydrogen generation and fueling station, designed to produce up to 650 kg of hydrogen per day to support fuel cell powered forklifts.
- In April 2025, Next Hydrogen received a \$5 million working capital debt facility from Export Development Canada ("EDC").

Business Overview

Founded in 2007, Next Hydrogen's innovative water electrolysis technology with patented cell architecture, is designed to efficiently convert intermittent renewable electric power sources into clean hydrogen on an infrastructure scale.

Next Hydrogen's team has spent more than a decade revolutionizing the design architecture of the electrolyzer to optimize it for intermittent electrical power, such as from renewable energy. To date, it has been awarded 40 patents across multiple jurisdictions. The innovation in cell design architecture enables superior operational flexibility to use intermittent electrical energy with smaller or fewer units than traditional electrolyzer designs. Next Hydrogen believes its unique design enables high current density operations, a superior dynamic response and inherent scalability, being strong technological advantages to reduce the cost of green hydrogen generation.

The Company's advanced electrolyzer module design uses a new and fundamentally different approach to fluid flows in water electrolyzers. Fluid flows are maintained separately in each half cell chamber or "slice" of the electrolyzer module, whereas conventional designs collect all the fluid flows in internal manifolds of the electrolyzer module which are then separated from the gas in external gas liquid separators. Next Hydrogen's design can handle higher fluid flow rates and higher gas generation rates, which in turn enables its system to make more hydrogen, particularly whenever low-cost electricity is available.

Next Hydrogen's hydrogen electrolyzer makes hydrogen from water and electricity using water electrolysis to generate high purity hydrogen on demand. The electrolyzer module is combined with balance of plant equipment including power, controls, gas purification, closed loop cooling and water treatment. The process typically works by first converting AC electricity to DC electricity, which powers the electrolyzer module. Inside the electrolyzer module, water is converted by the DC electricity into hydrogen and oxygen gases. Hydrogen, typically the product gas, is cleaned and sent to the user's processing system and/or hydrogen storage. The system is automatically controlled and operates with minimal oversight. It can be packaged in sea containers for ease of shipping and installation and outdoor installation.

Results of Operations

Financial Highlights

	3 months ended June 30, 2026	3 months ended June 30, 2025	6 months ended June 30, 2026	6 months ended June 30, 2025
Revenue	\$ 878,738	\$ 274,652	\$ 1,179,621	\$ 606,516
Expenses				
Cost of sales	914,256	581,859	1,528,546	766,391
Research and development	1,309,823	1,000,448	2,461,370	2,603,638
General and administrative	1,007,158	1,286,526	2,153,424	2,453,879
Marketing and sales	437,245	93,894	516,349	249,841
Loss before the following	(2,789,744)	(2,688,075)	(5,480,068)	(5,467,233)
Finance costs, net	139,003	231,937	244,090	393,191
Net Loss and comprehensive loss	\$ (2,928,747)	\$ (2,920,012)	\$ (5,724,158)	\$ (5,860,424)
Loss per share - basic	\$ (0.04)	\$ (0.13)	\$ (0.08)	\$ (0.26)
Loss per share - diluted	\$ (0.04)	\$ (0.13)	\$ (0.08)	\$ (0.26)

Revenue

	3 months ended June 30, 2026	3 months ended June 30, 2025	6 months ended June 30, 2026	6 months ended June 30, 2025	3 month \$ Change	3 month % Change	6 months \$ Change	6 months % Change
Revenue	\$ 878,738	\$ 274,652	\$ 1,179,621	\$ 606,516	\$ 604,086	220 %	\$ 573,105	94 %

Next Hydrogen is in the stage of product commercialization. The Company recorded \$878,738 (three months ended June 30, 2025 — \$274,652) as revenue during the three-month period ended June 30, 2026, and \$1,179,621 (six months ended June 30, 2025 — \$606,516) for the six-month period ended June 30, 2026. Revenue comprised of service revenue under ongoing service and maintenance agreements and development contract revenue recognized under the two nuclear application contracts awarded in March 2026. The increase of \$604,086 (220%) and \$573,105 (94%) for the three and six-month periods respectively reflects the commencement of revenue recognition on these contracts as performance obligations began to be satisfied, as well as higher service revenue compared to the same periods in the prior year. The two nuclear application contracts, with a combined value of approximately \$3.75 million, are expected to be substantially recognized during 2026, with the balance through the first quarter of 2027 as performance obligations are satisfied.

During the six months ended June 30, 2026, two customers accounted for 51% and 49% of revenues (six months ended June 30, 2025 — two customers accounted for 53% and 38% of revenues).

As at June 30, 2026, the Company had \$3,078,022 in deferred revenue (December 31, 2025 — \$2,677,693), of which \$1,211,195 is classified as current and is expected to be recognized over the next twelve months.

Management's Discussion and Analysis for the second quarter ended June 30, 2026

Expenses

	3 months ended June 30, 2026	3 months ended June 30, 2025	6 months ended June 30, 2026	6 months ended June 30, 2025	3 months \$ Change	3 months % Change	6 months \$ Change	6 months % Change
Cost of sales	\$ 914,256	\$ 581,859	\$ 1,528,546	\$ 766,391	\$ 332,397	57 %	\$ 762,155	99 %
Research and development	1,309,823	1,000,448	2,461,370	2,603,638	309,375	31 %	(142,268)	(5)%
General and administrative	1,007,158	1,286,526	2,153,424	2,453,879	(279,368)	(22)%	(300,455)	(12)%
Marketing and sales	437,245	93,894	516,349	249,841	343,351	366 %	266,508	107 %
	\$ 3,668,482	\$ 2,962,727	\$ 6,659,689	\$ 6,073,749	\$ 705,755	24 %	\$ 585,940	10 %

Cost of sales increased by \$332,397, or 57%, for the three-month period and by \$762,155, or 99%, for the six-month period ended June 30, 2026, compared to the same periods in 2025. Cost of sales relating to service revenue increased by \$227,591 and \$265,157 for the three- and six-month periods respectively, reflecting the expanded scope of service activities following the commissioning of the customer's hydrogen fueling site in July 2025. Cost of sales relating to development revenue increased by \$104,806 and \$496,999 for the three- and six-month periods respectively, reflecting work on the two nuclear application contracts awarded in March 2026.

Research and development expenses increased by \$309,375, or 31%, for the three-month period and decreased by \$142,268, or 5%, for the six-month period ended June 30, 2026 compared to the same periods in 2025. Research and development expenses have remained consistent with prior periods. The Company is currently focused on standardizing its existing product line.

General and administrative expenses decreased by \$279,368 or 22%, for the three-month period and by \$300,455, or 12%, for the six-month period ended June 30, 2026 compared to the same periods in 2025. The decreases were primarily driven by lower legal and professional fees.

Marketing and sales expenses increased by \$343,351 or 366%, for the three-month period and by \$266,508 or 107%, for the six-month period ended June 30, 2026 compared to the same periods in 2025. The Company has increased headcount in its business development function as it advances its commercialization efforts.

Summary of Quarterly Results

The following table sets out quarterly financial information for the Company's eight most recently completed quarters.

(in thousands)	Q2'26	Q1'26	Q4'25	Q3'25	Q2'25	Q1'25	Q4'24	Q3'24
Revenue	879	301	523	2,291	275	332	115	120
Profit / (loss) from operations	(2,790)	(2,690)	(1,322)	384	(2,688)	(2,779)	(3,353)	(3,895)
Net profit / (loss) and comprehensive profit / (loss)	(2,929)	(2,795)	(1,880)	88	(2,920)	(2,940)	(3,361)	(3,922)
Profit / (loss) per share - Basic	(0.04)	(0.04)	(0.06)	0.00	(0.13)	(0.13)	(0.17)	(0.17)
Profit / (loss) per share - Diluted	(0.04)	(0.04)	(0.06)	0.00	(0.13)	(0.13)	(0.17)	(0.17)

Quarterly revenues and operating results have varied materially across periods, reflecting the timing of contract milestones, project-based revenue recognition, and the nature of the Company's commercialization activities. Q2 2026 revenues of \$878,738 reflect both ongoing service revenue and the commencement of revenue recognition under the two nuclear application contracts awarded in March 2026. The elevated Q3 2025 revenues reflected the recognition of cumulative revenue under a nuclear application development contract following a change in estimate of costs to complete. Activity under that contract was paused from Q3 2024 through Q2 2025 and the contract was completed in 2025. Q4 2025 results were impacted by the recognition of an onerous contract provision in connection with a hydrogen fueling project. The Q1 and Q2 2026 net loss is broadly comparable to the net loss recorded in Q1 and Q2 2025.

Given the concentrated nature of the Company's current customer base and the project-based character of its revenue streams, quarterly results may fluctuate materially as contracts are initiated, progressed, or completed. Management expects this variability to moderate as the Company builds a broader pipeline of commercialized electrolyzer deployments and recurring service agreements.

Liquidity and Capital Resources

	June 30, 2026	Dec 31, 2025
Cash and cash equivalents	\$ 12,170,278	\$ 18,516,086
Working capital ⁽¹⁾	6,597,154	12,388,279
Total assets	24,369,797	28,972,538
Debt ⁽²⁾	6,959,483	6,793,562
Shareholders' equity	6,896,804	12,083,271

⁽¹⁾ Working capital is defined as current assets minus current liabilities.

⁽²⁾ Debt includes both current and non-current portions of long-term debt and convertible debentures. Finance lease liability has been excluded as it pertains to the Company's head office and assembly facility lease.

Cash and cash equivalents, working capital, total assets, and shareholders' equity decreased during the six months ended June 30, 2026 by \$6.3 million, \$5.8 million, \$4.6 million, and \$5.2 million, respectively, primarily reflecting the use of cash to fund operating activities and capital expenditures during the period.

Management's Discussion and Analysis for the second quarter ended June 30, 2026

The Company expects to progress towards cash flow positive operations over the medium term as it executes its commercialization strategy, increases its sales pipeline and continues to invest in product development to advance its technology. Achieving this remains dependent upon, among other things, the timing and outcome of commercial contracts and financing initiatives.

For the six months ended June 30, 2026, the Company had a net loss of \$5,724,158, negative cash flow from operations of \$5,909,655, and as at June 30, 2026 had cash and cash equivalents of \$12,170,278 and working capital (current assets less current liabilities) of \$6,597,154. The Company has long-term debt of \$3,988,838 maturing in November 2026, another debt of \$308,693 due over the next year and a convertible debenture of \$1,564,757 maturing in December 2026. As more fully described in the Capital Requirements section, these circumstances represent a material uncertainty that casts significant doubt on the Company's ability to continue as a going concern.

The following table sets out the Company's contractual obligations:

(in thousands)	Total	1 Year	2 Years	3 Years	4 Years	5 Years	After 5 Years
Trade and other payables	\$ 1,366	\$ 1,366	\$ —	\$ —	\$ —	\$ —	\$ —
Finance lease liability	4,406	393	410	421	432	444	2,306
Convertible debt	1,680	1,680	—	—	—	—	—
Long-term debt	6,117	4,484	400	400	400	400	33

As of June 30, 2026, the Company had 69,312,949 common shares, 4,076,626 stock options, and 705,809 deferred share units outstanding.

Subsequent Events

Subsequent to June 30, 2026, the employment of the Company's President and Chief Executive Officer was terminated effective August 31, 2026. In accordance with the terms of his employment agreement, the Company recognized termination benefits of \$175,000 in the third quarter of 2026. As the termination occurred after the reporting date, this is a non-adjusting event and no amount has been recognized in the interim consolidated financial statements as at June 30, 2026.

Effective September 1, 2026, the Company appointed Jocelyne Moyer as President and Chief Executive Officer of the Company and its subsidiaries and as a director of the Company.

Forward-Looking Statements

Certain sections of this MD&A may contain "forward-looking statements" within the meaning of applicable securities legislation. All statements, other than statements of historical fact, made by the Company that address activities, events or developments that the Company expects or anticipates will or may occur in the future are forward-looking statements, including, but not limited to, statements preceded by, followed by or that include words such as "may", "will", "would", "could", "should", "believes", "estimates", "projects", "potential", "expects", "plans", "intends", "anticipates", "targeted", "continues", "forecasts", "designed", "goal", or the negative of those words or other similar or comparable words. Forward-looking statements may relate to the Company's future financial conditions, results of operations, plans, objectives, performance or business developments. Forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable by the Company as of the date of such statements, are inherently subject to significant business, economic and competitive uncertainties and contingencies. Known and unknown factors could cause actual results to differ materially from those projected in the forward-looking statements.

There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Forward-looking statements are provided for the purpose of providing information about management's expectations and plans relating to the future. All of the forward-looking statements made in this MD&A are qualified by these cautionary statements and those made in our other filings with applicable securities regulators in Canada. The Company disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, or to explain any material difference between subsequent actual events and such forward-looking statements, except to the extent required by applicable law.

Critical Accounting Estimates

The preparation of consolidated financial statements in accordance with IFRS requires management to make judgments that affect the application of accounting policies and the interpretation of accounting standards, and to make estimates and assumptions which affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the reported amounts of revenues and expenses. Management makes estimates based on specific facts or circumstances as well as past experiences. Management periodically reviews its estimates and underlying assumptions and as adjustments become necessary, they are reported in profit and loss in the period in which they become known. Due to the inherent uncertainty involved with making such estimates, actual results could differ from those reported.

A detailed description of the Company's critical accounting estimates can be found in the most recent audited annual consolidated financial statements.

Changes in Accounting Standards

Please refer to the most recent audited annual consolidated financial statements.

Future Accounting Pronouncements

Please refer to the most recent audited annual consolidated financial statements.

Risks and Uncertainties

Any investment in the securities of the Company is speculative due to the nature of its business and stage of development. There are a number of risk factors that could materially affect the Company's future operating results and could cause actual events to differ materially from those described in the forward-looking statements related to the Company. In addition to the usual risks associated with an investment in a business, investors should carefully consider the following risk factors and the risk factors set out in the Company's various public disclosure documents. If any of the noted risks actually occur, the business may be harmed and the financial condition and results of operations may suffer significantly. In that event, the trading price of the common shares could decline, and shareholders may lose all or part of their investment. Additional risks and uncertainties not presently known to us or that we currently consider immaterial also may impair our business and operations.

Capital Requirements

Next Hydrogen continues to execute its commercialization strategy and invest in product development. As at June 30, 2026, the Company had cash and cash equivalents of \$12,170,278 and working capital of \$6,597,154, following December 2025 Private Placement. The Company has long-term debt of \$5,394,726, including an Export Development Canada ("EDC") facility with a carrying amount of \$3,988,838 maturing in November 2026, and a convertible debenture of \$1,564,757 maturing in December 2026. The continuation of the Company as a going concern is dependent upon its ability to meet the relevant criteria of government grants and positive margin revenue contracts for additional funds to be received and obtaining financing through equity or debt. There can be no assurance that the Company will be able to obtain adequate financing in the future or on terms acceptable to the Company. These circumstances represent a material uncertainty that casts significant doubt on the Company's ability to continue as a going concern.

Operations

Next Hydrogen is subject to risks relating to the industry in which it operates, which include risks relating to the changes in the global and local industry and risks relating to changes in regulations. With respect to the continuing development of the renewable energy industry, Next Hydrogen is subject to the risk that its technology is relatively new and not commercially proven over an extended period of time. As a result, assumptions and estimates regarding the performance of its technology are made based on limited commercial operating history to date. The projects undertaken by Next Hydrogen are generally capital intensive, require significant time to develop, are technically complex and are physically large. As a result, Next Hydrogen is subject to risks relating to completion of projects, cost overruns, the availability of financing for such projects, and the ability to complete projects in geographically challenging locations. With respect to regulation, the industries in which Next Hydrogen operates are generally heavily regulated. As a result, Next Hydrogen is subject to risks relating to compliance with comprehensive regulations in multiple jurisdictions, and the risk that laws and regulatory requirements can change in a manner adverse to Next Hydrogen.

Development of the Clean Power Industry

Next Hydrogen operates in a rapidly evolving industry and accordingly is subject to risks relating to the development of that industry generally, and the technology underlying that industry. Accordingly, the business and future prospects of Next Hydrogen may be difficult to evaluate. Next Hydrogen cannot accurately predict the extent to which demand for products and services developed by Next Hydrogen will develop and/or

increase, if at all. The success of Next Hydrogen also will depend on traditional business factors such as the ability to develop or market new products and the ability to properly execute corporate strategies. In addition, the regulation of issuers using such technologies or operating in such markets may undergo substantial change and the ultimate regulatory treatment of such technologies and markets is uncertain, which could affect the viability and expansion of such technologies and markets. In addition, because such technologies and markets may operate across many national boundaries, it is possible that they will be subject to widespread and inconsistent regulation. Any adverse developments that affect any of such technologies or markets could impact Next Hydrogen, thereby negatively impacting the value of Next Hydrogen's investments and/or the ability of Next Hydrogen to pay dividends or distributions.

Commercialization

While Next Hydrogen has commenced commercial scale operations, continued success in scaling its electrolyzer business requires ongoing improvements to the durability, reliability and performance of its products, as well as the development of higher-volume manufacturing processes and its supply chain to reduce unit costs. Product iteration and refinement are a normal course of technology commercialization; however, there is an inherent risk that such iterations may result in delays, additional development costs, or performance outcomes that differ from those anticipated, which could affect the pace of commercialization. Next Hydrogen may not be able to sufficiently reduce the cost of these products without reducing their performance, reliability and durability, which would adversely affect the willingness of customers to buy its products. Next Hydrogen cannot guarantee that it will be able to internally develop the technology necessary to sell its electrolyzer products on a commercially viable basis.

Before Next Hydrogen releases any products to market, Next Hydrogen subjects its products to numerous lab and field tests. These tests may encounter problems and delays for a number of reasons, many of which are beyond Next Hydrogen's control. If these tests reveal technical defects or reveal that its products do not meet performance goals, Next Hydrogen's anticipated timeline for selling its products on a commercially viable basis could be delayed, and potential purchasers may decline to purchase its products.

Market Demand

Next Hydrogen's products are intended for use in new and emerging markets and end-user adoption remains difficult to quantify. In such emerging markets, demand and market acceptance for recently introduced products and services are subject to a high level of uncertainty and risk. The development of a mass market for Next Hydrogen's electrolyzers may be affected by many factors, many of which are beyond Next Hydrogen's control, including the emergence of newer, more competitive technologies and products, the cost of inputs used by Next Hydrogen's products, supply costs and supply chain constraints, regulatory requirements, customer perceptions of the safety of its products, and end-user reluctance to buy a new product.

If a material market fails to develop, or develops more slowly than anticipated, Next Hydrogen may never achieve profitability. Moreover, Next Hydrogen cannot guarantee that Next Hydrogen will continue to develop, manufacture or market its products if sales levels do not support the continuation of its products.

Warranty Claims and Product Performance

There is a risk that Next Hydrogen's warranty accrual estimates are not sufficient and Next Hydrogen may recognize additional expenses, including those related to litigation, as a result of warranty claims in excess

of its current product performance expectations. Such warranty claims may necessitate changes to its products or manufacturing processes up to and including a product recall, all of which could hurt the reputation of Next Hydrogen and its products and may have a significant adverse impact on its financial performance and/or on future sales. While Next Hydrogen mitigates these risks through product development, quality assurance and customer support and service processes, there can be no assurance that these processes are adequate. Even in the absence of any warranty claims, a product deficiency such as a design or manufacturing defect could be identified, necessitating a product recall or other corrective measures, which could hurt Next Hydrogen's reputation and the reputation of its products and may have an adverse impact on its financial performance and/or future sales.

New products may have different performance characteristics from previous products. In addition, Next Hydrogen has limited field experience with its existing commercial products from which to make its warranty accrual estimates.

Intellectual property

Failure to protect Next Hydrogen's existing intellectual property rights may result in the loss of its exclusivity regarding, or right to use, its technologies. If Next Hydrogen does not adequately ensure its freedom to use certain technology, Next Hydrogen may have to pay others for rights to use their intellectual property, pay damages for infringement or misappropriation, or be enjoined from using such intellectual property. Next Hydrogen relies on patent, trade secret, trademark and copyright laws to protect its intellectual property. Some of its intellectual property is not covered by any patent or patent application, and the patents to which Next Hydrogen currently has rights expire between July 2028 and October 2034. Next Hydrogen's present or future-issued patents may not protect its technological leadership, and its patent portfolio may not continue to grow at the same rate as it has in the past. Moreover, Next Hydrogen's patent position is subject to complex factual and legal issues that may give rise to uncertainty as to the validity, scope and enforceability of a particular patent. Accordingly, there is no assurance that: (i) any of the patents owned by Next Hydrogen will not be invalidated, circumvented, challenged, or rendered unenforceable; or (ii) any of its pending or future patent applications will be issued with the breadth of claim coverage sought by Next Hydrogen, if issued at all. In addition, effective patent, trade secret, trademark and copyright protection may be unavailable, limited or not applied for in certain countries.

Next Hydrogen also seeks to protect its proprietary intellectual property, including intellectual property that may not be patented or patentable, in part by confidentiality agreements and, if applicable, inventors' rights agreements with its strategic partners and employees. Next Hydrogen can provide no assurance that these agreements will not be breached, that Next Hydrogen will have adequate remedies for any breach, or that such persons or institutions will not assert rights to intellectual property arising out of these relationships.

Next Hydrogen may become subject to lawsuits in which it is alleged that Next Hydrogen has infringed the intellectual property rights of others or commence lawsuits against others who Next Hydrogen believes are infringing upon its rights. Next Hydrogen's involvement in intellectual property litigation could result in significant expense to Next Hydrogen, adversely affecting the development of sales of the challenged product or intellectual property and diverting the efforts of its technical and management personnel, whether or not such litigation is resolved in its favour.

Competitive Industry Environment

The alternative energy industry is highly competitive in all of its phases, both domestically and internationally. The Company's ability to develop hydrogen technology is based on its ability to secure talented personnel and secure supply of goods necessary to build electrolyzers, of which there may be a limited supply. The Company may also encounter competition from other companies in its efforts to hire experienced engineering and development professionals. Competition could adversely affect the Company's ability to attract necessary funding or acquire prospects for strategic partnerships in the future. Competition for services and equipment could result in delays if such services or equipment cannot be obtained in a timely manner due to inadequate availability, and could also cause scheduling difficulties and cost increases due to the need to coordinate the availability of services or equipment, any of which could materially increase project development or construction costs and result in project delays.

Product Safety Risk

Safety is the top priority of the Company and Management and all employees are strongly committed to delivering fail-safe products to our customers. The product safety risks include the risk from major accidents and/or malfunctions in our products and/or insufficient service during operations and maintenance. The product safety risk is further increased due to Next Hydrogen's new and unique product line.

Technology and Competition Risk

The green-energy sector, and hydrogen production in particular, is witnessing significant development. This not only results in increased competition, but also increased activity in research and development across the hydrogen industry. There is inherent risk that some of the technology developed by Next Hydrogen becomes obsolete. There is a degree of uncertainty that green hydrogen emerges as the preferred technology, which poses a direct risk to Next Hydrogen's technology and how the Company seeks to outperform competition.

Cybersecurity

The Company relies on digital and internet technologies to conduct and expand its operations, including reliance on information technology to process, transmit and store sensitive and confidential data, including personally identifiable information, and proprietary and confidential business performance data. As a result, the Company and/or its customers are exposed to risks related to cybersecurity. Such risks may include unauthorized access, use, or disclosure of sensitive information (including proprietary business information), corruption or destruction of data, or operational disruption resulting from systems impairment (e.g., malware and ransomware). Third parties to whom the Company outsources certain functions, their service providers and subcontractors, and third parties with whom their systems interface, are also subject to the risks outlined above and may not have or use appropriate controls to protect confidential information and business systems. A breach or attack affecting a third-party service provider or partner could harm the Company's business even if the Company does not control the service that is attacked or directly contract with an affected entity. Further, the Company has noted increases in frequency and sophistication of cybersecurity attacks in general as a result of the use of artificial intelligence by threat actors.

Expansion Risk

The pressures faced by Next Hydrogen to expand its facilities, staff and operations may place high demands on the Company's overhead, technical, financial and other resources. The Company is currently relatively lean and there is a degree of risk associated with the Company's ability to build a capable organization at a speed that is required to meet the demand by its customers or potential customers. Next Hydrogen's failure to manage its growth effectively or to manage its expansion strategy in a timely manner may significantly harm its ability to achieve profitability.

Third Party Dependence Risk

The Company is involved in electrolyzer manufacturing and therefore relies on external subcontractors and suppliers for component goods and services. This operating model poses risk to Next Hydrogen's goodwill and branding, as suppliers may fail to meet environmental, human rights, labour, and product quality standards. Next Hydrogen aims to limit risk through careful sourcing of critical components and prefers suppliers with local legislation compliance. However, if Next Hydrogen fails to maintain relationships with its suppliers or faces supply disruptions, it may experience delays in manufacturing, higher costs, order cancellations, customer claims, and loss of market share.

Project Risk

Next Hydrogen's participation in large commercial projects exposes it to risks such as delays and cost overruns due to various factors including delivery delays or shortages of key equipment, design problems, labour disputes, safety hazards, disputes with suppliers, changes in customer specifications, adverse weather conditions, and regulatory approvals or permits delays. Failure to complete a commercial project on time may result in contract delays, renegotiation, or cancellation, and can negatively impact Next Hydrogen's reputation and customer relationships. Next Hydrogen may also face contractual penalties for not completing the project on time, which could adversely affect its business, financial condition, and results of operations.

Key Personnel Risk

Next Hydrogen's growth, development and commercialization will depend on the efforts of key management and other key personnel. Loss of any of these people, particularly to competitors, could have a material adverse effect on Next Hydrogen's business. The marketplace for key skilled personnel is competitive, which means the cost of hiring, training and retaining such personnel may increase. Factors outside Next Hydrogen's control, including competition for human capital and the high level of technical expertise and experience required to execute this development, will affect Next Hydrogen's ability to employ the specific personnel required. Due to the relatively small size of Next Hydrogen, the failure to retain or attract a sufficient number of key skilled personnel could have a material adverse effect on Next Hydrogen's business, results of future operations and financial condition.

Customer Risk

Next Hydrogen's growth and revenue generation depend heavily on its ability to maintain relationships with existing customers and to acquire new customers. However, there is no guarantee that Next Hydrogen will be successful in securing new customers or maintaining existing customer relationships in the future.

Adverse Publicity and Product Liability Risk

Next Hydrogen's products could potentially result in product liability claims due to malfunctions, defects, improper installation or other causes, which could result in adverse publicity and significant monetary damages. The successful assertion of such claims could have a significant negative impact on Next Hydrogen's business, prospects, financial results, and operations. As of the date of this MD&A, Next Hydrogen is not aware of any current or pending product liability claims against the Company.

Market Development Risk

Next Hydrogen's revenues may be significantly harmed if significant markets for fueling products, other hydrogen energy products or renewable energy as a major source for hydrogen production do not develop or develop more slowly than anticipated. This could result in Next Hydrogen being unable to recover the expenditures it has incurred and expects to incur in the development of its products.

Regulatory Risk

Next Hydrogen's operations are subject to numerous environmental requirements, including laws and regulations related to air pollution emissions, wastewater discharges, waste management and hazardous materials handling. Compliance with these requirements can be costly and may increase over time. Breaches of allowed emission limits granted by various authorities could result in temporary production halts, fines, and corrective measures, which may have a significant effect on Next Hydrogen's operations.

Next Hydrogen's hydrogen industry is currently not subject to industry-specific government regulations in certain jurisdictions, but the Company expects to encounter such regulations in the future, which may impact its development and growth. Changes in environmental policies or government subsidies could also adversely affect Next Hydrogen's business, as it depends substantially on government programs and grants. Political developments or judicial review of government financial support could result in the discontinuation or reduction of government support, leading to lower profitability and adverse effects on Next Hydrogen's business, financial condition, and results of operations.

Climate Related Risks

Next Hydrogen recognizes that while climate change is a major trend, the anticipated role of green hydrogen in mitigating climate change could change due to geopolitical factors shaping climate policies. Next Hydrogen does not expect to be significantly impacted by potential carbon taxes or restrictions on carbon-intensive assets.

Reputation Risk

Next Hydrogen acknowledges the importance of maintaining a strong brand in the green hydrogen industry. Reputational risk for Next Hydrogen includes potential damage to brand value resulting in lost opportunities, challenges in talent recruitment and retention leading to technology development disruptions and customer experience issues, and difficulties in attracting investors due to a damaged reputation that could impact the Company's ongoing operations.

Physical Risk

Next Hydrogen's manufacturing facilities are not situated in environments that are excessively exposed to physical risks, including sustained long-term shifts in climate patterns. However, Next Hydrogen's delivered solutions depend on uninterrupted access to water and electricity, and shortages of these resources could potentially impact the performance of their products.