



The Engine Driving Zero-Emissions

LOOP ENERGY INC.

Management's Discussion and Analysis

FOR THE THREE MONTHS ENDED MARCH 31, 2023

(in Canadian dollars, amounts expressed in thousands except number of shares, per share amounts and number of units)

DATED MAY 10, 2023

Loop Energy Inc. ("Loop", "Company", "we", "us" or "our") has prepared the following management's discussion and analysis ("MD&A") for the three months ended March 31, 2023, as of May 10, 2023. This MD&A has been prepared in accordance with National Instrument 51-102F1 and should be read in conjunction with the unaudited interim condensed consolidated interim financial statements of the Company and the notes thereto for the three months ended March 31, 2023, and the consolidated financial statements and accompanying notes for the years ended December 31, 2022 and 2021, which have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board ("IFRS") and have been filed with the securities regulatory authorities on SEDAR at www.sedar.com. All references to "\$" are references to Canadian dollars, unless otherwise stated. The functional currency of certain of the Company's subsidiaries is the Renminbi and all balances have been translated to the presentation currency of the Company, the Canadian dollar.

Additional information relating to the Company, including our Annual Information Form for the year ended December 31, 2022, is available on SEDAR at www.sedar.com and is also available on our website at www.loopenergy.com. The Company's common shares trade on the Toronto Stock Exchange ("TSX") under the symbol "LPEN".

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1. OVERVIEW AND HIGHLIGHTS

1.1 Loop Energy

Loop Energy is an industry-leading developer, manufacturer, and supplier of hydrogen fuel cell systems for a variety of applications, including medium- and heavy-duty mobility, material handling, and stationary power. Our customers include vehicle original equipment manufacturers (“OEMs”) and power generation system manufacturers. We believe our products have the potential to reshape the industry with our combination of fuel efficiency, power density and fuel durability with our proprietary patented designs and technological advancements.

Our mission is to contribute to global decarbonization. Our current focus is to extend the range, power, and efficiency of fleets of return-to-base electric buses, trucks, and coaches. We believe this will be key to the goal of igniting growth in the hydrogen economy.

We estimate our total addressable market (“TAM”) value within return-to-base fleets at C\$1.2 billion¹ today. We believe our broader strategy has the potential to create access to a TAM that has the potential to reach up to C\$64 billion¹ in the aggregate by 2032.

The Company was incorporated under the laws of British Columbia, Canada on June 21, 2000 and is headquartered in Burnaby, British Columbia. The Company has manufacturing facilities in Burnaby, British Columbia and Shanghai, China, and has opened a service centre in Essex, United Kingdom (UK) and a sales office in Saronno, Italy to support growing customer demand in Europe.

1.1.1 Our eFlow™ Technology

A fuel cell is an environmentally clean electrochemical device that combines hydrogen fuel with oxygen to produce electricity. There are approximately 20 established manufacturers of fuel cells in the market today. Only Loop’s products feature our eFlow™² technology which is based on a patented modified (narrowing) geometry. Using a tapered, rather than rectangular, channel we can better control the flows of hydrogen, oxygen and coolant in the fuel stack.

Our tests show this technology maintains optimal performance temperatures and increases the unit’s efficiency, peak power and operational longevity. We believe that our proprietary eFlow™ technology offers up to 10x greater density uniformity of current, increased flow velocity and robust water removal³.

¹ Source: Company estimates, Bloomberg NEF, MarketsandMarkets Hybrid Train Market, The North American Locomotive Review 2022, H2FC SUPERGEN, Global Market Insights, Fueling the Future of Mobility, Hydrogen Council Reports, and publicly available information.

² This trademark is protected under applicable intellectual property laws and is the Company’s property. The Company’s trademark may appear without the ™ symbol in this MD&A, but such absence is not intended to indicate, in any way, that the Company will not assert, to the fullest extent under applicable law, the Company’s rights to this trademark. All other trademarks and trade names used in this MD&A are the property of their respective owners.

³ Source: Transport in PEMFC Stacks summary presentation for US Department of Energy, H2 Program. Based on Loop’s internal testing and comparisons of published studies of the performance of fuel cells from other manufactures and competitors. In order to quantify the benefit of eFlow™ technology directly, Loop purchased commercially available materials from a top competitor, built them into a Loop eFlow™ fuel cell stack, and then operated this stack at Loop’s best estimate of the competitor’s operating conditions using publicly available information.

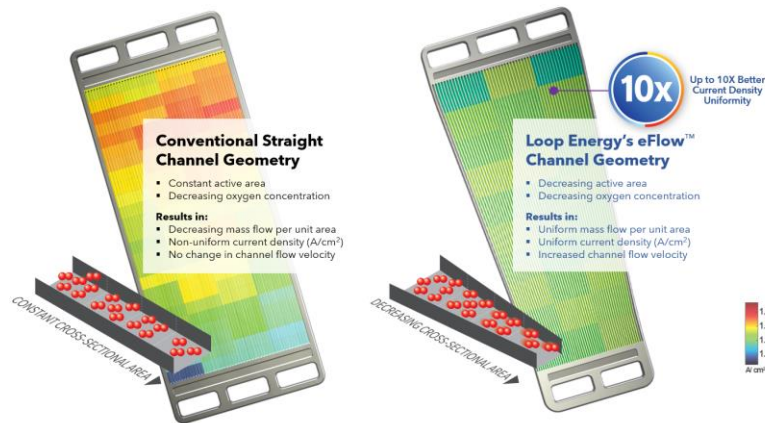


Figure 1: Conventional vs. eFlow™ Fuel Cell Bipolar Plate

Our primary focus for eFlow™'s patented modified geometry has been hydrogen fuel cells. We have successfully commercialized eFlow™ into our fuel cell products and continue to see strong and growing customer demand for its industry leading performance. We have also been investigating the potential positive impact that eFlow™ can have on Polymer Electrolyte Membrane ("PEM") Electrolyzers. The Company recently completed third-party validation testing with Fraunhofer Institute for Solar Energy Systems ISE in partnership with Fraunhofer USA, demonstrating that eFlow™'s trapezoid flow field design can increase green hydrogen production. The Company is currently inviting expressions of interest for strategic partners to complete commercial trials of the use of its patented eFlow™ technology in PEM electrolyzers.

1.1.2 Commercial Strategy

Given our competitive technology advantage, we continue to believe Loop's rate of market penetration will be driven by the total cost of ownership ("TCO") we deliver for customers, both in absolute terms and relative to competitors.

We expect the combination of decreasing TCO and accelerating demand will create an ongoing positive feedback loop, allowing us to leverage Wright's Law - a reliable framework for cost reduction as a function of cumulative production. As we continue to scale operations, we expect average unit cost to decrease. Decreased unit cost will result in greater demand which, in turn, will increase production scale and decrease costs until market saturation is reached.

We believe our proven eFlow™ technology has the potential to deliver lower TCO, due to the improvement in fuel efficiency, which makes up a significant portion of the TCO, and its uniform current distribution that prevents hotspots, making our products inherently more durable, thereby extending lifecycles and reducing service and maintenance costs.

Our fuel cell products are now far easier to install in electric vehicles - times are measured in days not weeks, even for new vehicle platforms. We also anticipate that the high-quality components used in our production will pay back for customers - via the cumulative uptime, efficiency, power uniformity and longevity that we expect our stacks will deliver over years of constant use.

Our strategy of having a local presence in the key geographical markets in which we operate enables us to provide on-the-ground support for our customers. We believe that this will not only lower TCO while enhancing customer experience and retention, but will also increase our market visibility.

To ensure the full benefits of these initiatives are realized, Loop manages sales, account development and retention via a tight customer adoption cycle (see figure 2). To qualify for our Customer Adoption Cycle (“CAC”), every customer must place at least one purchase order and have an articulated plan to scale to full production (“Pilot Phase”).

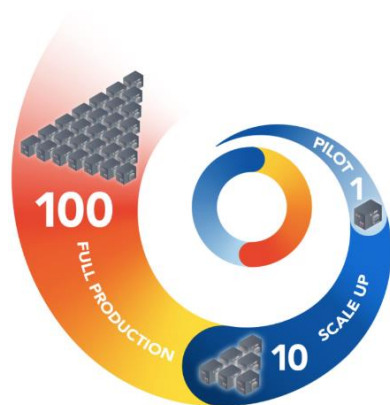


Figure 2: Customer Adoption Cycle (CAC)

Every customer that enters the CAC starts with a single unit for technical evaluation. Once the technical evaluation is complete, they enter the scale up phase, which often means testing several units in a fleet (“Scale-Up Phase”). The final step is full production at commercial levels (“Production Phase”).

We believe that our continued performance in 2023 will prove our competitive advantage to the market and drive demand for our products in the medium- and heavy-duty mobility, material handling, and stationary power sectors.

1.1.3 Underlying Market Drivers

The decarbonization of transportation via electrification and fuel switching has the potential to greatly impact emissions. The movement towards electrification has grown as countries take action to achieve commitments made in the Paris Agreement. These actions include the banning of diesel vehicles in major city centers and the progressive phasing out of internal combustion engine vehicles (“ICEVs”). Energy security concerns highlighted by the ongoing war in Ukraine have provided further emphasis on the push away from the world’s dependency on fossil fuels.

This movement is apparent in the recent growth in the number of electric vehicles (“EVs”), most commonly battery-powered (“BEVs”). Several governments around the world are combining regulatory changes with financial support for the transition to zero emission vehicle technologies, recent examples include REPowerEU in Europe and the Inflation Reduction Act in the USA. With expanding e-commerce freight demands, we believe that zero emission vehicles are one of the only viable options for a sustainable future. Commercial vehicles powered solely by lithium-ion batteries are a part of the solution.

However, fully battery-powered commercial vehicles are currently unable to economically meet many of the critical functional characteristics required for mass-market adoption. Commercial EVs, medium and heavy-duty BEVs currently suffer from reduced operating performance as the substantial weight, and the dimensions of battery packs limit range, reduce payload capacity and necessitate long re-charging times - all increasing TCO.

We continue to believe hydrogen fuel cells combined with lithium-ion batteries (“FCEV”) are the optimal solution. In this hybrid, hydrogen fuel cells act as on-board chargers and address these BEVs shortcomings. While smaller deployments of FCEVs and hydrogen refueling infrastructure are costlier, benefits are compounded when fleets are deployed at scale. We believe that when FCEV fleet sizes increase, hydrogen infrastructure becomes less costly per vehicle than BEV recharging infrastructure. Given the level of enquiries, we believe that major fleet operators of commercial vehicles are beginning to recognize the potential benefits of this hybrid approval.

1.2 Recent Developments

The following highlights the significant corporate, financial events and announcements of the Company since December 31, 2022:

- Appointed Brad Miller to the Board of Directors. In conjunction with this appointment, Neil Murdoch resigned from the board. (Jan 2023)
- Partnered with H2 Portable, a Canadian developer of hydrogen-electric mobile power solutions, to develop zero-emission gensets. (Feb 2023)
- Selected by Wiggins Lift Co., a leading American material handling vehicle manufacturer, to provide the fuel cell system for its new hydrogen-powered eBull forklift product. (Feb 2023)
- Reduced headcount and operating expenses. (March 2023)
- Completed third-party validation of the use of Loop's patented eFlow™ technology in PEM electrolyzers in partnership with Fraunhofer USA and the German Fraunhofer Institute for Solar Energy Systems ISE. (Mar 2023)
- Retained Credit Suisse to advise on strategic alternatives, including strategic partnerships, licencing opportunities, joint development and outsource opportunities, and other ways to bring new capital, expertise and resources to the business and to identify growth opportunities and ways to support Loop Energy's expansion plans. (Mar 2023)
- The Board formed a special committee to evaluate and review transaction proposals and, if applicable, oversee the negotiation and implementation of a transaction proposal relating to the Credit Suisse engagement (April 2023)
- Dr. Sean MacKinnon, Chief Scientist at Loop Energy, and Dr. Tom Smolinka, Head of Department of Energy at Fraunhofer ISE presented how eFlow™ flow field improves PEM water electrolysis at Hanover Messe. (April 2023)
- Partnered with MYNT First Element, a leading Australian power generator manufacturer, to manufacture hydrogen electric power generators. Under the agreement, Loop Energy's hydrogen fuel cell modules are integrated into MYNT's lineup of Purple H2 generators. Further, Loop has appointed MYNT as an exclusive value-added distribution partner for the Australian market. (May 2023)

1.3 Outlook

Continuing to Execute

The first quarter of 2023 was positive for Loop Energy, with a broadening of our customer base in our core geographic and vertical markets, and strong indications that the market for fuel cell commercial vehicles is strengthening in our core applications. However, it has not been without its challenges. Tightening of capital markets continues to impact the Company's ability to raise funds, and rising electricity costs and overall inflationary pressure have resulted in extended timelines for both new and existing projects, necessitating a reduction in headcount and operating expenses across the Company. As a result, we expect modest growth in 2023, with lower anticipated deliveries extending over the year.

Go to Market Strategy ("GTMS")

Our CAC remains a key element to ensure that we are working with customers that have a trajectory and desire to scale to full production. The Pilot Phase of our CAC starts with the first PO and a documented path to full production and future orders, including things such as conditional purchase orders. We believe that our success is measured by the number of fuel cells ordered from our customers, and since the adoption of our CAC, we have had four customers progress from the Pilot Phase to the Scale-Up Phase, of which two further progressed to the Production Phase.

In Q1 2023, we fulfilled outstanding orders for 13 units of the S300 and 2 units of the T500 from Q4 2022 and added one new company to our CAC. While our order book remains heavily weighted towards Europe, we are beginning to see interest growing in North America and Asia-Pacific.

In Q1 2023, Loop announced a new partnership with H2 Portable, a Canadian developer of hydrogen-electric mobile power solutions, to develop zero-emission hydrogen-electric gensets designed to provide clean, reliable, on-demand power to movie sets, construction sites and other locations with limited grid power access. The first three fuel cell

systems were delivered to H2 Portable in late February, moving them into the Pilot Phase of the CAC. Less than a week later, we announced that Loop was selected by Wiggins Lift Co., a leading American material handling vehicle manufacturer, to provide the fuel cell system for its new hydrogen-powered eBull forklift product. Wiggins provides material handling vehicles to port, marina and warehouse operators across the US and aims to be an early mover in the hydrogen-electric material handling vehicle segment. Loop will deliver the first S300 (30 kW) fuel cell system and begin commissioning in Q2 2023 to support commercial deployment of the hydrogen-electric forklifts in late 2023.

In May 2023, Loop Energy and MYNT First Element, a leading Australian power generator manufacturer, announced a strategic partnership for manufacturing of hydrogen electric power generators. Under the agreement, Loop's hydrogen fuel cell modules will be integrated into MYNT's lineup of Purple H2 generators - a clean energy alternative solution to diesel generators in base load applications for mining, industrial and construction clients. The agreement was signed after a successful market introduction of the Purple H2 product line in the first quarter of 2023. MYNT is planning three trials in the second half of 2023 in Australia. Further, Loop has appointed MYNT as an exclusive value-added distribution partner for the Australian market.

Further exploiting our technology advantage

While current commercial success is based on our ability to deliver superior performance, efficiency and durability in the hydrogen fuel cell market, we are now readying the business to exploit our technological advance in the electrolyzer market. In March 2023, Loop completed third-party validation of the use of our patented eFlow™ technology in PEM electrolyzers, in partnership with Fraunhofer USA and the German Fraunhofer Institute for Solar Energy Systems ISE. Our initial external studies have indicated eFlow™, with its modified architecture, creates a more stable and uniform operating environment in the PEM water electrolysis test cells compared to conventional flow fields with parallel channels, resulting in greater hydrogen production and improved efficiency. Testing also showed the enhanced uniform operating environment should have a beneficial impact on durability. When incorporated into conventional PEM electrolysis cells, this bipolar plate architecture demonstrates it can increase hydrogen production. Loop Energy is now recruiting industry partners to develop a full-scale electrolyzer prototype for commercial validation.

Capital Requirements

Following a successful Initial Public Offering ("IPO") in February of 2021, the Company embarked on a 24-month development plan designed to enter the market, establish an initial customer base in the key growth applications and plot a course for scale-up and eventual profitability. The next phase of company development is largely centered on scaling up the business, which is dependent on the Company's ability to raise funding from the global financial markets, as well as being dependent on the industry's growth and demand profile. At this time, it does not appear that 2023 will present the combination of capital availability and demand growth necessary to proceed with plans for scale up in accordance with expected timelines. As a result, we anticipate unit sales and revenues in 2023 to be in line or slightly above 2022, with the potential for growth resuming in 2024, when market conditions are expected to improve.

In response to these changes in our business environment, we have worked collaboratively with our customers to align the Company's operations with their product demand. As a part of this exercise, the Company took steps in Q1 2023 to right-size the organization and align operating expenses with market conditions. We also evaluated ways to extend our cash resources and reduce or delay reliance on new fundraising from government partners and financial markets. This reduction in operating and capital spend has enabled us to maintain a cash balance of \$13.2 million as of March 31, 2023, which is expected to provide sufficient capital for the Company to continue to fund operations until the end of 2023. These operating and capital expense reductions were made with the intent to preserve commitments to our customers based on their anticipated growth trajectory.

Further, the Company has focused current resources on strategic initiatives to reduce cost through vertical integration of certain key components and to refine products for key market segments, such as municipal buses, that are less sensitive to capital availability. These efforts are not capital intensive but provide good return on investment in the current climate.

Investigating Strategic Options

Over the first quarter of 2023, we continued to evaluate the capital access options available in the financial markets. On March 29, 2023, we announced that Credit Suisse had been retained as Financial Advisor to advise on strategic alternatives. As part of this exercise, we are currently evaluating all options including: strategic partnerships; licencing opportunities; joint development and outsource opportunities; sale; and, other ways to bring new capital, expertise and resources to the business, in addition to exploring growth opportunities and ways to support Loop Energy's expansion plans.

2. MARCH 2023 FINANCIAL PERFORMANCE OVERVIEW

The following table highlights key financial information for the three months ended March 31, 2023, as compared to the prior comparative periods.

Table 1: Selected Interim Financial information (in thousands of CAD dollars, except per share amounts)	Three months ended March 31,		Variance	
	2023	2022	\$	%
	Revenues	\$ 903	\$ 178	725
Cost of Sales				
Cost of goods sold	2,451	793	1,658	209
Change in allowance for inventory write-down	1,399	1,206	193	16
Gross margin	(2,947)	(1,821)	(1,126)	62
Expenses:	7,430	6,170	1,260	20
Less cost recoveries:	(3,122)	(43)	(3,079)	(7160)
Net expenses	4,308	6,127	(1,819)	(30)
Loss before the undernoted	(7,255)	(7,948)	693	(9)
Other income (expenses):	(28)	(99)	71	(72)
Net loss for the period	(7,283)	(8,047)	(764)	(9)
Other comprehensive income	(60)	(17)	(77)	(453)
Total comprehensive loss for the period	(7,223)	(8,064)	(841)	(10)
Loss per common share				
- basic and diluted	(0.21)	(0.24)	(0.03)	(12)

2.1 Revenues and Cost of Sales:

Table 2: Revenues and Cost of Sales (in thousands of CAD dollars, except units sold)	Three months ended March 31,		Variance	
	2023	2022	\$	%
	Revenues	\$ 903	\$ 178	725
Units sold	15	2	13	650
Cost of sales				
Cost of goods sold	2,451	793	1658	209
Change in inventory write-down allowance	1,399	1,206	193	16
Gross margin	(2,947)	(1,821)	(1,126)	62

The Company's primary source of revenues is the sale of its fuel cell modules. As the Company continues to commercialize its fuel cell modules, it is expected that revenue will vary from period to period.

Revenues were \$0.9 million for the three months ended March 31, 2023 (2022- \$0.2M), due to the sale of 15 (2022: 2) fuel cell units. The average price per unit decreased in 2023, mostly due to product mix and market conditions. Revenue for 11 units built and shipped in 2022 but delivered in January 2023 are recognized in Q1 2023 (\$0.6 M impact).

Cost of sales includes the cost of materials, direct and indirect labour and overheads incurred in the manufacturing of our products, in addition to a warranty provision for products sold, inventory write-downs as required, and the cost of parts and components sold as part of the integration process as follows:

Table 3: Cost of sales (in thousands of CAD dollars)	Three months ended		Variance	
	March 31,			
	2023	2022	\$	%
Cost of goods sold	\$ 2,451	\$ 793	1,658	209
Change in inventory write-down allowance	1,399	1,206	193	16
Cost of sales	3,850	1,999	1,851	93

Cost of sales increased to \$3.9 million for the three months ended March 31, 2023 (2022- \$2.0 M), primarily due to an increase in quantity of units sold to 15 (2022:2), with the average cost per unit trending downwards due to product mix and cost efficiencies achieved along 2022.

A warranty provision, dependant upon the warranty period, is recorded for each applicable fuel cell unit sold. As the Company has just begun commercializing its fuel cell units and does not have a detailed warranty history, the warranty provision is a significant accounting estimate.

Due to the Company's current scale of production, and the start-up nature of our manufacturing operations, our cost per unit currently exceeds our selling price and we have a negative gross margin. We record our finished goods at the lower of costs and their net realizable value (estimated selling price less the estimated cost of completion and selling costs) recording a write down allowance when required, and also record a provision against our raw materials on hand.

The inventory write-down allowance increased by \$1.4 million during the three months ended March 31, 2023 (Q1 2022: \$1.2 M), mostly due to an increase in inventory on-hand. On March 31, 2023, the Company had inventory of \$4.4 million in raw materials and \$1.3 million in finished goods recorded at their net realizable value. As the inventory write-down allowance is based on the amount of inventory on hand at period end, this amount can significantly vary period over period. We expect that as we increase our scale of production and can approach a breakeven point, the write-down of inventory will decrease or will no longer be required.

2.2 Operating Expenses

Table 4: Operating expenses (in thousands of CAD dollars)	Three months ended		Variance	
	March 31,			
	2023	2022	\$	%
General and administrative	\$ 2,356	\$ 2,398	(42)	(2)
Engineering	3,489	2,593	896	35
Business development	1,326	752	574	76
Technology development	259	427	(168)	(39)
Cost recoveries	(3,122)	(43)	(3,079)	7,160
Operating expenses	4,308	6,127	(1,819)	(30)

Operating expenses in general have increased across most functions since the completion of our IPO as the Company is currently in a growth phase and building its foundation to deliver against its expected growth profile. A quarter-by-quarter comparison for the last eight quarters is included in section 3.2.

G&A expenses were \$2.4 million (2022: \$2.4 M) for the three months ended March 31, 2023, as headcount and activity remained similar in both periods.

Engineering expenses were \$3.5 million (2022: \$2.6 M) in the three months ended March 31, 2023. The increase was primarily related to product development and plate manufacturing activities supporting the Company's growth strategy, and initiatives to optimize product design and costs reductions.

During the period ended March 31, 2023, the Company invested in various business development initiatives mainly related to market development activities in North America and Europe. Business development costs increased to \$1.3 million (Q122: \$0.8 M) in the three months ended March 31, 2023, primarily due to increased headcount, tradeshow participation and communications.

The Company has continued to engage in new initiatives related to technology research and new material development, and how the benefits of eFlow™'s patented modified geometry may apply to electrolyzers, resulting in continued technology and development expenditures.

\$3.1 million in cost recoveries were recognized in the three months ended March 31, 2023, of which \$3.0 million is related to funding received under its Sustainable Development Technology Canada ("SDTC") project, mostly related to the completion and finalization of milestones 4 and 5, and \$0.1 million of cost recovery related to the Company's agreement with Pacific Economic Development Canada pursuant to which the Company is entitled to receive up to \$9.75 million of Job and Growth Fund-Innovation Program ("JGF Program") funding.

Net loss decreased to \$7.2 million (2022: \$8.0 M net loss) in the three months ended March 31, 2023, driven by the previously mentioned increases in sales and cost recoveries, partially offset by the increases in cost of sales and expenses discussed above.

Revenue and operating costs are further analyzed and discussed in section 3.1.

3. REVIEW OF QUARTERLY PERFORMANCE

The following tables highlights key financial performance for the last eight quarters and year-to-date for the past three years:

3.1 Revenues and Cost of Sales

Table 5: Quarterly and YTD Revenue and Cost of Sales (in thousands of CAD dollars)

	Quarter								YTD		
	Q123	Q422	Q322	Q222	Q122	Q421	Q321	Q221	2023	2022	2021
Revenues	\$ 903	\$ 681	\$ 1,404	\$ 1,065	\$ 178	\$ 128	\$ 206	\$ 1090	\$ 903	\$ 178	\$ -
Units sold	15	9	22	16	2	1	2	11	15	2	-
Cost of sales											
Cost of goods sold	2,451	2,421	3,283	3,685	793	789	620	3,041	2,451	793	-
Inventory write-down allowance	1,399	1,360	736	(159)	1,206	988	910	(931)	1,399	1,206	833
Cost of sales	3,850	3,781	4,019	3,526	1,999	1,777	1,530	2,110	3,850	1,999	833
Gross margin	(2,947)	(3,100)	(2,615)	(2,461)	(1,821)	(1,649)	(1,324)	(1,020)	(2,947)	(1,821)	(833)

Revenues

The Company's primary source of revenues is the sale of its fuel cell modules and systems, with 15 units sold in the three months ended March 31, 2023 (2022: 2). As the Company is commercializing its fuel cells, we expect that the number of units sold and revenue will vary from period to period. Q221 revenue was driven by the sale of 11 units for our first pilot bus program. The increase in Q2 2022 and Q3 2022 was driven by Tevva transitioning to the Production Phase of the CAC. As previously noted, 11 units were shipped in December 2022, but were not delivered prior to year end and thus were recognized as revenue in Q123.

Cost of sales

Our cost of goods sold varies with the number of units sold, with Q123, Q422, Q322, Q222 and Q221 being significantly higher than other periods, consistent with unit sales in such periods. Our average cost of goods sold per unit will also vary based on the volumes and type of units and models being sold, but we are seeing a downward trend as our volumes increase over time. We expect to see average costs further decrease as a result of design improvements, and supply chain efforts.

Due to the Company's current low production volumes and the build-out of our manufacturing capacity, our cost per unit currently exceeds our selling price, and as a result we have a negative gross margin. Therefore, at the end of each accounting period we are required to not only write down our finished goods to their net realizable value (estimated selling price less the estimated cost of completion and selling costs), but also record a provision against our raw materials on hand.

The inventory write-down allowance described above represents the movement in the write-down of raw materials and finished goods on hand during the period. As this is based on the amount of inventory on hand at period end, this amount can vary significantly period over period. We expect that as we increase our scale of production and can approach a breakeven point, the write-down of inventory will decrease or will no longer be required. The credit recorded in Q222 and Q221 reflects that the previously written down inventory was sold during the period and presented as cost of goods sold, to reflect the actual cost of inventory used. The increases in Q322 and Q422 reflect the impact of the build up of our inventory levels during the period.

Since Q221, the Company has been building its manufacturing capacity and inventory levels and as a result has had an increasing allowance on its raw materials.

3.2 Operating Expenses

Table 6: Quarterly and YTD Operating Expenses (in thousands of CAD dollars)

	Quarter								YTD		
	Q123	Q422	Q322	Q222	Q122	Q421	Q321	Q221	2023	2022	2021
G&A	\$ 2,356	\$ 2,372	\$ 3,329	\$ 2,633	\$ 2,398	\$ 2,600	\$ 2,015	\$ 1,976	\$ 2,356	\$ 2,398	\$ 3,487
Engineering	3,489	3,089	4,126	3,168	2,593	2,194	1,891	2,238	3,489	2,593	1,762
BD	1,326	1,237	1,794	1,643	752	688	912	616	1,326	752	384
Tech Dev	259	439	290	215	427	295	412	214	259	427	135
Cost recoveries	(3,122)	(594)	(2,051)	53	(43)	(33)	(33)	(38)	(3,122)	(43)	(1,839)
Operating expenses	4,308	6,543	7,488	7,712	6,127	5,744	5,197	5,006	4,308	6,127	3,929

General & Administrative (G&A) Expenses

The increase in Q222 compared to Q122 is mainly due to costs associated with additional headcount. The increase in Q322 compared to prior periods includes a credit loss charge of \$0.7 million. The decrease in Q422 and Q123 is in line with the Company's effort to streamline costs.

Engineering Expenses

Engineering expenses are associated with the expansion of the Company's product lines, the evolution of the Company's fuel stack technology and initiatives to optimize product design and costs. The increase in Q322 is mostly due to increased headcount, to support the larger plate design and the 120kW product launched in September 2022. The increase in Q123 is mostly due to work related to a new 60kW product design and plate manufacturing activities.

Business Development Expenses

Q321 saw a significant increase in business development expenses as the Company attended its first tradeshows to market our products. In 2022, we have increased our European sales team. Q322 and Q222 saw an increased focus on tradeshows along with growth in technical service team to support customer integration of fuel cell modules; while Q422 and Q123 dropped off slightly due to reduced activity compared to previous quarters.

Technical Development Expenses

Technical development expenses are comprised of the Company's advanced development research. The Company has continued to engage in new initiatives related to early-stage technology research and new material development, and in particular how the benefits of eFlow™'s patented modified geometry applies to electrolyzers and the potential to produce more hydrogen in a more cost-efficient manner. The increase in Q422 is associated with such additional efforts. The decrease in Q123 takes the expenses to its baseline as most of the electrolyzers work is already finished.

Cost Recoveries

Cost recoveries primarily relates to Scientific Research and Experimental Development (SR&ED) tax credits and Sustainable Development Technology Canada ("SDTC") credits, which are recognized only when there is reasonable certainty as to their collectability or, in the case of SDTC, when milestones are completed and approved. The SR&ED tax credits only relate to the periods prior to the Company becoming a public company. During each of Q121, Q322 and Q123 the Company recognized \$1.6 million, \$1.8 million and \$3.0 million, respectively, of cost recoveries related to achieving and finalizing SDTC milestones.

In Q322, Q422 and Q123 the Company is also recording recoveries in relation to the JGF loan, resulting in an increase in cost recoveries.

3.3 Net Loss

Table 7: Quarterly and YTD Net Loss in thousands of CAD dollars except per share amount)

	Quarter								YTD		
	Q123	Q422	Q322	Q222	Q122	Q421	Q321	Q221	2023	2022	2021
Net loss	\$ (7,283)	\$ (9,653)	\$ (9,864)	\$ (9,923)	\$ (8,047)	\$ (7,457)	\$ (6,540)	\$ (6,152)	\$ (7,283)	\$ (8,047)	\$ (4,872)
Loss per common share - basic and diluted	(0.21)	(0.28)	(0.29)	(0.29)	(0.24)	(0.22)	(0.19)	(0.18)	(0.21)	(0.24)	(0.20)

In general net loss has been increasing as a result of the aforementioned increases in cost of sales and operating expenses. The Net loss decrease in Q123 is mostly due to cost recoveries of \$3.1 million.

4. FINANCIAL POSITION

The following tables summarize the financial position for the Company as at the end of each of the last eight quarters.

4.1 Assets

Table 8: Total Assets

(in thousands of CAD dollars)

	Q123	Q422	Q322	Q222	Q122	Q421	Q321	Q221
Current assets:								
Cash and cash equivalents	\$ 13,163	\$ 24,524	\$ 36,949	\$ 43,325	\$ 55,730	\$ 67,030	\$ 77,810	\$ 84,439
Accounts receivable	4,015	3,842	3,237	2,914	2,533	2,066	1,671	1,356
Tax credit receivable	-	-	182	1,329	1,416	1,416	1,416	1,416
Inventory	5,632	4,288	3,927	1,591	1,637	1,280	1,195	828
Prepaid expenses and advances	3,063	2,001	7,105	7,748	6,575	6,564	3,256	2,322
Total current assets	25,873	34,655	51,400	56,907	67,891	78,356	85,348	90,361
Non-current assets:								
Accounts receivable	186	239	289	345	412	477	529	-
Equity-accounted investment	-	-	-	-	-	-	-	141
Property, plant and equipment	21,846	20,344	13,659	10,301	8,589	5,260	5,179	4,110
Total non-current assets	22,032	20,583	13,948	10,646	9,001	5,737	5,708	4,251
Total assets	47,905	55,238	65,348	67,553	76,892	84,093	91,056	94,612

The reduced cash burn in Q322 is attributed to the draw down of non-dilutive government funding in the form of tax credits and an interest free loan. The following table summarises the net cash flow from operating, investing, and financing activities:

Table 8.1: Cash Flow

(in thousands of CAD dollars)

	Q123	Q422	Q322	Q222	Q122	Q421	Q321	Q221
Net operating cash flow	\$ (9,011)	\$ (6,226)	\$ (8,458)	\$ (10,654)	\$ (7,839)	\$ (6,113)	\$ (5,883)	\$ (4,789)
Net investing cash flow	(2,392)	(7,605)	(2,542)	(1,541)	(3,274)	(3,993)	(628)	(714)
Net financing cash flow	(91)	940	4,568	(99)	(187)	(677)	(97)	(1,562)
Foreign exchange	133	466	56	(111)	-	3	(21)	18
Net change in cash and cash equivalents	(11,361)	(12,425)	(6,376)	(12,405)	(11,300)	(10,780)	(6,629)	(7,047)

The change in net operating cash outflow is generally consistent with the change in net loss (refer to section 3.3). In each of Q421, Q321, Q322 and Q123, net operating cash outflow was higher than the net loss primarily due to the timing of inventory purchases, with Q421 also impacted due to the timing of payments.

Cash used in investing activities relates entirely to the purchase of capital assets and leasehold improvements. Capital assets include testing and manufacturing equipment to continue growing the Company's manufacturing, product development, testing and prototyping capabilities. As at March 31, 2023, outstanding commitments related to purchases of property, plant, and equipment were \$1.6 million.

The net financing cash outflow for Q221 and Q421 primarily relates to the payment of share issuance costs related to the Company's IPO. In Q322 and Q422 the Company received \$4.9 million and \$1.1 million respectively related to its agreement with Pacific Economic Development Canada for the JGF program.

Fluctuations in accounts receivable relate to the timing and quantum of sales of fuel cell modules by quarter and the timing of receipt of payments on such sales. The timing of collection of GST receivables has also resulted in fluctuations in receivables.

The tax credit receivable relates to the Company's estimated SR&ED tax credits up to the date of the Company's IPO in February 2021, which amounts were payable in cash. As a public company, the Company's SR&ED tax credits are not refunded in cash. In Q322, the Company completed and submitted these filings and received \$1.1 million of SR&ED credits in cash, with an additional and final cash payment of \$0.2 million received in October 2022.

Inventory increased in most quarters as the Company continued to build its inventory balance to meet the growing demand of its customers. The increases in Q122, Q322 and Q123 are consistent with the build up of raw materials and finished goods to meet production requirements associated with the fulfillment of purchase orders. The amounts recorded in the Company's statement of financial position are the estimated net realizable value of inventory. As of March 31, 2023, not including write down allowance, the Company has \$12.0 million in inventory, out of which over 75% is raw materials.

Prepaid expenses and advances are comprised of deposits for property, plant and equipment, inventory, software and corporate G&A expenses. Increases in Q321, Q421, Q122, Q222 and Q123 are due to increases in refundable deposits made for inventory and property, plant, and equipment, as the Company continued to expand its manufacturing capabilities to continue to meet customer demands. The decrease in Q422 is mostly due to a reclassification of \$3.9 million to property, plant and equipment for deposits paid for equipment to be delivered in 2023 that are no longer refundable.

Non-current accounts receivable primarily relates to the amounts reimbursable by a government entity to the Company relating to the lease entered into by Loop Shanghai.

Property, plant and equipment, which includes right-of-use assets associated with leases, has increased following the IPO, to expand the Company's testing and manufacturing capabilities, as well as during Q322 when the Company entered into new office and facility leases in Canada and the UK, and during Q321 as a result of a new facility lease by Loop Shanghai.

4.2 Liabilities

Table 9: Liabilities (in thousands of CAD dollars)	Q123	Q422	Q322	Q222	Q122	Q421	Q321	Q221
Current liabilities:								
Accounts payable and accrued liabilities	\$ 4,684	\$ 3,939	\$ 5,312	\$ 2,416	\$ 3,037	\$ 2,846	\$ 2,886	\$ 1,555
Current portion of lease liabilities	1,002	972	900	708	713	715	659	492
Current portion of long-term debt	175	175	175	175	175	175	175	165
Deferred revenue and recoveries	717	1,656	666	2,453	2,836	2,479	2,358	2,577
Warranty provision	253	184	427	310	138	112	103	60
Total current liabilities	6,831	6,926	7,480	6,062	6,899	6,327	6,181	4,849
Non-current liabilities:								
Lease liabilities	2,596	2,764	2,983	2,190	1,202	1,350	1,476	753
Long-term debt	3,993	3,928	3,226	170	195	219	242	275
Deferred revenues and recoveries	1,430	1,737	2,275	757	807	849	873	-
Warranty provision	391	373	471	185	189	193	181	188
Total non-current liabilities	8,383	8,802	8,955	3,302	2,393	2,611	2,772	1,216
Total liabilities	15,214	15,728	16,435	9,364	9,292	8,938	8,953	6,065

Accounts payable increased in Q322 and Q123 mostly due to increase in purchases for inventory and equipment and consulting services, and the difference in timing between the receipt of the goods and services and payment of the invoices.

Lease liabilities increased in Q322 as a result of new leases entered into in Canada and the UK, in Q222 due to an extension of a facility lease in Canada, in Q321 due to a new facility lease entered into by Loop Shanghai and in Q121 due to a new office lease entered into in Canada.

Long-term debt decreased in Q221 primarily due to a \$0.4 million repayment of unsecured promissory notes and increased in Q322 and Q422 as a result of the recording of the fair value of the loan payable to Pacific Economic Development Canada from funding received under the JGF program.

Deferred revenues and recoveries include SDTC credits received for which milestones to recognize the cost recoveries had yet to be achieved, deposits received from customers, a deferred government grant recovery associated with a facility lease entered into by Loop Shanghai in Q321 and the government grant value associated with the interest free JGF funding received from Pacific Economic Development Canada. The balance of deferred revenue and recoveries will fluctuate period to period based on the timing of receipt of grants and the timing of recognition of recoveries associated with such grants.

In Q322 another \$1.8 million was recognized as a cost recovery associated with Milestone 3 completion of the SDTC project. In Q422 the Company received from SDTC a further advance payment of \$0.8 million to fund the fourth milestone project which was recorded as deferred cost recovery and subsequently recognized in Q123. In Q123 the Company received from SDTC a final payment of \$1.8 million in relation to completion of the fifth milestone, which was recognized completely alongside additional funding of \$297 upon completion of the fourth and fifth milestone.

On March 31, 2022, the Company entered into an agreement with Pacific Economic Development Canada for JGF funding of up to \$9.75 million in cash to assist with project costs associated with increases in the Company's manufacturing capacity. Under the terms of the agreement the funding is repayable over 60 consecutive months commencing on April 1, 2025 and is non-interest bearing. The funds are to be received as certain milestones are accomplished over a period up to March 31, 2024. The Company received initial advances of JGF funding in two tranches of \$4.9 million and \$ 1.1 million during Q322 and Q422 respectively. These advances were valued at \$3.1 million and \$0.7 million respectively on the applicable payment receipt date with the discount of \$1.8 million and \$0.5 million respectively being recorded as deferred cost recovery. The Company recognized \$0.1 million in Q123 as a cost recovery.

The increase in the non-current portion of deferred revenues and recoveries during Q322 is related to the non-current portion of the JGF loans from Pacific and Economic Development Canada, and in Q321 is primarily due to a government grant associated with the new facility lease entered into by Loop Shanghai and all other movements are due to the timing of customer deposits and the recognition of revenues.

Commencing in Q221, the Company recorded a warranty provision for the estimated costs of replacement and associated services costs that will be incurred by the Company with respect to the products sold.

4.3 Liquidity and Working Capital

	Q123	Q422	Q322	Q222	Q122	Q421	Q321	Q221
Cash and cash equivalents	\$13,163	\$24,524	\$36,949	\$43,325	\$55,730	\$67,030	\$77,810	\$84,439
Working capital	19,042	27,729	43,920	50,845	60,992	72,029	79,167	85,512

The Company's working capital position, being its current assets less its current liabilities, has declined as we have spent a majority of the funds received during the Company's IPO in Q121 on the development of our business.

The Company realized a net loss of \$7.3 million in Q123 and had negative cash flows from operations of \$9.0 million. The Company expects to incur further losses in the development of its business and forecasts that it will need to seek additional financing within the next year to continue as a going concern and meet its ongoing expenditures and obligations. While the Company has been successful in securing financing in the past, there can be no assurances that it will be able to do so in the future. These conditions indicate a material uncertainty exists that may cast significant doubt about the Company's ability to continue as a going concern.

While the Company has incurred losses to date, its strategy to mitigate this uncertainty is to continue its drive to attain profitable operations that are sustainable by executing a business plan that continues to focus on revenue growth, improving gross margins, maintaining discipline over operating expenses, managing working capital requirements, and securing additional financing to fund operations as needed until the Company does achieve profitable operations that are sustainable. As at March 31, 2023, the Company has working capital, being current assets less current liabilities, of \$19.0 million.

The Company's primary liquidity needs for the next twelve months are to pay existing committed capital expenditures, to make scheduled repayments of debt, to pay operating expenses and to manage its working capital.

The table below outlines the contractual maturities (including interest) of our financial obligations as at March 31, 2023:

	Carrying amount	Contractual cash flows	Within 1 year	1-3 years	thereafter
Accounts payable and accrued liabilities	\$ 4,684	\$ 4,684	\$ 4,684	\$ -	\$ -
Lease liabilities	3,571	4,363	1,042	1,675	1,646
Long-term debt	4,168	6,259	175	1,308	4,776
	\$ 12,423	\$ 15,306	\$ 5,901	\$ 2,983	\$ 6,422

In addition, as at March 31, 2023, the Company had committed to the following obligations that were not recognized as liabilities:

	Contractual cash flows	Within 1 year	1 to 3 years	thereafter
	\$	\$	\$	\$
Property, plant and equipment	1,528	1,528	-	-
	1,528	1,528	-	-

4.4 Shareholders' Equity

	Q123	Q422	Q322	Q222	Q122	Q421	Q321	Q221
Common shares	\$ 127,183	\$ 126,828	\$ 126,517	\$ 126,517	\$ 126,402	\$ 126,310	\$ 126,306	\$ 126,677
Share-based payments reserve	8,015	7,966	8,090	7,511	6,973	6,556	6,119	5,671
Accumulated deficit	(102,567)	(95,824)	(85,631)	(75,767)	(65,844)	(57,797)	(50,341)	(43,801)
Foreign currency reserve	60	-	(63)	(72)	69	86	19	-
Total shareholders' equity	32,691	39,510	48,913	58,189	67,600	75,155	82,103	88,547

As of March 31, 2023, and at the date of this MD&A the following equity instruments were outstanding:

	May 10, 2023	March 31, 2023
Common shares	34,312,571	34,235,522
Stock options	1,710,942	1,710,942
Warrants	66,667	66,667
Restricted Share Units	389,667	532,932

In the prospectus filed in connection with the IPO, the Company stated that it intended to use the net proceeds from the IPO for product and technology development, sales, general and administrative expenses and capital assets, as set forth in the table below. The Company's product and technology development, sales and general and administration expenses are working capital in nature.

Shares	Price (per share)	Net Proceeds	Intended Use	Intended use	Actual use
6,250,000	\$16.00	\$91,801	Product and Technology development	\$19,000	\$17,300
			Sales General and Administration	7,200	27,400
			Capital Assets	66,000	22,600
			Unallocated working Capital	-	12,900
			Total	92,200	80,200

The variance between the anticipated use of proceeds described in the prospectus for the Company's IPO and the actual use of proceeds from the IPO is principally the result of the impact of the COVID-19 pandemic and geopolitical events in Europe.

As set out in the prospectus for the IPO, a significant portion of the IPO proceeds were anticipated to be used on capital investment to set up a facility in Shanghai, China. With the zero-tolerance policy in certain parts of China during the pandemic, the opening of our Shanghai facility was delayed until July 2022, resulting in a significant delay in capital investment in the facility. In addition, geopolitical events in Europe have resulted in energy security becoming an increasingly important issue in Europe. This has accelerated hydrogen adoption in Europe and created an opportunity for the Company to advance its business objectives without the same degree of capital investment. This has also led to higher than anticipated sales and marketing expenditures intended to take advantage of these opportunities.

As a consequence of these developments, the Company has focused its efforts in building its product portfolio and the sales and support team needed to achieve its growth targets, and in optimizing its production capacity needs. The unallocated working capital is mostly related to expenses associated with inventory and production costs.

4.5 Related Party Transactions

The Company has related party relationships, as defined by IFRS, with its key management personnel, which includes the members of the Board of Directors and the officers of the Company. In addition to their salaries, key management personnel also participate in the Company's share-based compensation plan. Related party transactions with key management personnel were as follows:

	Q123	Q422	Q322	Q222	Q122	Q421	Q321	Q221
Salaries and benefits	\$ 532	\$ 388	\$ 377	\$ 400	\$ 531	\$ 737	\$ 542	\$ 352
Share-based payments	232	191	409	341	267	278	301	410
Director fees	27	41	44	38	38	38	31	31
	791	620	830	779	836	1,053	874	793

The increase during 2021 of related party expenses with key management personnel is primarily due to stock-based compensation issued at the time of the Company's IPO and costs associated with the departure of the Company's previous Chief Financial Officer in Q421.

As at March 31, 2023, the Company has \$0.3 million (December 31, 2022 - \$0.3M) in accounts receivable for which an allowance for credit losses has been fully provided, and \$0.04 million in accounts payable and accrued liabilities (December 31, 2022 - \$0.04) from transactions with a joint venture. The transactions were carried out in the normal course of operations and have been measured at their exchange value.

Related party transactions and balances are disclosed in note 15 of the unaudited interim condensed consolidated financial statements for the three months ended March 31, 2023.

4.6 Off Balance Sheet Arrangements

As of the date of this MD&A, the Company does not have any off-balance sheet arrangements.

4.7 Selected Annual Financial Information

Not applicable

5. CRITICAL ACCOUNTING ESTIMATES, POLICIES AND RISK MATTERS

The Company's management uses its judgement when applying the Company's accounting policies in the preparation of its audited consolidated financial statements. The preparation of financial information requires management to make assumptions and estimates of the effects of uncertain future events on the carrying amounts of the Company's assets and liabilities at the end of the reporting period and on the reported amounts of revenue and expenses during the reporting period. Actual results may differ from those estimates as the estimation process is inherently uncertain. Estimates are reviewed on an ongoing basis based on historical experience and other factors that are considered to be relevant in the circumstances. Revisions to estimates and the resulting effects on the carrying amounts of the Company's assets and liabilities are accounted for prospectively.

5.1 Key Sources of Estimation Uncertainty

The following are key assumptions concerning the future and other key sources of estimation uncertainty that have a significant risk of resulting in a material adjustment to the reported amount of assets, liabilities, revenues and expenses within the next financial year.

Determination of the carrying value of inventory:

In determining the lower of cost and net realizable value of inventory, the Company estimates the likelihood that inventory carrying values will be affected by changes in market pricing or demand for the products and by changes in technology or design which could make inventory on hand recoverable at less than the recorded value. The Company performs regular reviews to assess the impact of changes in technology and design, sales pricing and other changes

on the carrying value of inventory. Where it is determined that such changes have occurred and will have a negative impact on the value of inventory on hand, an appropriate write-down is made.

If there is a subsequent increase in the value of inventory on hand, reversals of previous write-downs to net realizable value are made. Unforeseen changes in these factors could result in additional inventory write-downs, or reversals of previous write-downs being required. During the three months ended March 31, 2023, the Company recorded a \$2.3 million write down of its inventory to its net realizable value (three months ended March 31, 2022 - \$1.4 M).

Impairment of financial assets

In determining the expected credit loss on the Company's trade receivables, the Company has elected to measure loss allowances for trade receivables using a provision matrix which specifies fixed provision rates depending on the number of days that a trade receivable is past due, using reference to past default experience of the debtor and an analysis of the debtor's current financial position, which also forms a basis for the Company's future expectations for potential defaults of the debtor. This includes both quantitative and qualitative information and analysis, based on the Company's historical experience and informed credit assessment and including forward-looking information.

As at March 31, 2023 the Company has recorded an allowance for an expected credit loss of \$1.0 million (December 31, 2022 - \$0.9M) for sales done in 2022.

Warranty provision

A provision for warranty costs is recognized when the underlying products are sold. In establishing the warranty provision, the Company estimates the likelihood that products sold will experience warranty claims and the estimated cost to resolve claims received, taking into account the nature of the contract and past and projected experience with the products, and applying a weighting of possible outcomes against the associated probabilities that the product will experience warranty claims. In making such determinations, the Company uses estimates based on the nature of the contract and past and projected experience with the products. Should these estimates prove to be incorrect, the Company may incur costs different from those provided for in the warranty provision, which would impact cost of sales in the Company's consolidated statements of loss and comprehensive loss. The Company reviews the warranty assumptions and adjusts the provision at each reporting date based on the latest information available, including the expiry of contractual obligations.

As at March 31, 2023, the Company had recorded warranty provisions of \$0.6 million (December 31, 2022 - \$0.6 M).

Share-based payments:

To calculate the fair value of stock options and warrants, the Company uses the Black-Scholes option pricing model. This inherently requires management to make various estimates and assumptions in relation to the expected life of the award, expected volatility, risk-free rate and forfeiture rates. Changes in any of these inputs could cause a significant change in the share-based compensation expense charged in the statements of loss and comprehensive loss and to share-based payment reserves in a given period.

The Company recognized share-based payments expense net of recoveries on cancellations of unvested options, during the three months ended March 31, 2023 and 2022 with allocations to functional expense as follows:

Table 15: Stock Option Share-Based Payments (in thousands of CAD dollars)	Three months ended	
	March 31,	
	2023	2022
	\$	\$
Engineering	46	77
General and administrative	167	294
Business development	53	83
Technology development	9	1
	275	455

5.2 Changes in Accounting Policies and Recent Accounting Pronouncements

The Company's material accounting policies are detailed in Note 3 to the Company's annual financial statements for the year ended December 31, 2022. The Company did not adopt any new accounting policies in the current period. There are no significant accounting pronouncements which are anticipated to impact the Company's financial reporting.

5.3 Financial Instruments

As at March 31, 2023, the Company's financial instruments consists of cash and cash equivalents, accounts receivable, accounts payable, lease liabilities and long-term debt.

The fair values of cash and cash equivalents, accounts receivable and accounts payable approximates their carrying values because of the short-term nature or the discount rates used in assessing the fair value of the instrument. The fair value of long-term debt was less than its carrying value by \$0.3 million as a result of change in discount rate.

Fair value hierarchical levels

The Company does not have any financial instruments measured at fair value in the interim condensed consolidated statements of financial position and therefore there were no transfers between the levels of the fair value hierarchy during the three months ended March 31, 2023. Additionally, there were no changes in the Company's valuation processes, valuation techniques, and types of inputs used in the fair value measurements during the three months ended March 31, 2023.

Capital Management and Financial Risk Management

As at March 31, 2023, the capital structure of the Company consists of \$36.9 million (December 31, 2022 - \$43.6million) in shareholders' equity and debt. In accordance with the terms of the JGF Program (note 8 to the Company's financial statements), the Company shall not pay any distribution of retained earnings to shareholders until the loan contribution has been repaid in full.

The Company manages its capital to ensure, as far as possible, that it will be able to continue as a going concern while maximizing the return to stakeholders through the optimization of the debt and equity given the assumed risks of its operations. The Company considers shareholders' equity and debt as capital. The Company manages capital through its operating and financial budgeting and forecasting processes on a regular basis. The Company reviews its working capital and future cash flow forecasts which are reviewed and approved by the Board of Directors. The Company continually makes strategic and financial updates to both capital expenditure and operational budgets in order to adapt to changes in risk factors, proposed expenditure programs and market conditions.

There were no changes to the Company's approach to capital management during the three months ended March 31, 2023.

Liquidity risk

Liquidity risk is the risk that the Company will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Company maintains sufficient financial liquidity to be able to meet its current operating requirements. The Company's approach to managing liquidity is to ensure, as far as possible, that it will have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Company's reputation. As at March 31, 2023, the Company had working capital, being current assets less current liabilities, of \$19,042.

The Company's primary liquidity needs for the next twelve months are to pay existing committed capital expenditures, to make scheduled repayments of debt, to pay operating expenses and to manage its working capital.

Contractual maturities of financial obligations (including interest) and the commitments that were not recognized as liabilities that exist as at March 31, 2023 are shown in section 4.3 in Tables 10.1 and 10.2 respectively.

Credit risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations. The carrying value of the Company's cash and cash equivalents and accounts receivable, totaling \$17.4 million, represents the Company's maximum exposure to credit risk.

The Company's exposure to credit risk on customer accounts receivable is influenced mainly by the individual characteristics of each debtor. The Company currently only has a small number of customers and is therefore able to monitor credit risk on an individual account basis periodically and apply lifetime expected loss provisions where any uncertainty on collectability is identified.

For the three months ended March 31, 2023, the Company's largest customer accounted for approximately 61% of sales and the second largest accounted for 25% (three months ended March 2021 - 57% and 0%, respectively).

At March 31, 2023, two customers accounted for 85% of the outstanding customer receivable (December 31, 2022 - one customer accounted for 87%)

There have been no significant developments in the Company's financial risk factors as included in the Company's consolidated financial statements as at end for the year ended December 31, 2022.

5.4 Risks and Uncertainties

Risk is inherent in all business activities and cannot be entirely eliminated. As a global company, we are subject to the risks arising from adverse changes in global economic and political conditions. Political conditions such as government commitments and policies towards environmental protection and renewable energy may change over time. Economic conditions in leading and emerging economies have been, and remain, unpredictable. The impact of COVID 19 on supply chains and global economic activity also continues to be unpredictable. These macroeconomic and geopolitical changes could result in decreased or delayed revenue recognition, increased costs and other potential material impacts to our business.

For full details on the risks and uncertainties affecting the Company, please refer to the Company's AIF (see section entitled "Risk Factors") for the year ended December 31, 2022, a copy of which is available on SEDAR at www.sedar.com. The risks and uncertainties described in our AIF are not the only ones that we face. Additional risks and uncertainties, including those that we do not currently know of or that we deem immaterial, could materially and adversely affect the Company's investments, prospects, cash flows, results of operations or financial condition.

5.5 Management's Report on Internal Controls

We have designed disclosure controls and procedures, as defined in National Instrument 52-109 - Certification of Disclosure in Issuers' Annual and Interim Filings ("NI 52-109"), to provide reasonable assurance that material information is identified and communicated to senior management, including the Chief Executive Officer and Chief Financial Officer, in a timely manner to allow decisions regarding required disclosures.

We have also designed internal controls over financial reporting ("ICFR"), as defined in NI 52 109, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. Any system of ICFR, no matter how well designed, has inherent limitations and cannot provide absolute assurance that all misstatements and instances of fraud, if any, within the Company have been prevented or detected. The Company uses the 2013 Internal Control - Integrated Framework published by The Committee of Sponsoring Organizations of the Treadway Commission ("2013 COSO framework") as the basis for assessing its ICFR.

During the three months ended March 31, 2023, there were no changes in internal controls over financial reporting that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

5.6 Cautionary Statement Regarding Forward-Looking Information

This MD&A contains certain "forward-looking statements" within the meaning of Canadian securities legislation that involve risks, uncertainties and assumptions and relate to the Company's current expectations and views of future events.

In certain cases, these forward-looking statements can be identified by words or phrases such as “forecast”, “target”, “goal”, “may”, “might”, “will”, “expect”, “anticipate”, “estimate”, “intend”, “plan”, “indicate”, “seek”, “believe”, “project”, “predict”, or “likely”, or the negative of these terms, or other similar expressions intended to identify forward-looking statements. The Company has based these forward-looking statements on its current expectations and projections about future events and financial trends that it believes might affect its financial condition, results of operations, business strategy and financial needs. These forward-looking statements include, among other things, statements relating to the Company’s financial position, business strategy, growth strategies, addressable markets, budgets, operations, financial results, taxes, plans and objectives. Particularly, statements regarding the Company’s expectations of future results, performance, achievements, prospects or opportunities or the markets in which we operate is forward-looking information, including:

- our liquidity needs and our ability to secure financing within the next year to meet our ongoing expenditures and obligations;
- our future growth prospects and business outlook including without limitation the expected demand for our products, the planned growth of our customer base and the expected growth of our operations globally
- our ability to secure future firm order commitments or develop further market opportunities under existing and future customer and/or partner agreements;
- our ability to meet manufacturing cost reduction targets;
- our plans to integrate certain upstream activities to drive further cost out;
- the expected rollout and timing of our planned field deployment of our next generation fuel cell stacks and the belief that the larger e-flow plate will result in significant cost reductions;
- the expected performance, durability and total cost of operation of our fuels cell systems;
- our expected manufacturing capacity and production capability;
- the timing of expected integration, testing and commissioning of our products in customer vehicles or other customer applications;
- our goal to become a leader across the entire fuel cell market;
- our plans for our production facility in Shanghai, China;
- our plans for maintaining and growing our physical presence in Europe;
- the estimated future TAM for hydrogen fuel cells and for our current target market;
- our anticipated completion of milestones with Pacific Economic Development Canada and receipt of associated funds as applicable;
- our belief that zero emission vehicles are one of the only viable options for a sustainable future and that hydrogen fuel cell systems (combined with Lithium-ion batteries) are the optimal solution for the commercial mobility market;
- our expectation that our patents will adequately protect our intellectual property now and in the future;
- the realization of electrification of transportation, elimination of diesel fuel and ongoing government support of such developments; and
- the extent of the disruption to and/or adverse impact on our business, operation results and financial condition as a result of the COVID-19 pandemic, including without limitation the current COVID related lockdowns in China.

Forward-looking statements are based on certain assumptions and analyses made by the Company based upon management’s experience and perception of historical trends, current conditions and expected future developments, and other factors it believes are appropriate. Although the Company believes that the assumptions underlying these statements are reasonable, if any assumptions underlying the forward-looking statements prove incorrect, actual results may vary materially from those anticipated in those forward-looking statements and there can be no assurance that actual results will be consistent with these forward-looking statements. Material assumptions underlying forward-looking statements in this MD&A include future expectations and assumptions regarding:

- our ability to secure adequate financing to implement our business plan and strategy on favourable terms or at all;

- our belief of the value of the total assessable market today and by 2030;
- our intention to become the market leader and moving to adjacent market applications;
- our expectation that eFlow™-equipped fuel cells will continue to offer performance improvements over time and the increased offerings for uniformity of current, increased flow velocity and water removal;
- our expectation that total cost of ownership will decrease and demand for our products will increase;
- our expectation that we will continue to scale production and decrease average unit cost;
- our belief that our market visibility will increase;
- the demand for, and supply of, hydrogen fuel cells for the commercial mobility and stationary power markets;
- the realization of electrification of transportation, elimination of diesel fuel and ongoing government support of such developments;
- our belief that hydrogen fuel cells combined with lithium-ion batteries are the optimal solution for the commercial mobility market;
- our ability to increase capacity, enhance our supply chain and reduce delivery time;
- our ability to reduce costs through scale purchasing and minimize inflation impact;
- our expectation that the write-down of inventory will decrease or will no longer be required in the future;
- our expectation that revenue will vary period to period;
- the timely availability of key equipment and components required in the manufacture of our products;
- our expectation that there are no significant unmitigated safety risks associated with the use of hydrogen;
- the availability of sufficient skilled human resources and financial capital required to meet our sales, product development and production growth aspirations; and
- the extent of the disruption to and/or adverse impact on our business, operation results and financial condition as a result of existing and unforeseen future global events, including without limitation the COVID-19 pandemic and the current war between Russia and Ukraine.

In addition, forward-looking-statements, by their nature, involve risks and uncertainties. Certain of these risks are included in “*Risks and Uncertainties*” in this MD&A and “*Risk Factors*” in the Company’s Annual Information Form dated March 28, 2023 (“AIF”), which factors should not be considered exhaustive and should be read together with the other cautionary statements in this MD&A. Given these risks, uncertainties and assumptions, readers should not place undue reliance on forward-looking statements and the Company cautions readers that forward-looking statements are not guarantees of future performance and that its actual results of operations, financial condition and liquidity and the development of the industry in which it operates may differ materially from those made in or suggested by forward-looking statements contained in this MD&A. In addition, even if the Company’s results of operations, financial condition and liquidity and the development of the industry in which it operates are consistent with the forward-looking statements contained in this MD&A, those results or developments may not be indicative of results or developments in subsequent periods. Any forward-looking statement that is made in this AIF speaks only as of the date of such statement, and the Company undertakes no obligation to update any forward-looking statements or to publicly announce the results of any revisions to any of those statements to reflect future events or developments, except as required by applicable securities laws. Comparisons of results for current and any prior periods are not intended to express any future trends or indications of future performance, unless specifically expressed as such, and should only be viewed as historical data.

5.7 Non-IFRS Financial Measures

None