Next Hydrogen Solutions Inc.

(previously BioHEP Technologies Ltd.)

Consolidated Financial Statements

For the years ended December 31, 2021 and 2020

NextHydrogen

CEO Letter

I would like to take this opportunity to thank our shareholders for your support and provide an update on the Company's progress. In 2021, we made tremendous strides in building a strong foundation to commercialize our multi-MW solutions for decarbonizing transportation and industrial sectors.

Next Hydrogen's revolutionary cell design architecture is aimed at enabling high current density operations, superior dynamic response and scalability over conventional alkaline electrolyzers. Together, this represents a very powerful combination to reduce the cost of electrolyzers and hence, the levelized cost of hydrogen.

After demonstrating our unique electrolyzers with 15 nm3/hr and 60nm3/hr (0.4MW) pilot projects with extremely limited capital, we are now well capitalized to scale up our technology to deliver large scale hydrogen generation solutions to our customers.

Well capitalized: We were able to raise $61.5M in equity capital over the past 12 months, which we expect will fully fund our path to commercialization of our multi-MW systems.

Strong governance: We have assembled an impressive independent board to ensure strong corporate governance as we establish ourselves as a leader in the hydrogen economy.

Industry leading product delivery team: We have an industry leading product development team with a proven track record in electrolysis, including leadership experience at Stuart Energy and Hydrogenics (acquired by Cummins). We complemented this team with new additions that expanded our engineering, assembly and after-market service capabilities. We hired excellent talent and are proud to report that our family has grown to 47 employees.

Comprehensive test infrastructure: We are in the process of installing lab scale, bench scale, pilot scale and factory acceptance test infrastructure in our facility. This will allow us to iterate faster in a cost-effective manner, as we roll out new and scaled-up versions of our product line. To supplement this, we are also testing commercial-sized systems concurrently to ensure our brand is synonymous with innovation and reliability.

Assembly readiness: We have moved into our new 27,000 sq foot facility and our assembly line is functional and supported by a new ERP system. We have the capacity to deliver 20MW of electrolyzer systems annually on one shift and can run up to three shifts at this facility. We have positioned this to be our center of excellence, and we are well-positioned to replicate these assembly facilities in attractive geographies with low capital requirements.

Strategic partnerships: The forklift market has proven to be an early adopter of fuel cells. We are well positioned in this market with our Canadian Tire customer, which has distribution centres and gas stations across the country. In addition, we are well-positioned for the emerging heavy mobility market through our electrolyzer development program with Hyundai and Kia, a leading OEM that is focused on this market opportunity. Further, we were recently selected by Black & Veatch, which is a globally recognized EPC with an attractive commercial and industrial customer base, to participate in their IgniteX Climate Tech Accelerator program. We believe focused collaboration with strategic partnerships comprised of large-scale customers and execution partners will embed us further in the fast-growing hydrogen economy.

With a strong foundation and strong strategic partnerships in place, we are now well positioned to execute quickly on our core objectives, which include:

- Demonstrations of our revolutionary electrolyzers: We already have four demonstrations planned which include three with Canadian Tire and a proof of concept with Hyundai and Kia. We believe this will serve as an excellent marketing platform to grow our sales pipeline.

- Next generation of our existing product line: With our test infrastructure in place, we aim to: (1) evaluate new best-in-class cell materials to further improve the efficiency of our electrolyzers and (2) reduce the footprint and cost of our overall systems. Following successful execution on this project, which represents low-hanging fruit for us, we will aim to scale-up our electrolyzer module stack up to 10MW. Multiples of these stacks, with a rationalized balance of plant, will be used for very large hydrogen production facilities, which are expected to be in the hundreds of MWs.

- Strategic partnerships: According to industry experts, electrolyzer installations are expected to grow from 200MW to over 100GW by 2030, representing a ~$100B market opportunity. As such, we continue to see strong interest from strategics given our unique design, scarcity of electrolyzer expertise globally, and growing awareness of the critical role green hydrogen will play in decarbonizing hard to electrify sectors. On a personal note, we care deeply about decarbonizing our planet and the best way to achieve this is through collaboration and leveraging strengths.

At this time, it appears that growth, small cap, and Canadian clean tech companies are out of favour. We are not immune to this cyclical sector headwind. That said, we are well capitalized, focused, care deeply about our fiduciary responsibility our shareholders, and are executing well on our clear goals, which we believe will drive strong shareholder value. Thank you again for your support.

Yours Sincerely,

Raveel Afzaal
President & CEO

Independent Auditor's Report

MNP LLP

To the Shareholders of Next Hydrogen Solutions Inc.:

Opinion

We have audited the consolidated financial statements of Next Hydrogen Solutions Inc. and its subsidiaries (the "Company"), which comprise the consolidated statements of financial position as at December 31, 2021 and December 31, 2020, and the consolidated statements of comprehensive loss, changes in shareholders' equity (deficit) and cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as at December 31, 2021 and December 31, 2020, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards.

Basis for Opinion

We conducted our audits in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Company in accordance with the ethical requirements that are relevant to our audits of the consolidated financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other Information

Management is responsible for the other information. The other information comprises Management's Discussion and Analysis.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audits of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audits or otherwise appears to be materially misstated. We obtained Management's Discussion and Analysis prior to the date of this auditor's report. If, based on the work we have performed on this other information, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company’s ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company’s financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company’s ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audits and significant audit findings, including any significant deficiencies in internal control that we identify during our audits.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

The engagement partner on the audit resulting in this independent auditor's report is Blair Michael Mabee.

MNP LLP

Mississauga, Ontario	Chartered Professional Accountants
April 1, 2022	Licensed Public Accountants

NextHydrogen

Consolidated Statements of Financial Position

as at December 31, 2021 and 2020 (in Canadian dollars)

	December 31 2021	December 31 2020
Assets		
Current		
Cash and cash equivalents	$ 39,197,357	$ 1,092,067
Trade and other receivables (note 23)	893,894	212,591
Prepaid expenses and deposits (note 18)	1,225,706	-
Current income tax recoverable (note 20)	119,763	53,318
Inventory (note 5)	2,371,276	1,539,687
	43,807,996	2,897,663
Prepaid expenses and deposits (note 18)	97,528	75,000
Equipment (note 4, 6)	1,109,184	39,482
Right of use asset (note 7)	1,903,235	-
Patents (note 8)	772,357	810,375
Intangible assets and goodwill (note 4, 9)	366,694	-
	$48,056,994	$ 3,822,520
Liabilities		
Current		
Bank indebtedness (note 25)	$ 60,000	$ 40,000
Trade and other payables (note 23)	2,321,220	287,630
Deferred revenue (note 10)	2,704,792	1,611,807
Provisions (note 11)	1,067,795	557,968
Finance lease liability (note 12)	54,847	-
Long-term debt (note 13)	137,409	33,560
Loan payable (note 14)	-	4,885,422
Deferred share unit liability (note 15)	-	1,523,314
	6,346,063	8,939,701
Contingent liability (note 4)	63,184	-
Deferred revenue (note 10)	323,149	1,159,834
Provisions (note 11)	1,548,344	132,747
Finance lease liability (note 12)	1,819,890	-
Long-term debt (note 13)	163,678	300,909
	10,264,308	10,533,191
Shareholders' Equity (Deficit)		
Share capital (note 16)	76,393,695	10,085,999
Contributed surplus (note 17)	3,274,503	71,196
Retained deficit	(41,875,512)	(16,867,866)
	37,792,686	(6,710,671)
	$48,056,994	$ 3,822,520

On behalf of the Board

"Raveel Afzaal" *"Allan Mackenzie"*

The accompanying notes are an integral part of these consolidated financial statements

NextHydrogen

Consolidated Statements of Comprehensive Loss

years ended December 31, 2021 and 2020 (in Canadian dollars)

	2021	2020
Revenue (notes 10, 22)	$ 177,589	$ 1,775
Direct costs	82,239	-
Gross margin	95,350	1,775
Expenses		
Research and development (note 18)	6,176,621	1,914,983
General and administrative (note 18, 25)	4,668,486	1,629,131
Marketing and sales	1,419,591	139,833
Provisions (notes 5, 11)	4,305,530	1,249,195
	16,570,228	4,933,142
Loss before the following	(16,474,878)	(4,931,367)
Finance costs, net (notes 14, 19)	265,950	762,608
Depreciation and amortization (notes 6, 7, 8, 9)	278,753	40,513
Change in fair value of deferred share units (note 15)	-	1,116,128
Transaction costs (notes 3, 4, 17)	7,988,065	-
	8,532,768	1,919,249
Net loss and comprehensive loss	$ (25,007,646)	$ (6,850,616)
Loss per share:		
Basic	$ (1.28)	$ (0.77)
Diluted	$ (1.28)	$ (0.77)
Weighted average number of shares outstanding: (note 16)		
Basic	19,586,728	8,883,362
Diluted	19,586,728	8,883,362

Consolidated Statements of Changes in Shareholders' Equity (Deficit)

years ended December 31, 2021 and 2020 (in Canadian dollars)

	Share Capital	Contributed Surplus	Retained deficit	Total
Balances at December 31, 2020	$ 10,085,999	71,196	(16,867,866)	$ (6,710,671)
Share issuance (note 16)	64,701,566	–	–	64,701,566
Warrant issuance (note 17)	–	614,700	–	614,700
Option exercise (note 16, 17)	82,816	(27,816)	–	55,000
DSU settlement (note 15, 16)	1,523,314	–	–	1,523,314
Share-based compensation expense (note 17)	–	2,616,423	–	2,616,423
Net loss and comprehensive loss	–	–	(25,007,646)	(25,007,646)
Balances at December 31, 2021	$ 76,393,695	3,274,503	(41,875,512)	$37,792,686
Balances at December 31, 2019	$ 7,299,258	–	(10,017,250)	$ (2,717,992)
Share issuance (note 16)	2,806,560	–	–	2,806,560
Share repurchase (note 16)	(22,722)	–	–	(22,722)
Warrant exercise (note 16)	2,903	–	–	2,903
Share-based compensation expense (note 17)	–	71,196	–	71,196
Net loss and comprehensive loss	–	–	(6,850,616)	(6,850,616)
Balances at December 31, 2020	$ 10,085,999	71,196	(16,867,866)	$ (6,710,671)

Consolidated Statements of Cash Flows

years ended December 31, 2021 and 2020 (in Canadian dollars)

	2021	2020
Cash flows used in operating activities		
Net loss	$ (25,007,646)	$ (6,850,616)
Adjustments:		
Finance costs, net	265,950	762,608
Depreciation and amortization	278,753	40,513
Change in fair value of deferred share units	-	1,116,128
Provisions	4,305,530	1,249,195
Share-based compensation	2,616,423	71,196
Deferred share unit expense	-	407,186
Warrant issuance	614,700	-
Transaction costs	7,347,908	-
	(9,578,382)	(3,203,790)
Net change in non-cash operating working capital (note 21)	(3,058,738)	(643,319)
	(12,637,120)	(3,847,109)
Interest paid	(9,056)	(3,513)
Interest received	92,688	625
	(12,553,488)	(3,849,997)
Cash flows used in investing activities		
Acquisition of equipment (note 6)	(1,069,777)	(1,050)
Proceeds from disposition of equipment (note 6)	875	-
Patent costs (note 8)	(46,846)	(87,023)
Acquisition of CFS (note 4)	(432,570)	-
	(1,548,318)	(88,073)
Cash flows from financing activities		
Issuance of shares, net (note 16)	57,196,870	2,809,463
Reverse takeover costs (note 3)	(364,627)	-
Cash acquired on acquisition of BioHEP (note 3)	521,416	-
Repurchase of shares (note 16)	-	(22,722)
Exercise of options (note 16)	55,000	-
Proceeds from loan payable (note 14)	-	1,984,390
Repayment of loan payable (note 14)	(5,105,256)	-
Repayment of long-term debt (note 13)	(36,555)	(35,777)
Proceeds from bank indebtedness (note 25)	20,000	40,000
Repayment of finance lease liability (note 12)	(79,752)	-
	52,207,096	4,775,354
Increase in cash	38,105,290	837,284
Cash and cash equivalents, beginning	1,092,067	254,783
Cash and cash equivalents, ending	$ 39,197,357	$ 1,092,067

1. CORPORATE INFORMATION

Founded in 2007, Next Hydrogen Solutions Inc. ("Next Hydrogen" or the "Company") 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 38 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.

The Company's registered head office is at 6610 Edwards Blvd, Mississauga, Ontario, L5T 2V6 and was incorporated on February 11, 2014 under the British Columbia Business Corporations Act. The Company changed its name from "BioHEP Technologies Ltd." to "Next Hydrogen Solutions Inc." on June 24, 2021.

The common shares of the Company trade on the TSX Venture Exchange under the symbol "NXH" and on the OTCQB under the symbol "NXHSF".

2. SIGNIFICANT ACCOUNTING POLICIES

Statement of Compliance

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS"), as issued by the International Accounting Standards Board ("IASB").

These consolidated financial statements were approved and authorized for issue by the Board of Directors on April 1, 2022.

Basis of Measurement

These consolidated financial statements have been prepared on a going concern basis using historical cost, except for financial instruments recorded at fair value.

Functional and Presentation Currency

These consolidated financial statements are presented in Canadian dollars, which is the Company's functional currency. All financial information presented has been rounded to the nearest dollar, except per share amounts and where otherwise indicated.

Basis of Consolidation

The consolidated financial statements consolidate the accounts of the Company and its subsidiaries, Next Hydrogen Corporation and Next Hydrogen USA, Inc. Subsidiaries are entities over which the Company has the power to govern financial and operating policies. Subsidiaries are fully consolidated from the date on which control is obtained by the Company, and are de-consolidated from the date control ceases. Fully consolidated means that all transactions with subsidiaries and any intercompany balances, gains or losses with subsidiaries have been eliminated on consolidation. The accounting policies have been applied consistently by all subsidiaries.

The Company's subsidiaries are wholly-owned, are in product development for the renewable energy industry and are domiciled in Canada and the United States, respectively.

Revenue Recognition

Revenue from contracts with customers

The Company is in the business of providing electrolyzers and balance of plant equipment, inclusive of installation services. Revenue from contracts with customers is generally recognized when control of the goods or services are transferred to the customer at an amount that reflects the consideration to which the company expects to be entitled.

Revenue recognition is determined on a contract to contract basis by determining the terms and performance obligations given in a specific contract. Based on the specific contract and its obligations, revenue under IFRS 15 - Revenue from contracts with customers ("IFRS 15") is recognized either at a point in time or over time.

The Company's revenues result from the sale of goods or services and reflect the consideration to which the Company expects to be entitled. IFRS 15 requires the Company to assess revenue recognition based on a five-step model. For its customer contracts, the Company identifies the performance obligations (goods or services), determines the transaction price, allocates the contract transaction price to the performance obligations, and recognizes the revenue when (or as) the performance obligations are satisfied. A good or service is transferred when (or as) the customer obtains control of that good or service.

The Company generates revenue from customer contracts from two principal sources: product and equipment sales and services as well as aftermarket sales. Product and equipment sales are generated from standard products.

Revenue from sale of standard products and equipment

The Company recognizes revenue at the point in time at which it satisfies a performance obligation by transferring the control of a good or service to the customer, which is generally at the time the equipment is installed at the customer's location and ready for use. The customer has control of a good or service when it has the ability to direct the use of and obtain substantially all of the remaining benefits from the good or service. The point in time measurement basis is the main method of recognizing revenue relating to electrolyzers, balance of plant equipment and aftermarket parts.

In circumstances where the cost directly related to a contract is expected to exceed the directly related revenues, the estimated loss on the contract will be recognized in its entirety in the period when this is identified.

The Company periodically enters into arrangements with customers that involve multiple elements. The Company assesses such contracts to evaluate whether there are multiple performance obligations and whether the transaction price under the arrangement is being appropriately allocated to each of the performance obligations.

Service and aftermarket sales

For contracts where the Company has agreed to provide routine maintenance services and warranty services over a period of time as part of the original contract, a portion of the transaction price is allocated to these performance obligations and revenue is recognized evenly over the contract period.

For sales of aftermarket parts, revenue is recognized when the performance obligation is satisfied, generally upon delivery of parts.

The Company accounts for a significant financing component on contracts where timing of cash receipts and revenue recognition differ substantially. The contracts typically require the customer to pay the full contract value by the time the product is ready for use, which is well before the delivery of maintenance and warranty services and therefore a financing component is accounted for separately. The result is that interest expense is accrued during the advance period and the transaction price will be increased by a corresponding amount.

Other revenue

Finance income is recognized as it accrues in income, using the effective interest method.

Deferred Revenue

Deferred revenue is the obligation to transfer goods or services to a customer for which the Company has received consideration from the customer. If a customer pays consideration before the Company transfers goods or services to the customer, a deferred revenue liability is recognized when the payment is made. Deferred revenue liabilities are recognized as revenue when the Company performs under the contract. Advances received are included within deferred revenue.

Financial Instruments

Financial instruments are initially recognized at fair value and are subsequently measured at either (i) amortized cost, (ii) fair value through other comprehensive income ("FVTOCI"), or (iii) fair value through profit or loss ("FVTPL"), based on the Company's business models for managing its financial assets and whether the contractual cash flows represent solely payments of principal and interest.

Financial instruments classified and measured at amortized cost are those assets that are held within a business model whose objective is to hold financial assets in order to collect contractual cash flows, and the contractual terms of the financial asset give rise to cash flows that are solely payments of principal and interest. Financial instruments classified at amortized cost are initially measured at fair value, plus adjustments for transaction costs, and subsequently amortized using the effective interest method. Financial instruments measured at amortized cost include: cash and cash equivalents, trade and other receivables (excluding sales taxes), bank indebtedness, trade and other payables, long-term debt and loan payable.

Financial instruments classified and measured at FVTPL are those assets and liabilities that do not meet the criteria to be classified at amortized cost or at FVTOCI. This category includes debt instruments whose cash flow characteristics are not solely payments of principal and interest, or are not held within a business model whose objective is achieved through contractual cash flows or through both contractual cash flows and through the selling of the financial instrument. Financial instruments classified at FVTPL are initially measured at fair value and subsequently carried at fair value, with changes in fair value recorded through profit or loss. Transaction costs are expensed as incurred through profit and loss. Financial instruments measured at FVTPL include deferred share unit liability and contingent liability.

The Company derecognizes a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the right to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred. The Company derecognizes a financial liability when its contractual obligations are discharged, cancelled or expired.

Financial assets and liabilities are offset and the net amount presented in the consolidated statements of financial position when, and only when, the Company has a legal right to offset the amounts and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

The impairment model under IFRS 9 is applicable to financial assets measured at amortized cost where any expected future credit losses are provided for, irrespective of whether a loss event has occurred as at the reporting date. The Company's only financial asset subject to impairment are trade and other receivables (excluding sales taxes), which are measured at amortized cost. The Company uses specific account identification to estimate lifetime expected impairment. Losses are recognized in profit and loss and reflected as an expected credit loss allowance against the financial asset. When a subsequent event causes the amount of the allowance to decrease, the decrease in allowance is reversed through profit and loss.

Business combinations

The acquisition method of accounting is used to account for business combinations. The cost of an acquisition is measured at the fair value of the assets acquired, equity instruments issued and liabilities incurred or assumed at the date of exchange. Acquisition costs are expensed as incurred. The excess of the cost of the acquisition over the fair value of the acquisition's identifiable assets and liabilities is recorded as goodwill. If the acquisition cost is less than the fair value of the assets and liabilities acquired, the difference is recognized directly in the consolidated statements of comprehensive loss. Contingent liability is included in total consideration and is recognized at its fair value as at the acquisition date. Subsequent changes in fair values are adjusted against the cost of the acquisition where they qualify as measurement period adjustments.

Cash and cash equivalents

Cash and cash equivalents are comprised of cash and highly liquid investments that are readily convertible into known amounts of cash.

Inventory

Inventory is made up of parts purchased for the assembly of the Company's electrolyzers and balance of plant equipment and is measured at the lower of cost and net realizable value, with cost being determined on a first in, first out basis. Net realizable value represents the estimated selling price less all estimated costs of completion and selling costs.

Equipment

Equipment is measured at cost less accumulated depreciation and accumulated impairment losses. Cost includes costs that are directly attributable to bringing the asset to a working condition for its intended use. When significant components of an item of equipment have different useful lives, they are accounted for as separate items of equipment. Gains and losses on disposal of equipment are determined by comparing the proceeds from disposal with the carrying amount of equipment and the net is recognized within profit or loss.

Depreciation is recognized in profit or loss on straight line basis over the estimated useful lives of equipment, which most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset. Depreciation methods, useful lives and residual values are reviewed each year and adjusted prospectively, if appropriate. Depreciation is provided for using the following useful lives:

Computer hardware	3 years
Equipment	10 years
Furniture and fixtures	10 years
Leasehold improvements	10 years

Equipment is assessed for impairment when events or changes in circumstance indicate that the Company may not be able to recover its carrying value. The Company calculates impairment by comparing the carrying value against the higher of the value in use and the fair value less costs to sell. Value in use is calculated based on discounted cash flows expected from its use and disposition, and fair value is the expected price in a binding sale agreement in an arm's length transaction. Any excess is a charge against earnings. When an impairment loss subsequently reverses, the carrying amount of the asset is increased to the revised estimate of its recoverable amount to the extent that it does not exceed the amount that would have been determined had the impairment loss not been recognized.

Intangible Assets and Patents

Intangible assets are measured at cost less accumulated amortization and accumulated impairment losses. If intangible assets are acquired through a business combination, costs are measured at fair value. Costs include costs that are directly attributable to bringing the asset to a working condition for its intended use. Intangible assets with finite useful lives are amortized on a straight-line basis over its estimated useful life beginning when the asset is ready for its intended use and recorded on the consolidated statements of comprehensive loss. The Company assesses the useful lives, residual values and amortization methods annually and recognize the effects of changes in estimates in the consolidated statements of comprehensive loss prospectively.

Amortization of intangible assets is provided for using the following useful lives:

Licensing agreement	2 years
Non-competition agreement	2 years
Customer list	11 years
Patents	8 - 22 years

Intangible assets are assessed for impairment annually, or more frequently if events or circumstances indicate that the asset might be impaired. If there is any indication of impairment, the carrying amount of the asset is compared to its recoverable amount and any excess is charged to earnings or loss.

Finance lease liabilities and right of use assets

At the inception of a contract, a right-of-use asset and a lease liability is recognized at the lease commencement date when the contract conveys the right to control the use of an identified asset for a period of time in exchange for considerations.

The asset is initially measured at cost, comprised of the initial amount of the lease liability adjusted for any pre-commencement lease payments, plus any initial direct costs incurred. The asset is subsequently depreciated using the straight-line method from the commencement date of the lease to the end of the useful life of the asset for rolling stocks and realty if the lease transfers ownership of the underlying asset by the end of the lease term, or the right of use asset reflects that the Company will exercise a purchase option. Otherwise, the asset is depreciated using the straight-line method from the commencement date of the lease to the end of the lease term. The estimated useful lives of leased assets are determined on the same basis as those of property and equipment. The carrying amount of the leased asset is adjusted by remeasurement of the lease liability and reduced by impairment losses, if any.

The lease liability is initially measured at the present value of future lease payments, less any lease incentive received, discounted using the interest rate implicit in the lease, or, if that rate cannot be readily determined, the Company's incremental borrowing rate. The lease liability is subsequently measured at amortized cost using the effective interest method. In the event of a change in the Company's assessment of whether it will exercise a purchase, extension or termination option, the lease liability will be remeasured and an adjustment will be made to the carrying amount of the right-of-use asset, or recognized in the consolidated statements of comprehensive loss if the carrying value of the leased asset is zero.

The Company has elected to apply the practical expedient not to recognize right-of-use assets and lease liabilities for short-term leases that have a lease term of 12 months or less and leases of low-value assets.

Provisions

Provisions are recognized when the Company has a material obligation, whether existing or potential, as a result of a past event and it is probable that an outflow of economic benefits will be required to settle the obligation. If the obligation is determined to be material, then the estimated amount of the provision is determined by discounting the expected future cash flows.

Warranties

Provisions for the expected cost of warranty obligations are recognized at the date of sale of the relevant products or at the time the obligation was committed to, and is recognized at management's best estimate of the expenditures required to settle the Company's obligation.

Onerous Contracts

If it is more likely than not that the unavoidable costs of meeting the obligations under a firm contract exceed the economic benefits expected to be received under it, a provision for onerous contracts is recorded as an expense, with the interest component being recorded as a financing expense. Unavoidable costs include the costs that relate directly to the contract such as anticipated cost overruns, expected costs associated with late delivery penalties and technological problems, as well as allocations of costs that relate directly to the contract. Provisions for onerous contracts are measured at the lower of the expected cost of fulfilling the contract and the expected cost of terminating the contract.

Deferred Share Units

The expense associated with the Company's deferred share unit ("DSU") plan is determined based on the market price of the Company's common shares on the grant date. The expense is recognized in the consolidated statement of comprehensive loss in the period in which the units are granted with a corresponding liability recorded on the consolidated statements of financial position. At each period end date, the DSU liability is adjusted based on the market price of the Company's common shares on the period end date.

Share Capital

Common shares are classified as equity. Incremental costs directly attributable to the issuance of common shares, stock options and warrants are recognized as a deduction from equity, net of any tax effects. When share capital recognized as equity is repurchased, the amount of consideration paid, including direct costs, net of tax effects, is recognized as a deduction from equity.

Share-Based Compensation

The grant date fair value of share-based payment awards granted is recognized as an expense, with a corresponding increase in contributed surplus, over the period that the individual becomes entitled to the awards. The fair value of stock options granted is determined using the Black-Scholes option pricing model. The fair value of deferred share units granted is determined using the fair value of the Company's common shares on the date of grant. The amount recognized as an expense is adjusted to reflect the number of awards for which the related service conditions are expected to be met, such that the amount ultimately recognized as an expense is based on the number of awards that meet the related service performance conditions at the vesting date.

When stock option awards are exercised, the proceeds, together with the amount originally recorded in contributed surplus, are recorded in share capital.

Government Grants

Government grants are recognized initially as deferred recoveries at fair value when there is reasonable assurance that they will be received, and the Company will comply with the conditions associated with the grant. Grants that compensate the Company for expenses incurred are recognized in profit or loss as other income on a systematic basis in the periods in which the expenses are recognized and/or the related project is agreed to be complete. Grants that compensate the Company for the cost of an asset are recognized in profit or loss on a systematic basis over the useful life of the asset.

Investment Tax Credits

Investment tax credits ("ITC") are recognized where there is reasonable assurance that the ITC will be received and all attached conditions will be complied with. When the ITC relates to an expense item, it is netted against the related expense. Where the ITC relates to an asset, it reduces the carrying amount of the asset. The ITC is then recognized as income over the useful life of a depreciable asset by way of a reduced depreciation charge. The Company is actively engaged in research and product development ("R&D") and, accordingly, has previously filed for ITC refunds under both the Canadian federal and Ontario provincial Scientific Research and Experimental Development ("SR&ED") tax incentive programs. The ITCs recorded in the accounts are based on management's interpretation of the Income Tax Act of Canada provisions, which govern the eligibility of R&D costs. The claims are subject to review by the Canada Revenue Agency and the Minister of Revenue for Ontario before the refunds can be released.

Research and Product Development

Expenditure on research activities undertaken with the prospect of gaining new scientific or technical knowledge and understanding are expensed as incurred.

Development activities that involve a plan or design for the production of new or substantially improved products and processes are capitalized only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable and the Company intends to and has sufficient resources to complete development and to use or sell the asset. All of the Company's development expenditures to date have been expensed as incurred.

Finance Costs

Finance costs are comprised of interest expense on bank indebtedness, long-term debt and loan payable. Borrowing costs that are not directly attributable to the acquisition of a qualifying asset or liability are recognized in profit or loss using the effective interest method.

Income Taxes

Income tax expense comprises current and deferred tax. Income tax expense is recognized in profit or loss except to the extent that it relates to items recognized directly in equity or in other comprehensive income or loss.

Current tax is recognized and measured at the amount expected to be recovered from or payable to the taxation authorities based on the income tax rates enacted or substantively enacted at the end of the reporting period and includes any adjustment to taxes payable in respect of previous years.

Deferred tax is recognized on any temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable earnings. Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period when the asset is realized and the liability is settled. The effect of a change in the enacted or substantially enacted tax rates is recognized in profit or loss or in equity depending on the item to which the adjustment relates.

Deferred tax assets are recognized to the extent that future recovery is probable. At each reporting period end, deferred tax assets are reduced to the extent that it is no longer probable that sufficient taxable earnings will be available to allow all or part of the asset to be recovered.

Earnings (Loss) Per Share

Basic earnings (loss) per share is calculated by dividing the income or loss attributable to common shareholders of the Company by the weighted average number of common shares outstanding during the period. Diluted earnings (loss) per share is determined by adjusting the income or loss attributable to common shareholders and the weighted average number of common shares outstanding for the effects of all potentially dilutive common shares using the treasury stock method. The calculation of diluted loss per share excludes the effects of outstanding instruments that would be anti-dilutive.

Foreign Currency Translation

Transactions denominated in a foreign currency have been translated at the rate of exchange in effect on the date of the transaction. Monetary items included in the consolidated statement of financial position have been translated at the rate of exchange in effect as at the consolidated statement of financial position date. Realized and unrealized gains and losses on translations of foreign currencies are included in profit and loss.

Change in Accounting Estimates

On January 1, 2021, the Company changed its method of depreciation and amortization for equipment and patents from a declining balance basis to a straight-line basis over the estimated useful lives of the assets. This change in accounting estimate better reflects the expected pattern of consumption of future economic benefits embodied in these assets.

The effect of this change on current and future depreciation and amortization expense is as follows:

	2021	2022	2023	2024	Later
Increase (decrease) in:					
Depreciation	$ 6,165	7,374	4,196	(3,579)	$ (14,156)
Amortization	$ 49,386	50,683	51,928	53,123	$ (205,120)

Critical Accounting Estimates and Significant Judgments

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) *Revenue recognition*: In accounting for revenue, management must review each contract and allocate the transaction price to the various performance obligations based on the expected costs for each performance obligation. The estimated costs are largely based on budgeted costs or quotes for costs and anticipated labour hours to complete the task.

b) *Provisions*: Provisions for warranty and onerous contracts are recognized at management's best estimate of the expenditures required to settle the Company's obligation. The estimated costs are largely based on budgeted costs or quotes for costs and anticipated labour hours to complete the task.

c) *Impairment of patents*: Patents are tested for impairment annually or more frequently if events or changes in circumstances indicate that they might be impaired. To determine whether patents are impaired, management must estimate the recoverable amount.

d) *Share-based compensation*: The fair value of share-based compensation expense is estimated using the Black-Scholes option pricing model and relies on a number of estimates, such as the expected life of the option, the volatility of the underlying share price of similar companies and the risk-free rate of return.

e) *Depreciation and impairment of equipment*: Estimates of useful lives for depreciation is based on management's judgment of the expected productive lives and planned uses for each respective asset. Equipment is assessed for impairment when events or circumstances indicate that the Company may not be able to recover its carrying value.

f) *Impairment of trade and other receivables*: An allowance for lifetime expected credit losses is established based on specific account identification. Management regularly analyzes its approach and exposure to credit loss based on analysis of all relevant current information as well as historical trends.

g) *Taxes*: Provisions for taxes are made using the best estimate of the amount expected to be paid based on a qualitative assessment of all relevant factors. The Company reviews the adequacy of these provisions at the end of the reporting period. However, it is possible that at some future date an additional liability could result from audits by taxation authorities. Where the final outcome of these tax-related matters is different from the amounts that were initially recorded, such differences will affect the tax provisions in the period in which such determination is made.

h) *Going Concern*: The financial statements were prepared on a going concern basis, which assumes that the Company will continue in operation for the forseeable future and will be able to realize its assets and discharge its liabilities and commitments in the normal course of business. The assessment of going concern involves significant judgement based on historical experience and other factors including expectation of future events that are believed to be reasonable under the circumstances.

3. REVERSE TAKEOVER TRANSACTION

On June 24, 2021, the Company acquired all of the common shares of BioHEP Technologies Ltd. ("BioHEP") by way of a three-cornered amalgamation between Next Hydrogen Corporation and a wholly-owned subsidiary of BioHEP ("FinCo"), forming a subsidiary of BioHEP (the "RTO"). Pursuant to the amalgamation, all of the outstanding common shares of Next Hydrogen Corporation and the wholly-owned subsidiary were canceled and the holders received an equal amount of common shares of BioHEP. Prior to the RTO, BioHEP spun-out all assets and liabilities less $500,000 in working capital, consolidated its common shares on the basis of one post-consolidation share for every 13.3 pre-consolidation shares, and changed its name to "Next Hydrogen Solutions Inc.".

In connection with the RTO, FinCo completed a non-brokered private placement of subscription receipts for gross proceeds of $27,000,000 and a brokered private placement of subscription receipts for gross proceeds of $28,545,000. Each subscription receipt was sold at a price of $10 and was exchanged for one common share of the Company upon completion of the RTO. Share issuance costs of $3,929,051 were deducted from gross proceeds.

In accordance with IFRS 2, Share-Based Payment, the RTO has been accounted for as a reverse acquisition that does not constitute a business, in which Next Hydrogen Corporation is being identified as the acquirer of BioHEP. All of the outstanding common shares of BioHEP were acquired by Next Hydrogen Corporation in exchange for 748,328 common shares valued at $10 per share. The excess of the fair value of identifiable net assets acquired over the share consideration issued is considered as payment for listing and has been included in transaction costs on the consolidated statements of comprehensive loss. The Company has completed the purchase price allocation over the identifiable net assets of BioHEP and has determined that the fair value of net assets acquired and the resulting reverse takeover cost is as follows:

Cash	$ 521,416
Current taxes receivable	119,718
Trade and other receivables	10,430
Trade and other payables	(151,564)
Total identifiable net assets acquired	500,000
Total share consideration	7,483,280
Reverse takeover cost	$ 6,983,280

As market prices for shares issued as part of the RTO were not available at the time of acquisition, the fair value of the equity instruments issued was based on an arm's length transaction between knowledgeable, willing parties. The valuation was consistent with the price of subscription receipts that FinCo issued as part of a non-brokered and brokered private placement that were completed on April 28, 2021. All relevant factors and knowledge of the Company and its industry were considered at the time of acquisition when making assumptions as part of the valuation of these shares.

In addition to the reverse takeover cost above, transaction costs of $364,627 were incurred in connection with the RTO, other than costs associated with the financing, and have been expensed under transaction costs.

4. BUSINESS COMBINATION

In order to expand its service offering, on April 1, 2021 the Company acquired the assets of Cleanfuel Systems Inc. ("CFS"), a hydrogen system integration and service company focused on delivering energy solutions through system design, component integration and development, and engineering solutions. The following table presents the preliminary purchase price allocation over the identifiable net assets and goodwill of CFS:

Equipment	$ 58,640
Licensing agreement	12,000
Non-competition agreement	138,650
Customer list	204,260
Net asset acquired	$ 413,550
Cash	432,570
Contingent consideration	63,184
Total consideration	495,754
Goodwill	$ 82,204

From the date of acquisition, CFS contributed revenue of $177,589 and net income of $95,350. Had Next Hydrogen acquired the business on January 1, 2021, CFS would have contributed revenue of $241,613 and net income of $129,725.

The contingent consideration was recorded at its fair value which represents the probability-weighted determination of the Company's earn-out obligation to pay with a range of $65,955 and $119,020. Contingent consideration is classified as FVTPL using level 3 inputs and was calculated using a discounted cashflow probability model and a discount rate of 25%.

Goodwill represents the value of the acquired workforce and related processes and knowledge. It is expected that the entire amount of goodwill will be deductible for tax purposes. Transaction costs of $25,458 were expensed and included in transaction costs on the consolidated statements of comprehensive loss.

5. INVENTORY

	Dec 31 2021	Dec 31 2020
Spare parts	$ 1,048,328	$ 153,338
Work in progress	140,937	2,467,484
Finished inventory	2,671,197	-
Onerous contract provision	(1,489,186)	(1,081,135)
	$ 2,371,276	$ 1,539,687

During the year, $1,496,923 (2020 - $NIL) in work in progress was written off to provisions.

6. EQUIPMENT

	Equipment	Equipment under Constr'n	Computer Hardware	Furniture and Fixtures	Leasehold Improv'ts	Total
Cost						
Balances, December 31, 2020	$ 243,029	-	10,711	-	-	$ 253,740
Additions	366,761	330,692	135,810	64,062	172,452	1,069,777
Acquired (note 4)	58,640	-	-	-	-	58,640
Disposals	(2,000)	-	(7,364)	-	-	(9,364)
Balances, December 31, 2021	666,430	330,692	139,157	64,062	172,452	1,372,793
Accumulated depreciation						
Balances, December 31, 2020	205,394	-	8,864	-	-	214,258
Depreciation	29,901	-	24,115	1,549	2,275	57,840
Disposals	(2,000)	-	(6,489)	-	-	(8,489)
Balances, December 31, 2021	$ 233,295	-	26,490	1,549	2,275	$ 263,609
Net carrying amounts						
At December 31, 2021	$ 433,135	330,692	112,667	62,513	170,177	$1,109,184

	Equipment	Equipment under Constr'n	Computer Hardware	Furniture and Fixtures	Leasehold Improv'ts	Total
Cost						
Balances, December 31, 2019	$ 243,029	–	9,661	–	–	$ 252,690
Additions	–	–	1,050	–	–	1,050
Balances, December 31, 2020	243,029	–	10,711	–	–	253,740
Accumulated depreciation						
Balances, December 31, 2019	195,985	–	7,904	–	–	203,889
Depreciation	9,409	–	960	–	–	10,369
Balances, December 31, 2020	$ 205,394	–	8,864	–	–	$ 214,258
Net carrying amounts						
At December 31, 2020	$ 37,635	–	1,847	–	–	$ 39,482

7. RIGHT-OF-USE ASSET

The right of use asset relates to a lease of the Company's head office and assembly facility, which started on September 1, 2021.

	Cost	Accumulated Amortization	Net
Balances, December 31, 2020	$ –	–	$ –
Additions	1,968,864	–	1,968,864
Amortization	–	65,629	(65,629)
Balances, December 31, 2021	$ 1,968,864	65,629	$ 1,903,235

8. PATENTS

	Cost	Accumulated Amortization	Net
Balances, December 31, 2019	$ 913,328	159,832	$ 753,496
Additions (note 4)	87,023	–	87,023
Amortization	–	30,144	(30,144)
Balances, December 31, 2020	1,000,351	189,976	810,375
Additions	46,846	–	46,846
Amortization	–	84,864	(84,864)
Balances, December 31, 2021	$ 1,047,197	274,840	$ 772,357

9. INTANGIBLE ASSETS AND GOODWILL

	Intangible Assets	Goodwill	Net
Balances, December 31, 2020	$ -	-	$ -
Additions	354,910	82,204	437,114
Amortization	(70,420)	-	(70,420)
Balances, December 31, 2021	$ 284,490	82,204	$ 366,694

All goodwill has been allocated to the service business, which is the smallest identifiable group of assets that generate cash inflows that are largely independent of the cash inflows from other assets or group of assets. The Company performed its goodwill impairment test as at December 31, 2021 and determined that the recoverable amount of the service business exceeded its respective carrying amount.

10. DEFERRED REVENUE

	Maintenance and warranty obligations in process	Service obligations in place	Advances on contracts with no satisfied obligations	Total
Balances, December 31, 2019	$ 94,952	-	2,142,517	$ 2,237,469
Payments received	-	-	535,631	535,631
Revenue recognized	(1,775)	-	-	(1,775)
Interest	316	-	-	316
Balances, December 31, 2020	93,493	-	2,678,148	2,771,641
Payments received	-	274,775	-	274,775
Revenue recognized	-	(18,475)	-	(18,475)
Balances, December 31, 2021	$ 93,493	256,300	2,678,148	3,027,941
Current portion				2,704,792
				$ 323,149

11. PROVISIONS

	Onerous contracts	Warranty	Total
Balances, December 31, 2019	$ 106,635	–	$ 106,635
Additions	–	585,141	585,141
Utilized	(1,061)	–	(1,061)
Balances, December 31, 2020	105,574	585,141	690,715
Additions	1,965,176	98,496	2,063,672
Adjustments	213,226	123,658	336,884
Utilized	(55,483)	(419,649)	(475,132)
Balances, December 31, 2021	$ 2,228,493	387,646	2,616,139
Current portion			1,067,795
			$ 1,548,344

12. FINANCE LEASE LIABILITY

The finance lease liability relates to the lease of the Company's head office and assembly facility, which started on September 1, 2021. The lease expires on August 31, 2026 with an option to extend for an additional five years. The lease liability was initially valued at $1,872,412, using a weighted average incremental borrowing rate of 14%, and is payable as follows:

	Less than 1 Year	1 to 5 Years	More than 5 Years	Total
Future minimum lease payments	$ 294,757	1,298,927	1,835,649	$ 3,429,333
Interest	(239,910)	(849,910)	(464,776)	(1,554,596)
	$ 54,847	449,017	1,370,873	1,874,737
Current portion				54,847
				$ 1,819,890

13. LONG-TERM DEBT

Long-term debt pertains to grant loans that accrue interest at a blended rate of 3.72%, with interest only payable until September 2021 and blended monthly installments of $12,185 payable starting October 2021. The long-term debt is secured by a second-ranking general security agreement over all assets of the Company.

	Less than 1 Year	1 to 5 Years	More than 5 Years	Total
Principal repayments	$ 137,409	163,678	-	$ 301,087

14. LOAN PAYABLE

	2021	2020
Opening balance	$ 4,885,422	$ 2,145,295
Issuance	-	2,022,162
Transaction costs	-	(37,772)
Accrued interest	95,201	557,893
Accretion expense	124,633	128,283
Loss on extinguishment	-	69,561
Repayment	(5,105,256)	-
	$ -	$ 4,885,422

Loan payable pertains to a debt financing that the Company completed in July 2019 for $2,000,000 and for an additional $2,022,162 in May 2020. As part of the debt financing, investors that participated were also awarded 1.7 class B preferred shares for each dollar of debt (see note 16).

The loan accrued interest of 20% until September 2020 and accrued interest of 4% October 2020 and onwards. The amount was secured by a first-ranking general security agreement over all assets of the Company and was repaid during the year as the Company completed an equity financing in excess of $30 million, triggering a maturity event.

Interest of $95,201 accrued during 2021 and $557,893 during 2020. Interest may be paid in cash or added to the principal amount of debt on an annual basis. The Company elected to add the amount of accrued interest to the principal amount of debt for both years. The adjustment in interest rate resulted in a loss on extinguishment of $69,561 on September 30, 2020. Accretion expense was recorded using an effective interest rate of 19.38% to September 30, 2020 and an effective interest rate of 13.17% thereafter.

15. DEFERRED SHARE UNIT LIABILITY

The Company had a deferred share unit ("DSU") plan for certain employees, directors and consultants that was administered by the Board of Directors and could have been settled in cash or equity. During 2020, 761,657 DSUs were issued in lieu of cash based compensation at a value of $0.29 - $0.60 per unit. Of the DSUs issued, 549,324 were issued to key management. On December 31, 2020, the DSUs were revalued at a fair value price of $2, which reflects the price at which the Company was raising capital at the time. On February 10, 2021, these DSUs were converted into common shares and the plan was discontinued.

16. SHARE CAPITAL

Authorized

Unlimited number of common shares with no par value.

	Common Shares #	Share Capital $
Issued		
Balances, December 31, 2019	6,091,765	7,299,258
Shares issued as part of debt financing	3,437,675	-
Shares issued as part of equity financing	3,000,000	2,806,560
Repurchase of shares	(75,739)	(22,722)
Exercise of warrants	290,250	2,903
Balances, December 31, 2020	12,743,951	10,085,999
Shares issued / assumed on RTO (note 3)	748,328	7,483,280
Shares issued as part of equity financing	8,554,500	57,218,286
Settlement of DSUs	761,657	1,523,314
Exercise of stock options	80,000	82,816
Balances, December 31, 2021	22,888,436	76,393,695

On May 29, 2020, the Company completed a debt financing for $2,022,162. As part of the financing, investors received 1.7 class B preferred shares for each dollar of debt.

On June 29, 2020, the Company repurchased 75,739 class A common shares from a deceased shareholder at $0.30 per share.

On September 30, 2020, the Company issued 3,000,000 common shares at a price of $1 per share. Transaction costs of $193,440 were deducted from equity.

During 2020, 290,250 warrants were exercised for gross proceeds of $2,903.

On January 21, 2021, the Company completed a non-brokered private placement for 3,000,000 class A common shares at a price of $2 per share. Transaction costs of $397,663 were deducted from equity.

On February 10, 2021, the Company settled 761,657 DSUs valued at $2 per unit in exchange for 761,657 class A common shares.

On April 28, 2021, FinCo completed a non-brokered private placement of subscription receipts for total gross proceeds of $27,000,000 and a brokered private placement of subscription receipts for gross proceeds of $28,545,000, where each subscription receipt was sold at a price of $10 per unit. Subscription receipts were converted to common shares of the Company on completion of the RTO on June 24, 2021. Transaction costs of $3,929,051 were deducted from equity.

On June 24, 2021, the Company issued 748,328 common shares at a price of $10 per share in connection with its acquisition of BioHEP. In connection with the RTO, both class A and class B common shares of Next Hydrogen Corporation were exchanged for common shares of the Company on a one-to-one basis.

During 2021, 80,000 stock options were exercised for gross proceeds of $55,000. In addition, $27,816 was reallocated from contributed surplus as part of these transactions.

The weighted average number of common shares outstanding has been calculated as follows:

	2021	2020
Issued common shares	22,888,436	12,743,951
Effect of issued common shares	(3,301,708)	(3,860,589)
Weighted average number of common shares	19,586,728	8,883,362

No adjustments to loss or the weighted average number of shares for the effects of dilutive potential ordinary shares were necessary. Dilutive potential ordinary shares are financial instruments or contracts that may entitle its holder to ordinary shares, where the conversion, exercise or issuance of the financial instrument or warrant would result in a reduction in earnings per share or an increase in loss per share.

17. CONTRIBUTED SURPLUS

The Company offers a stock option plan for the benefit of certain directors, employees and consultants. The plan is administered by the Board of Directors and the maximum number of shares which may be issued under this plan may not exceed 20% of the number of issued and outstanding shares of the Company. Each stock option entitles its holder to receive one common share upon exercise and all options expire 5 years from issuance. The following table summarizes the changes in outstanding stock options during the year ended December 31, 2021:

	Weighted Average Exercise Price $	Options #
Issued	0.66	1,025,000
Balances, December 31, 2020	0.66	1,025,000
Issued	4.03	2,331,626
Exercised	0.69	(80,000)
Forfeited	1.05	(275,000)
Balances, December 31, 2021	3.24	3,001,626

The majority of stock options issued prior to RTO vest over three years and stock options issued following RTO vest over four years. Of the total stock options issued during the period ended December 31, 2021, 1,471,626 were issued to key management. Of the total stock options outstanding as of December 31, 2021, 2,071,626 were held by key management.

Subsequent to the reporting period, 360,000 stock options were granted at an average exercise price of $3.17, of which 250,000 were issued to key management.

The following table summarizes information about stock options outstanding as at December 31, 2021:

Exercise Price $	Options Outstanding #	Weighted Avg Remaining Life #	Options Exercisable #
0.60	575,000	3.6	250,000
1.00	150,000	3.8	150,000
2.00	1,360,000	4.1	275,000
7.41	796,626	4.5	-
6.98	5,000	4.6	-
6.44	10,000	4.6	-
5.95	5,000	4.6	-
4.68	10,000	4.8	-
5.84	20,000	4.8	-
5.35	5,000	4.8	-
5.60	5,000	4.9	-
5.11	15,000	4.9	-
4.15	45,000	4.9	-
3.24	3,001,626	4.0	675,000

The estimated fair value of stock options issued during the period was calculated using the Black-Scholes option pricing model with the following assumptions: i) the expected life of each stock option is 3 years (2020 - 3 years); ii) the risk free rate is between 0.18% and 1.32% (2020 - 0.28% and 0.34%); iii) the dividend yield will be $NIL (2020 - $NIL); and iv) expected volatility is between 72.23% and 75.52% (2020 - 64.82% and 67.69%). Included in expenses is a share-based compensation expense of $2,616,423 (2020 - $71,196).

On April 8, 2021, the Company issued 150,000 warrants with an exercise price of $10 in connection with potential future transactions. The estimated fair value of warrants issued during the period was $614,700 and the expense was included in transaction costs. The value was calculated using the Black-Scholes option pricing model with the following assumptions: i) expected life of 2 years; ii) risk free rate of 0.53%; iii) dividend yield of $NIL; and iv) expected volatility of 75.52%.

Volatility was determined using an average of comparable companies' historical trading data over a period equal to the expected life of the warrants and stock options. Variables used in the Black-Scholes option pricing model are based on highly subjective assumptions and any change in the assumptions can materially affect the fair value estimate.

18. RELATED PARTY TRANSACTIONS

During the period up to RTO, the Company paid $1,025,045 (2020 - $1,855,792) for research and product development work to Carlsun Energy Solutions Inc., which is owned by an individual that was director of the Company prior to RTO. Following RTO, the company ceased to be a related party. Included in prepaid expenses and deposits as of December 31, 2021, is $75,000 (2020 - $75,000) prepaid to this company.

Related parties include shareholders with a significant ownership interest in the Company and key management. These transactions are in the normal course of operations and are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

Included in operating expenses are the following wages and consulting fees paid to key management:

	2021	2020
Salaries and benefits	$ 871,242	$ 739,166
Share-based compensation expense	$ 1,522,643	$ 64,718

Board of directors and executive officers are deemed to be key management.

19. FINANCE COSTS

	2021	2020
Interest income	$ (92,688)	$ (625)
Interest expense	234,005	565,389
Accretion expense	124,633	128,283
Loss on extinguishment	-	69,561
	$ 265,950	$ 762,608

20. INCOME TAXES

The Company's income tax expense as presented differs from the amount that would be computed by applying the combined Canadian federal and provincial statutory income tax rate as a result of the following:

	2021	2020
Net loss before income taxes	$(25,007,646)	$ (6,850,616)
Statutory income tax rate	26.50%	26.50%
Expected income tax recovery	(6,627,026)	(1,815,413)
Non-deductible items	2,707,217	19,619
Share issuance costs booked to equity and debt	(1,146,579)	(51,262)
Tax asset acquired on reverse takeover	107,623	-
Tax benefit not recognized	4,958,765	1,847,056
	$ -	$ -

Deferred tax assets and liabilities have been offset where they relate to income taxes levied by the same taxation authority and the Company has the legal right and intent to offset. The following table summarizes the components of deferred tax:

	2021	2020
Deferred Tax Assets		
Capital lease obligation	$ 496,805	$ -
Operating tax losses applied	7,552	-
	504,357	-
Deferred Tax Liabilities		
Right of use asset	(504,357)	-
Net deferred tax liability	$ -	$ -

Deferred taxes are provided as a result of temporary differences that arise due to differences between income tax values and the carrying amount of assets and liabilities. Deferred tax assets have not been recognized in respect of the following deductible temporary differences:

	2021	2020
Operating tax losses carried forward	$ 23,289,473	$ 10,326,287
Reserves	4,457,550	2,124,077
Share issuance costs	3,908,313	209,740
Scientific research expenditures	2,327,970	2,289,961
Equipment	580,153	130,008
Patents	105,482	20,618
Intangibles	101,211	-
Tax credits	40,444	39,182
Bank indebtedness	20,000	10,000
Loan payable	-	125,367
	$ 34,830,596	$ 15,275,240

Income tax losses may be carried forward for up to 20 years. The Company's tax losses will expire as indicated below:

2027	$ 6,253
2028	128,583
2029	78,021
2030	183,976
2031	325,086
2032	65,069
2033	671,963
2034	640,027
2035	183,953
2036	719,857
2037	968,820
2038	704,240
2039	2,162,233
2040	3,459,708
2041	12,991,684
	$ 23,289,473

21. CHANGE IN NON-CASH WORKING CAPITAL

	2021	2020
Trade and other receivables	$ (747,750)	$ (143,799)
Prepaid expenses and deposits	(1,389,183)	(73,890)
Inventory	(831,589)	(134,005)
Trade and other payables	2,033,590	(160,682)
Deferred revenue	256,300	534,172
Provisions	(2,380,106)	(665,115)
	$ (3,058,738)	$ (643,319)

22. SEGMENTED INFORMATION AND MAJOR CUSTOMERS

The Company mainly operates in one segment, being the development and sale of electrolyzers and balance of plant equipment. On April 1, 2021, the Company acquired a hydrogen system integration and service company, which contributed to 100% of the Company's revenues. However, as this business has nominal assets, has no discrete cost information and is not reviewed internally by decision makers separately from the rest of the business, segmented results have not been presented.

All of the Company's assets are located in Canada. During the year ended December 31, 2021, one customer provided 73% (2020 - 100%) of the Company's revenues.

23. FINANCIAL INSTRUMENTS

Risk Management

The Board of Directors has overall responsibility for the establishment and oversight of the Company's risk management framework but has delegated to management the responsibility for monitoring and managing the risks that the Company faces. Financial instruments present a number of specific risks as identified below:

Fair Value

Fair value is defined as the exchange price that would be received to sell an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date.

Valuation techniques used to measure fair value are required to maximize the use of observable inputs and minimize the use of unobservable inputs. The carrying value of cash and cash equivalents, trade and other receivables, bank indebtedness, and trade and other payables approximate their fair values due to their nature or capacity for prompt liquidation. The carrying value of finance lease liability, loan payable and long-term debt approximates fair value given the difference between the discount rates used to recognize the liabilities in the consolidated statements of financial position and the market rates of interest is insignificant.

Valuation techniques used to measure fair value are required to maximize the use of observable inputs and minimize the use of unobservable inputs. Level 2 valuation methods have been used to determine fair values. Level 1 uses quoted prices in active markets for identical assets or liabilities. Level 2 uses inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

Credit Risk

Credit risk arises from the potential that debtors will fail to satisfy their obligations as they come due. Credit risk with respect to trade and another receivables is considered low as the balance is largely made up of sales taxes as well as large customers with strong credit. Credit risk with respect to cash and cash equivalents is considered low as it is held by a major Canadian financial institution. As such, no provision for lifetime expected credit losses has been made.

Liquidity Risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they become due. The Company manages its liquidity risk by reviewing, on an ongoing basis, its financial requirements for operations and capital expenditures and ensuring financing is available when necessary. As at December 31, 2021, the Company had $39,197,357 (2020 - $1,092,067) in cash and cash equivalents and $37,461,933 (2020 - $(6,042,038)) in working capital.

Market Risk

Market risk refers to the risk that a change in one or more general market conditions will result in losses to the Company. The Company is exposed to interest rate risk and manages this risk through regular monitoring of its financial instruments. The Company is not exposed to other price risk or foreign exchange risk.

(i) Interest rate risk

Interest rate risk arises from the possibility that changes in interest rates will have a negative effect on the value of financial instruments. The Company is exposed to interest rate cash flow risk on its cash and cash equivalents balances, which earn interest at a floating rate, and is exposed to interest rate price risk on its long-term debt balance, which bears interest at a fixed rate. As all of the Company's financial instruments bear interest at a fixed rate and are measured at amortized cost, a change in interest rates would not affect the Company's earnings.

24. CAPITAL MANAGEMENT

The Company's objectives when managing capital are to safeguard its ability to continue as a going concern, to meet its capital expenditures for its continued operations, and to maintain a flexible capital structure which optimizes the cost of capital within a framework of acceptable risk. Management defines capital as the aggregate of its equity, which is comprised of share capital, contributed surplus and retained earnings. The Company manages its capital structure and makes adjustments in light of general economic conditions, the risk characteristics of the underlying assets and the Company's working capital requirements. In order to maintain or adjust its capital structure, the Company may issue new shares or new debt, acquire or dispose of assets, or repay long-term debt. The Board of Directors reviews and approves any material transactions out of the ordinary course of business, including proposals on acquisitions or other major investments or divestitures, as well as annual capital and operating budgets. The Company is not subject to externally imposed capital requirements and there was no change to the Company's approach to capital management during the year.

25. COVID-19 INFORMATION

As the duration and impact of the COVID-19 pandemic to the global economy is indeterminable, it is not possible to reliably estimate the length and severity of COVID-19 related impacts on the financial results and operations of the Company. The Company will continue to closely monitor the situation as it develops day-to-day and will take further actions, if necessary, to ensure the wellbeing of our workforce, customers, suppliers and other stakeholders, as well as minimize disruption to the Company's progress.

In March 2020, the Government of Canada introduced the Temporary Wage Subsidy ("TWS") to support employers affected by COVID-19. The subsidy covered 10% of remuneration paid from March 18 to June 19, 2020, up to $1,375 per employee. During the year, the Company qualified for the TWS program and recognized $4,840 as a reduction to general and administrative expenses.

The Company also applied for the Canada Emergency Business Account ("CEBA"), which provides an interest-free and partially forgivable loan of up to $60,000 to small businesses. This has been classified as bank indebtedness, of which $40,000 was received in 2020 and $20,000 in 2021. Of the total amount, $20,000 is forgivable if the balance is repaid by December 31, 2022.

The Company will continue to review all programs offered by the Government and ensure that it applies for all appropriate support. The Company's exposure to supply chain risk and hiring risk was heightened during the pandemic, which the Company continues to monitor regularly in order to mitigate these risks. The Company does not expect any material changes to other risk factors, although a prolonged period of precautionary measures may delay the Company's ability to execute on its goals in a timely manner.