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**ELECTROVAYA INC.**

**MANAGEMENT'S DISCUSSION AND ANALYSIS  
FOR THE YEAR ENDED SEPTEMBER 30, 2021**

**DECEMBER 17, 2021**

## **ELECTROVAYA INC.**

### **MANAGEMENT’S DISCUSSION AND ANALYSIS**

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## **Introduction**

Management’s discussion and analysis (“MD&A”) provides our viewpoint on our Company, performance and strategy. “We,” “us,” “our,” “Company” and “Electrovaya” include Electrovaya Inc. and its wholly-owned or controlled subsidiaries, as the context requires.

Our Board of Directors, on the recommendation of its Audit Committee, approved the content of this MD&A on December 17, 2021 and it is, therefore, dated as at that date. This MD&A includes the operating and financial results for the years ending September 30, 2021 and 2020, and should be read in conjunction with our consolidated financial statements. It includes comments that we believe are relevant to an assessment of and understanding of the Company’s consolidated results of operations and financial condition. The financial information herein is presented in thousands of US dollars unless otherwise noted (except per share amounts, which are presented in US dollars unless otherwise noted), in accordance with International Financial Reporting Standards (“IFRS”). Additional information about the Company, including Electrovaya’s current annual information form, can be found on the SEDAR website for Canadian regulatory filings at [www.sedar.com](http://www.sedar.com).

## **Forward-looking statements**

This MD&A contains forward-looking statements including statements with respect to the effect of the global COVID-19 novel coronavirus pandemic and its impact on the Company’s supply chain, customer demand and order flow, its health implications on employees and other stakeholders, and its effect on the Company’s delivery schedule, other factors impacting revenue, the competitive position of the Company’s products, global trends in technology supply chains, the Company’s strategic objectives and financial plans, including the operations and strategic direction of Electrovaya Labs, the Company’s products, including E-bus and electric lift truck applications and the potential for revenue from new applications (including the e-bus market), cost implications, continually increasing the Company’s intellectual property portfolio, additional capital raising activities, the adequacy of financial resources to continue as a going concern, and also with respect to the Company’s markets, objectives, goals, strategies, intentions, beliefs, expectations and estimates generally. Forward-looking statements can generally be identified by the use of words such as “may”, “will”, “could”, “should”, “would”, “likely”, “possible”, “expect”, “intend”, “estimate”, “anticipate”, “believe”, “plan”, “objective” and “continue” (or the negatives thereof) and words and expressions of similar import. Readers and investors should note that any announced estimated and forecasted orders and volumes provided by customers and potential customers to Electrovaya also constitute forward-looking information and Electrovaya does not have (a) knowledge of the material factors or assumptions used by the customers or potential customers to develop the estimates or forecasts or as to their reliability and (b) the ability to monitor the performance of the business its customers and potential customers in order to confirm that the forecasts and estimates initially represented by them to Electrovaya remain valid. If such forecasts and estimates do not remain valid, or if firm irrevocable orders are not obtained, the potential estimated revenues of Electrovaya could be materially and adversely impacted.

Although the Company believes that the expectations reflected in such forward-looking statements are reasonable, the outcome of such statements involve and are dependent on risks and uncertainties, and undue reliance should not be placed on such statements. Certain material factors or assumptions are applied in making forward-looking statements, and actual results may differ materially from those expressed or implied in such statements. Material assumptions used to develop forward-looking information in this MD&A include, among other things, that current customers will continue to make and increase orders for the Company's products; that the Company's alternate supply chain will be adequate to replace material supply and manufacturing; that the Company's products will remain competitive with currently-available alternatives in the market; that the alternative energy market will continue to grow and the impact of that market on the Company; the purchase orders actually placed by customers of Electrovara; customers not terminating or renewing agreements; general business and economic conditions (including but not limited to currency rates and creditworthiness of customers); the relative effect of the global COVID-19 public health emergency on the Company's business, its customers, and the economy generally; that any settlement of claims with respect to Litarion will proceed on the agreed upon terms; actions taken by creditors and remedies granted by German courts in the Litarion insolvency proceedings and their effect on the Company's business and assets; negative reactions of the Company's existing customers to Litarion's insolvency process; the Company's liquidity and capital resources, including the availability of additional capital resources to fund its activities; the Company's ability to consolidate its shares in contemplation of listing on NASDAQ; the Company's application and ability to list its common shares on NASDAQ; industry competition; changes in laws and regulations; legal and regulatory proceedings; the ability to adapt products and services to changes in markets; the ability to retain existing customers and attract new ones; the ability to attract and retain key executives and key employees; the granting of additional intellectual property protection; and the ability to execute strategic plans. Information about risks that could cause actual results to differ materially from expectations and about material factors or assumptions applied in making forward-looking statements may be found herein under the heading "Qualitative and Quantitative Disclosures About Risks and Uncertainties", in the Company's Annual Information Form ("AIF") for the year ended September 30, 2021 under the heading "Risk Factors", and in other public disclosure documents filed with Canadian securities regulatory authorities. The Company does not undertake any obligation to update publicly or to revise any of the forward-looking statements contained or incorporated by reference in this document, whether as a result of new information, future events or otherwise, except as required by law.

## ELECTROVAYA INC.

### MANAGEMENT'S DISCUSSION AND ANALYSIS

#### 1. OUR BUSINESS

Electrovaya Inc. designs, develops and manufactures directly or through out-sourced manufacturing lithium ion batteries for Material Handling Electric Vehicles (“MHEV”) and other electric transportation applications, as well for electric stationary storage and other battery markets. Our main businesses include:

- (a) lithium ion battery systems to power MHEV including fork-lifts as well as accessories such as battery chargers to charge the batteries;
- (b) lithium ion batteries for other transportation applications; and,
- (c) industrial and residential products for energy storage.

The Company has a battery and battery systems research and manufacturing facility in Mississauga, Ontario. In December 2019, Electrovaya moved its corporate head office to 6688 Kitimat Road in Mississauga, Ontario. The new location, which comprises approximately 62,000 square feet, is designed to enhance the Company’s productivity and efficiency. For further information, see “Liquidity and Capital Resources”.

The Company researches in many areas of lithium ion batteries and has developed and patented a number of items in the lithium ion battery area. Electrovaya carries out engineering development at this facility, including assembly of complete battery systems. The Company has operating personnel at our headquarters in Canada and sales personnel in the USA.

Electrovaya has a team of mechanical, electrical, electronic, battery, electrochemical, materials and system engineers able to give clients a “complete solution” for their energy and power requirements. Electrovaya also has substantial intellectual property in the lithium ion battery sector.

Management believes that our battery and battery systems contain a unique combination of characteristics that enable us to offer battery solutions that are competitive with currently available advanced lithium ion and non-lithium ion battery technologies. These characteristics include:

- *Scalability and pouch cell geometry:* We believe that large-format pouched prismatic (flat) cells represent the best long-term battery technology for use in large electro-motive and energy storage systems.
- *Safety:* We believe our batteries provide a high level of safety in a lithium ion battery. Safety in lithium ion batteries is becoming an important performance factor and Original Equipment Manufacturers (“OEMs”) and users of lithium ion batteries prefer to have the highest level of safety possible in lithium ion batteries.

- *Cycle-life*: Our cells are in the forefront of battery manufacturers with respect to cycle-life, with excellent rate capabilities. Cycle-life is generally controlled by the parasitic reactions inside the cell and these reactions have to be reduced in order to deliver industry leading cycle-life. Higher cycle-life is of importance in many intensive applications of lithium ion batteries.
- *Energy and Power*: Our batteries give industry leading combination of energy and power and can be application specific.
- *Battery Management System*: Our Battery Management System (“BMS”) has developed over the years, and provides excellent control and monitoring of the battery with advanced features as well as communication to many chargers, electric vehicles and other devices.

## 2. OUR STRATEGY

We have developed a series of products which focus on maximising the cycle-life of the battery such that mission critical and intensive use applications would be interested in such long life batteries while giving appropriate energy and power. We developed cells, modules, battery management systems, software and firmware necessary to deliver systems for discerning users. We also developed supply chains which can produce needed components including separators, electrolytes with appropriate additives, cells and cell assembly, modules, electronic boards, electrical and mechanical components as needed for our battery systems. Supply chains allow flexibility in production as well as ability to manage scalable and fluctuating demands, especially for emerging new product introductions. The global trend in technology products is to use high quality supply chains to achieve scalable production and reduce or eliminate ownership of component suppliers. The battery systems we have developed are focused on mission critical applications, where the battery has to be used for long durations and could be charged and discharged several times a day. ElectroVaya has moved away from owning component suppliers and making use of higher levels of contract manufacturing to produce its customised requirements.

Our goal is to utilize our battery and systems technology to develop and commercialize mass-production levels of battery systems for our targeted end markets.

To achieve these strategic objectives, we intend to:

- Establish global strategic relationships in order to broaden the market potential of our products and services;
- Develop and commercialize leading-edge technology for the stationary grid, zero-emission vehicle, as well as partnering with key large organizations to bring them to market;
- Invest in research and development initiatives related to new technologies that reduce the costs of our products, but enhance the operating performance, of our current and future products; and,

- Focus on intensive use and mission critical applications such as the logistics and e-commerce industry, automated guided vehicles, electric buses, energy storage and similar other applications.

### **3. RECENT DEVELOPMENTS**

In January 2021 the Company announced it had completed a private placement for gross proceeds of \$2.6 million (CDN\$3.3 million). Also in January 2021, warrants and Compensation options were exercised for total proceeds of \$3.8 million (CDN\$4.8 million). The total gross proceeds raised from these transactions was \$6.4 million (CDN\$8.1 million) of which \$1.8 million (CDN\$2.3 million) was used to make a voluntary payment to reduce the outstanding balance of the revolving credit facility with the remaining \$4.6 million (CDN\$5.8 million) to be used for general corporate purposes.

On February 23, 2021, the Company announced it had submitted an initial application to list the Common Shares on the Nasdaq Stock Market (“NASDAQ”). The Company is pursuing a NASDAQ listing in order to enhance its investor profile, with the goal of attracting a broader base of both institutional and retail investors, furthering strategic acquisition, opportunities, and increasing shareholder value.

The Company currently earns the majority of its revenues from the United States, with its lithium-ion battery products powering electric lift trucks in over 48 locations, a majority of which are in the United States.

Should the application for listing be successful, the Company expects the Common Shares will continue to be listed and trade on TSX under the symbol “EFL”. The listing of the Common Shares on NASDAQ remains subject to the review and approval of the Company’s listing application and the satisfaction of all applicable listing and regulatory requirements, including the approval of the United States Securities and Exchange Commission, and there is no assurance that NASDAQ will approve the listing of the Company’s Common Shares. In the event the listing is approved, the Company may pursue a consolidation of the Common Shares on a ratio not exceeding five pre-consolidation Common Shares for each one post-consolidation Common Share. The Company’s shareholders approved the potential consolidation at a meeting of shareholders held on February 17, 2021.

On March 17, 2021, the Company announced the launch of its electric bus lithium ion battery systems with the delivery of a 700V, 300kWh battery. The product launch signaled the Company’s entry into the rapidly growing electric bus market. The Company believes its e-bus battery product provides safety, cost, cycle-life and performance advantages as the world generally moves away from dependence on fossil fuel consumption and combustion engines for transportation.

Company batteries are now powering electric lift trucks in five big box retail stores in the New York City region owned by a Fortune 100 retailer with several thousand stores. The Company continues to receive repeat orders from Fortune 500 companies as the Company believes these organizations are recognizing efficiency gains from using the Company’s lithium ion batteries.

The Company's US-based Original Equipment Manufacturer ("OEM") partner for electric lift trucks has started marketing the Company's batteries into Canada, South America and Australasia, in addition to the United States. This OEM sales activity began in earnest from Q2 FY2021 after the Raymond Strategic Supply Agreement was signed in December 2020. The Company has delivered its first sales into Argentina through this OEM channel, along with sales into the United States.

The Company added additional sales staff in the United States, to increase the reach of its direct sales channel.

On June 16, 2021, the Company and its officers reached an agreement with the Administrator of Litarion GmbH, to mutually settle all potential claims of both parties as part of the termination of the insolvency proceedings of Litarion GmbH. The Company has agreed to pay €221,000 as full and final settlement which includes the acquisition of certain patents and trademarks. The payment is to be made in instalments over a nine month period. With the entry into the settlement agreement and upon payment of the instalment amounts, the Company's liability with respect to Litarion GmbH will be satisfied in full.

On June 23, 2021, the Company announced that it had established a new operating division: Electrova Labs. Electrova Labs will conduct ongoing research into next generation cells and batteries in the areas of solid-state cells, electrode production and higher energy density batteries, and will generate additional intellectual property and patent applications in connection therewith. The Company entered into a lease agreement (the "Lease Agreement") with respect to a dedicated research and chemistry lab facility located at the Sheridan Science and Technology Park, Mississauga, where Electrova Labs will operate (the "Facility").

Subsequent to the quarter ended June 30, 2021, the Facility was acquired by an investor group controlled by Dr. Sankar Das Gupta, the Company's Chief Executive Officer and controlling shareholder, which group also includes the Company's Chief Operating Officer, Rajshekar Das Gupta. The Lease Agreement was not amended or terminated on the change of ownership of the Facility and remains in effect between the Company and the current Facility owner, such that the CDN\$25,000 monthly fee payable by the Company under the Lease Agreement is now payable to a related party of the Company for the purposes of *Multilateral Instrument 61-101 – Protection of Minority Security Holders in Special Transactions* ("MI 61-101"). The board of directors of the Company (the "Board") determined that the Lease Agreement and the transactions contemplated thereunder are exempt from the formal valuation and shareholder approval requirements set forth in sections 5.4(1) and 5.6 of MI 61-101, respectively, as the fair market value of the Lease Agreement and the Fees did not exceed 25% of the market capitalization of the Company at the time of execution of the Lease Agreement for the purposes of sections 5.5(a) and 5.7(1)(a) of MI 61-101. For greater certainty, Dr. Das Gupta disclosed in writing the nature of his interest in the Lease Agreement and abstained from voting in connection with the Lease Agreement.

On July 14, 2021, the Company extended the term to maturity of its CDN\$6 million promissory notes with a Canadian financial institution from June 30, 2021 to December 31, 2021. The effective interest rate was reduced from 11% to 10%. The Company paid a 1% renewal fee of CDN\$60,000 to the financial institution.



On July 20, 2021, the Company announced the following business updates:

- the Company received its first purchase orders from one of the world’s largest e-commerce companies. The orders were valued at more than \$2 million and received through the Company’s OEM partner under the Raymond Strategic Supply Agreement;
- the Company received repeat orders valued at approximately \$1.5 million through its OEM partner from two of the world’s largest food manufacturing firms, headquartered in the United States and Europe, respectively; and
- the Company received a purchase order worth approximately CDN\$1 million from one of North America’s largest food processing firms, headquartered in Canada. This order came through the Company’s direct sales channel.

In October 2021, the Company announced the signing of a Strategic Supply Agreement with Vicinity, a leading supplier of electric, compressed natural gas and clean diesel vehicles (the “Vicinity Strategic Supply Agreement”). The Vicinity Strategic Supply Agreement is for the supply of battery systems for Vicinity’s line of Vicinity Lightning™ EV buses and fully electric VMC 1200 Class 3 trucks.

The Company believes it is continuing to make significant progress in the e-bus market and anticipates increased revenue from this segment in the 2022 fiscal year.

The Company is making progress with its capital market initiatives in Canada and the United States. Management and the Board will carefully monitor the capital markets and the benefits and risks to the Company before a decision is made regarding the next steps toward a potential listing on the NASDAQ Stock Market.

On October 1, 2021, the Company completed a brokered private placement of Common Shares and warrants to purchase Common Shares to an institutional investor in the United States for gross proceeds of approximately CDN\$3.8 million. The Company issued 2,919,230 Common Shares and warrants to purchase up to 1,459,615 Common Shares at a price of CDN\$1.30 per Common Share and associated warrant. Each warrant entitles the holder thereof to purchase one Common Share at an exercise price of CDN\$1.60 per Common Share at any time prior to October 1, 2024.

### **3.2 Business Highlights and 2022 Outlook**

#### **Business Highlights – Q4 FY2021:**

On September 22, 2021, the Company launched EVISION, an internally developed and proprietary remote monitoring system. This new system is cloud-based and is able to track battery operational usage in Electrovaya-powered applications such as lift trucks or electric buses in real-time. The system monitors battery health, utilization, and charging to provide customers with optimized fleet and charging management. The EVISION system is now live and generating revenue.

On September 23, 2021, the Company announced that its research division, ElectroVaya Labs, produced promising initial test results using a proprietary approach for a solid-state (NMC cathode/lithium metal anode) battery. The initial results have demonstrated minimal capacity fade, and multiple tests have demonstrated the repeatability of the performance with coin cells at room temperature.

On October 5, 2021, the Company announced that all of its battery models will be receiving a capacity increase of approximately 7%. This change has also been reflected in the UL files for ElectroVaya batteries, in which new model numbers are used to reflect the capacity increases. Furthermore, additional models have been added to the UL file, expanding the number of ElectroVaya UL-listed offerings.

On October 13, 2021, the Company signed a Strategic Supply Agreement with Vicinity Motor Corp, a leading supplier of electric, compressed natural gas, and clean diesel vehicles. The Vicinity Strategic Supply Agreement is for the supply of battery systems for Vicinity's line of Vicinity Lightning™ EV buses and fully electric VMC 1200 Class 3 trucks.

On December 1, 2021, the Company announced that Steven Berkenfeld has been engaged as a Special Advisor to the CEO and Board. Mr. Berkenfeld will provide capital markets, strategic, and commercial guidance to support the company's growth across multiple market segments.

On December 7, 2021, the Company filed a final base shelf prospectus with the securities regulatory authorities in each of the provinces and territories of Canada. The base shelf prospectus is valid for a 25-month period, during which time the Company may offer and issue, from time to time, common shares, warrants, units, subscription receipts and debt securities, or any combination thereof, having an aggregate offering price of up to \$100 million. The ability to draw on the shelf prospectus was conditional upon extended the working capital and promissory note facilities. As this condition is now fulfilled the Company is free to draw upon the base shelf.

On December 17, 2021, the Company amended its C\$7 million working capital facility to extend the maturity from December 31, 2021 to December 31, 2022. All other terms and conditions are unchanged. In exchange for the extension, the Company paid CDN \$70K as an extension fee.

On December 17, 2021, the promissory note which was due to mature on December 31, 2021 was amended to extend the maturity to July 1, 2022. All other terms and conditions are unchanged. As consideration for the extension, the company issued 306,122 Common Shares (representing a value of CDN \$300K at the closing price of the Common Shares on TSX on the day prior to the extension) as an extension fee.

### **Positive Financial Outlook:**

The Company anticipates revenue of approximately \$27 million for the fiscal year ending September 30, 2022 ("FY 2022"), more than double the revenue total of \$11.6 million in FY 2021. The revenue is anticipated to be generated from two primary sources: direct sales and sales through the Company's OEM partner dealer network.

The revenue forecast takes into consideration the OEM Strategic Supply Agreement, which includes an exclusivity provision, pursuant to which the OEM must make annual purchases in the minimum amount of \$15 million in order to maintain exclusivity. This annual period commences on January 1, 2022. While there is no assurance that the OEM will make more than \$15 million of purchases in 2022, given the sales initiatives underway with the OEM,

management anticipates achieving or even possibly exceeding this minimum purchase level and has accordingly included it in the revenue forecast of \$27 million for FY 2022.

#### 4. SELECTED ANNUAL FINANCIAL INFORMATION

##### 4.1 Selected Annual Financial Information for the Years ended September 30, 2021, 2020 and 2019

###### Results of Operations

(Expressed in thousands of U.S. dollars)

	Year Ended September 30,		
	2021	2020	2019
Revenue	\$ 11,584	\$ 14,525	\$ 4,891
Direct manufacturing costs	7,660	9,592	2,949
Gross Margin	3,924	4,933	1,942
GM%	34%	34%	40%
Expenses			
Research & development	4,555	2,749	2,863
Government assistance	(871)	(273)	-
Sales & marketing	1,282	1,117	1,133
General & administrative	2,649	1,710	1,620
Stock based compensation	541	144	1,120
Finance Cost	2,669	3,097	2,120
Patent & trademark expenses	58	77	33
Total operating expenses	10,883	8,621	8,889
	(6,959)	(3,688)	(6,947)
Depreciation	319	209	109
Gain (Loss) from operations	(7,278)	(3,897)	(7,056)
Gain on redemption of debentures	-	5,175	-
Gain on sale of property	-	-	4,184
Foreign exchange gain (loss)	(256)	(166)	35
Net Profit (Loss)	\$ (7,534)	\$ 1,112	\$ (2,837)

###### Operating Segments

The Company has reviewed its operations and determined that it operates in one business segment and has only one reporting unit. The Company develops, manufactures and markets power technology products.

###### Revenue

Revenue decreased to \$11.6 million, compared to \$14.5 million for the year ended September 30, 2021 and 2020 respectively, a decrease of \$2.9 million or 20%. The 20% decrease in year-over-year revenue was due to a reduced order volume resulting from a transition to the OEM Strategic Supply Agreement, which was signed in December 2020. This OEM agreement brought a new corporate sales team focused on large corporations, which required time to become familiar our lithium ion battery solution and the sales cycle for these customers. Uncertainty on the part of customers due to concerns over global component shortages and continued supply chain disruptions caused a delay in orders.

It appears that the delays discussed above have improved as the Company has received indications of significant new orders for delivery in 2022, with the majority of the new orders generated through our OEM sales channel but also with a significant new order from our direct sales channel. These orders included both repeat customers and new customers.

Revenue was predominately from the sale of batteries and battery systems. Batteries and battery systems accounted for \$9.5 million or 82% of revenue for FY 2021 and \$13.0 million or 89% for FY2020. Sale of services, research grants, and other sources of revenue, including Government assistance, accounted for the remaining \$2.1 million or 18% in FY 2021 and \$1.6 million or 11% in FY 2020.

For the year ended September 30, 2021 revenue attributable to the United States accounted for \$9.4 million 81% of total revenue while revenue attributed to Canada accounted for the remaining \$2.2 million or 19%. For the year ended September 30, 2020 revenue attributable to the United States account for \$7.5 million or 52% and Canada was \$6.9 million 48%. This reflects the growing level of interest in our material handling batteries and an increased direct and indirect sales presence in the United States.

#### *Direct Manufacturing Costs (variable costs) and Gross Margin*

Direct manufacturing costs are comprised of the material, labour and manufacturing overhead, excluding amortization, associated with the production of batteries and battery packs for Electric Vehicles, stationary grid applications and research and engineering service revenues.

The gross margin decreased to \$3.9 million, compared to \$4.9 million for the year ended September 30, 2021 and 2020 respectively, a decrease of \$1 million or 20%. This is due to the decrease in sales discussed above. The gross margin percentage was consistent at 34% for the years ended September 30, 2021 and 2020. Our objective is to maintain gross margin in the range of 30%-35%. Our margin varies period to period due to a number of factors including the product mix, special customer pricing, material cost, shipping costs and foreign exchange movement. In the current fiscal year there has been an increase in the price of some components most significantly the cost of steel which impacts the cost of battery enclosures, which is expected to place some pressure on margins in 2022.

#### *Operating Expenses*

Operating expenses include:

- *Research and Development (“R&D”)* Research and development expenses consist primarily of compensation and premises costs for research and development personnel and activities, including independent contractors and consultants, and direct materials;
- *Government Assistance* The company applied for and received Canada Emergency Rent Subsidy (CERS) and Canada Emergency Wage Subsidy (CEWS) which were created by the Federal Government to support recovery from economic disruption associated with the COVID-19 outbreak;
- *Sales and Marketing* Sales and marketing expenses are comprised of the salaries and benefits of sales and marketing personnel, marketing activities, advertising and other costs associated with the sales of Electrovaya’s product lines;
- *General and Administrative* General and administrative expenses include salaries and benefits for corporate personnel, insurance, professional fees, reserves for bad debts and facilities expenses. The Company’s corporate administrative staff includes its executive officers and employees engaged in business development, financial planning and control, legal affairs, human resources and information technology;
- *Stock based compensation* Recognizes the value based on Black-Scholes option pricing model of stock based compensation expensed over the relevant vesting period;
- *Financing costs* Financing costs includes the cost of debt, equity or other financing. This includes cash and non-cash interest, legal costs of financing, commissions and fees; and,
- *Patent and trademark costs* Patent and trademark expense recognizes the cost of maintaining the Company’s patent and trademark portfolio.

Total operating expenses increased to \$10.9 million compared to \$8.6 million for the year ended September 30, 2021 and 2020 respectively, an increase of \$2.3 million or 27%. The largest component of the operating expense increase was a \$1.8 million increase in R&D. The increase was due to the involvement of more staff and resources in Electrovaya Labs activities in ongoing research in the areas of solid-state cells, electrode production and higher energy density batteries as opposed to being involved in production activities. The actual head count of these engineers and scientist was generally consistent between periods. The R&D expense will vary period to period as staff are utilized in R&D or production activities.

The other significant component of the operating expense increase was an increase in General and administrative expenses of \$0.9 million. This increase includes the accrual of \$0.3 million for the Litarion settlement. Other factors which contributed to this increase include increased insurance cost as a result of price increase in the international insurance market as opposed any change in the Company’s specific risk profile, increased professional fees associated with Canadian and United States regulatory filings and increased facility expenses. These increases were partially offset by the increase in Government subsidies of \$0.6 million.

#### *Net Profit/(Loss)*

The net loss increased to \$7.5 million from a net profit of \$1.1 million for the years ended September 30, 2021 and 2020 respectively, an increase of \$8.6 million. This increase in the net loss was due in a large part to a decrease in the gain on redemption of \$5.2 million which was recorded in the third quarter of fiscal 2020, a reduction in gross margin of \$1.0 million due to reduced revenue as explained above, an increase in R&D expenditures of \$2.3 million as explained above and an increase in general and administrative of \$0.9 as explained above which

was partially offset by a reduction in finance cost of \$0.4 million and an increase in government assistance of \$0.6 million.

## Key Performance Indicators

In addition to operating results and financial information described above, management reviews the following measures (which are not measures defined under IFRS):

### Adjusted EBITDA<sup>1</sup>

(Expressed in thousands of U.S. dollars)

	Year Ended September 30,		
	2021	2020	2019
Gain (Loss) from operations	\$ (7,278)	\$ (3,897)	\$ (7,056)
Less: Finance Cost	2,669	3,097	2,120
Stock based compensation	541	144	1,120
Depreciation	319	209	109
Adjusted EBITDA <sup>1</sup>	\$ (3,749)	\$ (447)	\$ (3,707)
Adjusted EBITDA <sup>1</sup> %	-32%	-3%	-76%

<sup>1</sup> Non-IFRS Measure: Adjusted EBITDA is defined as loss from operations, plus finance costs, stock-based compensation costs and depreciation. Adjusted EBITDA does not have a standardized meaning under IFRS. We believe that certain investors and analysts use Adjusted EBITDA to measure the performance of the business and is an accepted measure of financial performance in our industry. It is not a measure of financial performance under IFRS, and may not be defined and calculated in the same manner by other companies and should not be considered in isolation or as an alternative to Income (loss) from operations.

Adjusted EBITDA<sup>1</sup> decreased by \$3.3 million due to the gross margin decrease of \$1 million and the increase in operating expenses of \$2.3 million discussed above. Management is focused on achieving positive Adjusted EBITDA<sup>1</sup> in 2022 through an increase in sales, maintaining a gross margin of 30%-35% and controlling cost of operations.

Adjusted EBITDA<sup>1</sup> will improve primarily through increased sales, maintaining gross margin percentage and controlling operating expenses. We continue our efforts for sales growth, control of manufacturing costs and reduction operating expenses.

## Summary Financial Position

(Expressed in thousands of U.S. dollars)

	Year Ended September 30,		
	2021	2020	2019
Total current assets	\$ 12,028	\$ 8,067	\$ 2,083
Total non-current assets	2,949	2,575	5
Total assets	\$ 14,977	\$ 10,642	\$ 2,088
Total current liabilities	13,453	16,451	16,211
Total non-current liabilities	3,220	2,906	142
Equity (Deficiency)	(1,696)	(8,715)	(14,265)
Total liabilities and equity (deficiency)	\$ 14,977	\$ 10,642	\$ 2,088

In the three year period commencing September 30, 2019 and ending September 30, 2021 current assets have increased \$10 million, current liabilities have decreased \$2.7 million and the equity deficiency has decreased \$12.6 million.

Management is focused on continuing to improve the company's financial position through the prudent use of debt and equity but most important achieving a profitable position and strong working capital management.

### Summary Cash Flow

*(Expressed in thousands of U.S. dollars)*

	<b>Year Ended September 30,</b>		
	<b>2021</b>	<b>2020</b>	<b>2019</b>
Net income (loss) for the year	\$ (7,534)	\$ 1,112	\$ (2,837)
Less: Amortization	319	209	109
Stock based compensation	541	144	1,120
Financing costs (non-cash)	1,158	2,006	743
Gain on redemption/sale of pre	-	(5,175)	(4,184)
Cash provided by (used in) operating activities	\$ (5,516)	\$ (1,704)	\$ (5,049)
Net change in working capital	(2,600)	(2,194)	2,174
Cash from(used in) operating activities	(8,116)	(3,898)	(2,875)
Cash (used in) investing activities	(560)	(40)	15,229
Cash from financing activities	10,916	3,490	(13,728)
Increase in cash	2,240	(448)	(1,374)
Exchange difference	838	1,239	1,581
Cash, beginning of year	1,124	333	126
Cash at end of year	<u>\$ 4,202</u>	<u>\$ 1,124</u>	<u>\$ 333</u>

The Company ended September 30, 2021 with \$4.2 million of cash as compared to \$1.1 million and \$0.3 million for September 30, 2020 and 2019, respectively.

For the year ended September 30, 2021 the Company had cash used in operating activities of \$5.5 million, as compared to \$1.7 million and \$5 million for September 30, 2020 and 2019, respectively. The company generated \$12.9 million in equity issues resulting for exercise of warrants, options and private placement of shares.

## 4.2 Quarterly Financial Results

### Results of Operations

(Expressed in thousands of U.S. dollars)

	2021				
	Q1	Q2	Q3	Q4	2021
Total Revenue	\$ 2,583	\$ 2,927	\$ 1,918	\$ 4,156	\$ 11,584
Variable Costs	1,762	2,003	1,203	2,692	7,660
Gross Margin	821	924	715	1,464	3,924
GM%	32%	32%	37%	35%	34%
Expenses					
Research & development	906	1,001	1,007	1,641	4,555
Government assistance	-	(210)	(354)	(307)	(871)
Sales & marketing	262	340	332	348	1,282
General & administrative	539	563	942	605	2,649
Stock based compensation	44	47	42	408	541
Finance Cost	516	885	364	904	2,669
Patent & trademark expenses	11	10	10	27	58
	2,278	2,636	2,343	3,626	10,883
	(1,457)	(1,712)	(1,628)	(2,162)	(6,959)
Depreciation	70	72	74	103	319
Gain (Loss) from operations	(1,527)	(1,784)	(1,702)	(2,265)	(7,278)
Gain on redemption of debentures	-	-	-	-	-
Foreign exchange gain (loss)	(317)	(82)	(90)	233	(256)
Net Profit (Loss)	(1,844)	(1,866)	(1,792)	(2,032)	(7,534)
	2020				
	Q1	Q2	Q3	Q4	2020
Total Revenue	\$ 861	\$ 1,947	\$ 4,799	\$ 6,918	\$ 14,525
Variable Costs	541	1,123	3,097	4,831	9,592
Gross Margin	320	824	1,702	2,087	4,933
GM%	37%	42%	35%	30%	34%
Expenses					
Research & development	404	1,048	860	437	2,749
Government assistance	-	-	(226)	(47)	(273)
Sales & marketing	230	157	127	603	1,117
General & administrative	502	578	402	228	1,710
Stock based compensation	43	15	14	72	144
Finance Cost	896	446	525	1,230	3,097
Patent & trademark expenses	8	12	36	21	77
	2,083	2,256	1,738	2,544	8,621
	(1,763)	(1,432)	(36)	(457)	(3,688)
Depreciation	2	96	92	19	209
Gain (Loss) from operations	(1,765)	(1,528)	(128)	(476)	(3,897)
Gain on redemption of debentures	-	-	5,156	19	5,175
Foreign exchange gain (loss)	(144)	420	(203)	(239)	(166)
Net Profit (Loss)	(1,909)	(1,108)	4,825	(696)	1,112

For the three months period September 30, 2021, total revenue was \$4.2 million. While this was the highest revenue quarter for FY2021 it was a decrease of \$2.7 million compared to the



revenue in the three month period ending September 30, 2020 of \$6.9 million. As indicated earlier this reduction was due to reduced order volume in the quarter but now appears to be gaining momentum.

Continued advances in technology and a highly competitive market are more significant factors than general economic conditions and specific price changes when considering major impacts on revenue. In particular, the alternative energy market continues to be robust and the Company believes that new and important opportunities will potentially be available to it. Supply chain issues, however, are a continuing risk factor and introduce a level of uncertainty.

While the gross margin decreased approximately \$0.6 million to \$1.5 million for Q4 2021 from \$2.1 million for Q4 2020, the gross margin percentage increased to 35% in Q4 2021 as compared to Q4 2020. As described earlier this can be due to a number of factors including the product mix, special customer pricing, material cost, shipping costs and foreign exchange movement.

Total operating expenses for Q4 2021 increased to \$3.6 million as compared to \$2.5 million for Q4 2020, an increase of \$1.1 million. The largest component of the operating expense increase was a \$1.2 million increase in R&D. As previously explained the increase was due to the involvement of more staff and resources in Electrovaya Labs activities in ongoing research in the areas of solid-state cells, electrode production and higher energy density batteries as opposed to being involved in production activities. The actual head count of these engineers and scientist was generally consistent between periods. The R&D expense will vary period to period as staff are utilized in R&D or production activities.

### Quarterly Comparative Summaries

**Quarterly revenue from continued operations are as follows:**

<i>(USD \$ thousands)</i>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
2021	\$2,583	\$2,927	\$1,918	\$4,156
2020	\$861	\$1,947	\$4,799	\$6,918
2019	\$1,972	\$1,253	\$1,162	\$504

**Quarterly net profits/(losses) from continued operations are as follows:**

<i>(USD \$ thousands)</i>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
2021	\$(1,844)	\$(1,866)	\$(1,792)	\$(2,032)
2020	\$(1,909)	\$(1,108)	\$4,825	\$(696)
2019	\$2,756	\$(1,884)	\$(1,226)	\$(2,483)

**Quarterly net gains (losses) per common share from continued operations are as follows:**

	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
2021	\$(0.01)	\$(0.02)	\$(0.01)	\$(0.01)
2020	\$(0.02)	\$(0.01)	\$0.05	(0.01)
2019	\$0.03	\$(0.02)	\$(0.01)	\$(0.03)

## **Quarterly Revenue and Seasonality**

The Company has not historically experienced seasonality in its business. In recent periods, however, revenue has been relatively low in the fiscal first quarter, which reflects the material handling customers' preference to defer product delivery past the holiday season and into the New Year. This is due to an increasing e-commerce demand and the need to minimize changes or disruptions at high-volume distribution centers. Seasonality has also increased due to the impact of COVID-19 on the general consumer community as a result of a shift from in-person to online shopping, increasing the activity at distribution centres.

The lithium ion forklift battery has a long sales cycle as many customers are large companies, the technology is relatively new to the forklift market, and customers need time to familiarize themselves with and validate the benefits as compared to the incumbent technology of lead acid batteries. In some cases, the process involves receiving a demonstrator battery for testing and trial. This causes a somewhat a long and “lumpy”, or uneven, sales cycle. As customers become more comfortable with the product and place repeat orders it is managements view that the sales will grow in a more predictable and consistent fashion.

## **5. LIQUIDITY AND CAPITAL RESOURCES**

The Company ended its 2021 fiscal year on September 30, 2021, with \$4.2 million of cash and had drawn \$3.3 million of a working capital facility with a maximum availability of \$5.6 million, leaving a further \$2.3 million available for drawing. The Company believes this available liquidity of \$6.5 million (cash of \$4.2 million plus available line of \$2.3 million) is adequate working capital to support its operating activities at the anticipated sales level for the 12 months ended September 30, 2022.

In December, 2021 the promissory note which was due to mature on December 31, 2021 was amended to mature on July 1, 2022. All other terms and conditions are unchanged. In exchange for the extension, the company paid Canadian \$300K as extension fee, satisfied through the issuance of 306,122 Common Shares. As well in December, 2021, the credit agreement was amended to extend the maturity from December 31, 2021 to December 31, 2022. All other terms and conditions are unchanged. In exchange for extension, the Company paid Canadian \$70K as extension fee.

On December 7, 2021, the Company filed a final base shelf prospectus with the securities regulatory authorities in each of the provinces and territories of Canada. The base shelf prospectus is valid for a 25-month period, during which time the Company may offer and issue, from time to time, Common Shares, warrants, units, subscription receipts and debt securities, or any combination thereof, having an aggregate offering price of up to USD \$100 million.

In connection with the filing of the base shelf prospectus, the Company gave an undertaking to the Ontario Securities Commission that it will not distribute securities thereunder until it has entered into a definitive agreement to extend or renew the maturity date of the Promissory Note and Working Capital Facility. With the definitive agreement above this undertaking has now been fulfilled and the Company is free to draw upon the base shelf.

Given the Company’s strengthened financial position, available cash and operating facility, extended maturity of promissory notes, good relations with our supportive financial lender, strong relationship with our OEM partner, strong sales pipeline and availability of \$100 million shelf prospectus we are confident in our ability to continue operations for at least twelve months.

At September 30, 2021, we had the following contractual obligations:

<b>Year of Payment Obligation</b>	<b>Debt Repayment</b>
2022	8,642
2023	30
2024	60
2025	60
2026 and thereafter	150
<b>Total</b>	<b>\$ 8,942</b>

## 6. OUTSTANDING SHARE DATA

The authorized and issued capital stock of the Company consists of an unlimited authorized number of common shares as follows:

	Common Shares	
	Number	Amount
Balance, September 30, 2020	129,615,284	\$86,134
Issuance of shares	3,987,701	3,222
Balance, December 31, 2020	133,602,985	\$89,356
Issuance of shares	7,852,860	10,049
Balance, March 31, 2021	141,455,845	\$99,405
Issuance of shares	1,565,833	353
Balance, June 30, 2021	143,021,678	\$99,758
Issuance of shares	2,919,230	2,740
Balance, September 30, 2021	145,940,908	\$102,498

On February 17, 2021 at a Special Meeting of the Shareholders, a resolution was passed to amend the articles of the Corporation to change the number of issued and outstanding common shares of the Corporation by consolidating the issued and outstanding common shares on the basis of one new common share for every 5 existing common shares (or such lower consolidation ratio as may be determined by the Board). Such consolidation would ultimately only become effective at a future date determined by the Board if the Board determined it was in the best interests of the Corporation to implement a consolidation. There is no assurance that the Board will decide to implement a share consolidation and the Common Shares may remain unconsolidated indefinitely.

The following table reflects the quarterly stock option activities for the period from October 1, 2020 to September 30, 2021:

	Number outstanding	Weighted average exercise price
Outstanding, September 30, 2020	10,944,603	\$0.46
Cancelled or expired	(423,666)	\$1.99
Exercised	(281,998)	\$0.33
Outstanding, December 31, 2020	10,238,939	\$0.41
Exercised	(491,668)	\$0.36
Outstanding, March 31, 2021 & June 30, 2021	9,747,271	\$0.41
Issued	7,540,000	\$0.79
Cancelled or expired	(10,000)	\$1.99
Outstanding, September 30, 2021	17,277,271	\$0.45

On February 17, 2021 at a Special Meeting of the Shareholders, a resolution was passed to (i) authorize amendments to the company's Stock Option Plan to increase the maximum number of common shares issuable upon the exercise of stock options thereunder from 15,100,000 to 23,000,000.

The following table reflects the outstanding warrant and Broker Compensation Option activities for the period from October 1, 2020 to September 30, 2021:

#### Details of Share Warrants

	Number Outstanding	Exercise Price
Outstanding, September 30, 2020	17,262,679	
Exercised during the quarter ended December 31, 2020	(242,500)	\$0.16
Exercised during the quarter ended December 31, 2020	(3,333,333)	\$0.57
Outstanding, December 31, 2020	13,686,846	
Exercised during the quarter ended March 31, 2021	(200,000)	\$1.15
Exercised during the quarter ended March 31, 2021	(4,000,000)	\$1.15
Exercised during the quarter ended March 31, 2021	(416,666)	\$0.16
Issued during the quarter ended March 31, 2021	1,211,113	\$1.39
Outstanding, March 31, 2021	10,281,293	
Exercised during the quarter ended June 30, 2021	(1,565,833)	\$0.16
Outstanding, June 30, 2021	8,715,460	
Issued during the quarter ended September 30, 2021	1,459,615	\$1.26
Outstanding, September 30, 2021	10,175,075	

#### Details of Compensation Options to Brokers

	Number Outstanding	Exercise Price
Outstanding, September 30, 2020 & December 31, 2020	322,304	\$1.15
Exercised during the quarter ended March 31, 2021	(322,304)	\$1.15
Issued during the quarter ended March 31, 2021	145,333	\$1.39
Outstanding, March 31, 2021, June 30, 2021 & Sept 30, 2021	145,333	

As of September 30, 2021, the Company had 145,940,908 common shares outstanding, 17,277,271 options to purchase common shares outstanding, 145,333 compensation options outstanding and 10,175,075 warrants to purchase common shares outstanding.

## 7. OFF-BALANCE SHEET ARRANGEMENTS

The Company does not have any off-balance sheet arrangements for the year ended September 30, 2021.

## 8. RELATED PARTY TRANSACTIONS

### Transactions with Chief Executive Officer and controlling shareholder of Electrovaya Inc.

#### *Quarterly General Expenses*

There is an outstanding payable balance of \$18 relating to raising of capital on behalf of the Company, as at September 30, 2021 (2020-\$18).

During the quarter ended September 30, 2021, the Company paid \$38 (2020 - \$36) to a director of Electrovaya Corp. for services rendered in his capacity as an executive officer of Electrovaya Inc. These amounts, which are recorded at their exchange amount, have been expensed in General and Administrative.

During the quarter ended September 30, 2021, the Company paid \$74 (2020 - \$50) to the Chief Executive Officer, who is also a controlling shareholder of the Company. An amount of \$21 relate to car allowance paid out for 2017 and 2018. These amounts, which are recorded at their exchange amount, have been expensed in General and Administrative.

#### *Personal Guarantees*

The CEO and controlling shareholder personally guaranteed the following short-term loans.

	September 30, 2021		September 30, 2020	
	CDN	USD	USD	
Shareholder guaranteed loan (Dec. 2017)	\$ 500	\$ 395	\$ 375	
Shareholder loan (Sept.2017 & March 2019)	-	-	148	
Shareholder guaranteed loan (June 2019)	300	236	226	
	\$ 800	\$ 631	\$ 749	

	September 30,	
	2021	2020
Promissory Note	\$ 4,734	\$ 4,503

The promissory note is also secured by the personal guarantee of Dr. Sankar Das Gupta, CEO and the controlling shareholder of the Company, as well as a pledge of 25,700,000 Common Shares by Dr. Das Gupta in favour of the lender.

In June 2020, as consideration for the significant personal risk involved in granting the Company's lenders personal guarantees and share pledges, the Company's independent directors approved the issuance to Dr. Das Gupta of 4,000,000 Common Shares at a price of \$0.13 (Cdn \$0.18), and 7,100,000 warrants to purchase Common Shares, each exercisable at a price of \$0.13 (Cdn \$0.18) until April 2, 2030 as consideration for the guarantees and pledges described above.

#### *Electrovaya Labs – Facility Usage Agreement*

In May 2021 Electrovaya entered a month to month Facility Usage Agreement for the use of space and allocated staff of a third party research firm providing access to laboratory facilities, primarily for research associated with its Electrovaya Labs segment. The term of the agreement was for six months and could be terminated by either party upon 90 days notice.

In July 2021 the facility was acquired by an investor group controlled by the family of Dr. Sankar Das Gupta, Electrovaya's CEO and controlling shareholder, and which group includes its COO, Dr. Rajshekar Das Gupta. The Facility Usage Agreement was not changed on the change of ownership and remains in effect between the Company and the owner, such that the monthly payment of \$25,000 is now with a related party of Electrovaya.

In December 2021 the Facility Usage Agreement was renewed for a further 12 months on the same terms and conditions.

#### *Special Option Grants*

In September 2021, on the recommendation of the Compensation Committee of the Corporation, a committee composed entirely of independent directors, the Board of Directors of the Corporation determined that it is advisable and in the best interests of the Corporation to amend the terms of the compensation of certain key personnel to incentivize future performance, to encourage retention of their services, and to align their interests with those of the Corporation's shareholders.

Dr. Sankar Das Gupta was granted two million options which vest in two tranches of one million options each based on reaching specific target market capitalization thresholds. As the target market capitalization thresholds have not yet been reached, none of these options have vested.

Dr. Rajshekar Das Gupta was granted four million and five hundred thousand options which vest in three tranches of one million and five hundred thousand options based on reaching specific target market capitalization thresholds. As the target market capitalization thresholds have not yet been reached, none of these options have vested.

## **9. CRITICAL ACCOUNTING ESTIMATES**

The Company's management make judgments in the process of applying the Company's accounting policies in the preparation of its consolidated financial statements. In addition, the preparation of financial information requires that the Company's management make assumptions and estimates of effects of uncertain future events on the carrying amounts of the Company's assets and liabilities at the end of the reporting period and 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 under the circumstances. Revisions to estimates and the resulting effects on the carrying amounts of the Company's assets and liabilities are accounted for prospectively.

The critical judgments, estimates and assumptions applied in the preparation of Company's financial information are reflected in Note 3 of the Company's September 30, 2021 consolidated financial statements.

## **10. CHANGES IN ACCOUNTING POLICIES AND RECENT ACCOUNTING PRONOUNCEMENTS**

Our accounting policies and information on the adoption and impact of new and revised accounting standards the Company was required to adopt effective January 1, 2015 are disclosed in Note 3 of our consolidated financial statements and their related notes for the year ended September 30, 2021.

## **11. FINANCIAL AND OTHER INSTRUMENTS**

We do not have any material obligations under forward foreign exchange contracts, guarantee contracts, retained or contingent interests in transferred assets, outstanding derivative instruments or non-consolidated variable interests.

## **12. DISCLOSURE CONTROLS**

We have established disclosure controls and procedures that are designed to ensure that the information required to be disclosed by the Company in the reports that it files or submits under securities legislation is recorded, processed, summarized, and reported within the time periods specified in such rules and forms and that such information is accumulated and communicated to management, including our principal executive officer and principal financial officer (who are our Chief Executive Officer and Chief Financial Officer, respectively) as appropriate to allow timely decisions regarding required disclosure. In designing and evaluating our disclosure controls and procedures, management recognized that disclosure controls and procedures can provide only reasonable, not absolute, assurance that the objectives of the disclosure controls and procedures are met.

Our management, including our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures. Based on this evaluation and as described below under "Internal Control over Financial Reporting", our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of September 30, 2021.

### **13. INTERNAL CONTROL OVER FINANCIAL REPORTING**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed by, or under the supervision of, the CEO and the CFO and effected by the Board of Directors, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with IFRS.

Our management, including our CEO and CFO, believes that any disclosure controls and procedures or internal control over financial reporting, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, they cannot provide absolute assurance that all control issues and instances of fraud, if any, have been prevented or detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by unauthorized override of the control. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Accordingly, because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud might occur and not be detected.

Management assessed the effectiveness of the Company's internal control over financial reporting at September 30, 2021, based on the criteria set forth in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission as published in 2013. Based on this evaluation, management believes, at September 30, 2021, the Company's internal control over financial reporting is effective. Also, management determined there were no material weaknesses in the Company's internal control over financial reporting at September 30, 2021.

The effectiveness of the Company's internal control over financial reporting as of September 30, 2021, has been audited by Goodman & Associates LLP, an independent registered public accounting firm, as stated in their report, which is included in the Company's audited consolidated financial statements.

### **14. QUALITATIVE AND QUANTITATIVE DISCLOSURES ABOUT RISKS AND UNCERTAINTIES**

The Company may be exposed to risks of varying degrees of significance which could affect its ability to achieve its strategic objectives. The main objectives of the Company's risk management processes are to ensure that the risks are properly identified and that the capital base is adequate in relation to those risks. The principal risks to which the Company is exposed are described below.

*Capital risk*



The Company manages its capital to ensure that there are adequate capital resources for the Company to maintain and develop its products. The capital structure of the Company consists of shareholders' equity and depends on the underlying profitability of the Company's operations.

The Company manages its capital structure and makes adjustments to it, based on the funds available to the Company, in order to support the development, manufacture and marketing of its products. The Board of Directors does not establish quantitative return on capital criteria for management, but rather relies on the expertise of the Company's management to sustain future development of the business.

The Company's capital management objectives are:

- to ensure the Company's ability to continue as a going concern.
- to provide an adequate return to shareholders by pricing products and services commensurately with the level of risk.

The Company monitors capital on the basis of the carrying amount of equity plus its short-term debt comprised of the Promissory note, less cash and cash equivalents as presented on the face of the statement of financial position.

The Company sets the amount of capital in proportion to its overall financing structure, comprised of equity and long-term debt. The Company manages the capital structure and makes adjustments to it in the light of changes in economic conditions and the risk characteristics of the underlying assets. In order to maintain or adjust the capital structure, the Company issues new shares or increases its long-term debt.

Capital for the reporting periods under review is summarized as follows:

		<u>30-Sep-21</u>		<u>30-Sep-20</u>
Total (Deficiency)	\$	(1,696)	\$	(8,715)
Cash and cash equivalents		<u>(4,202)</u>		<u>(1,124)</u>
(Deficiency)		<u>(5,898)</u>		<u>(9,839)</u>
Total (deficiency)		(1,696)		(8,715)
Promissory Note		4,734		4,503
Short-term loan		631		749
Working capital facilities		3,277		4,708

Other Long-term liabilities		3,220		2,906
Overall Financing	\$	10,166	\$	4,151
Capital to Overall financing Ratio		-0.58		-2.37

### *Credit risk*

Credit risk is the risk that the counter-party fails to discharge an obligation to the Company. The Company is exposed to this risk for various financial instruments, for example, by granting loans and receivables to customers, placing deposits, etc. The Company's maximum exposure to credit risk is limited to the carrying amount of financial assets recognized at the reporting date, as summarized below:

	September 30,			
		2021		2020
Cash and cash equivalents	\$	4,202	\$	1,124
Trade and other receivables		1,341		2,491
Carrying amount	\$	5,543	\$	3,615

Cash and cash equivalents are comprised of the following:

	September 30,			
		2021		2020
Cash	\$	4,202	\$	1,124
Cash equivalents		-		-
	\$	4,202	\$	1,124

The Company's current portfolio consists of certain banker's acceptance and high interest yielding saving accounts deposits. The majority of cash and cash equivalents are held with financial institutions, each of which had at September 30, 2021 a rating of R-1 mid or above.

The Company manages its credit risk by establishing procedures to establish credit limits and approval policies. The balance in trade and other receivables is primarily attributable to trade accounts receivables. In the opinion of management, the credit risk is moderate as some receivables are falling into arrears. Management is taking appropriate action to mitigate this risk by adjusting credit terms.

### *Liquidity risk*

The Company is exposed to liquidity risk from trade and other payables in the amount of \$3,248 (2020- \$3,913), Promissory Note and loan financing of \$5,365 (2020-\$5,252), working capital facilities \$3,277 (2020-\$4,708) and other payables of \$588 (2020-\$551). Liquidity risk is the risk

that the Company is not able to meet its financial obligations as they fall due. The Company manages its liquidity risk by carefully monitoring the cash requirements and balancing them against the cash received from operations and government grants.

#### *Market risk*

Market risk incorporates a range of risks. Movement in risk factors, such as market price risk and currency risk, affect the fair value of financial assets and liabilities. The Company is exposed to these risks as the ability of the Company to develop or market its products and the future profitability of the Company is related to the market price of its primary competitors for similar products.

#### *Interest rate risk*

The Company has floating and fixed interest-bearing debt ranging from prime plus 7% to 24%. The Company's current policy is to invest excess cash in investment-grade short-term deposit certificates issued by its banking institutions.

#### *Foreign currency risk*

The Company is exposed to foreign currency risk. The Company's functional currency is the Canadian dollar and a majority of its revenue is derived in US dollars. Purchases are transacted in Canadian dollars, United States dollars and Euro. Management believes the foreign exchange risk derived from any currency conversions may have a material effect on the results of its operations. The financial instruments impacted by a change in exchange rates include our exposures to the above financial assets or liabilities denominated in non-functional currencies. Cash held by the Company in US dollars at Sep 30, 2021 was \$1,136 (2020 - \$55).

If the US dollar to Canadian foreign exchange rate changed by 2% this would change the recorded Net gain by \$70 (2020 - \$68).

#### *Price risk*

The Company is exposed to price risk. Price risk is the risk that the commodity prices that the Company charges are significantly influenced by its competitors and the commodity prices that the Company must charge to meet its competitors may not be sufficient to meet its expenses. The Company reduces the price risk by ensuring that it obtains information regarding the prices set by its competitors to ensure that its prices are appropriate to the unique attributes of our product. In the opinion of management, the price risk is low and is not material.

#### *Disclosure control risks*

The Company's management, with the participation of the Chief Executive Officer and Chief Financial Officer of the Company, have designed disclosure controls and procedures ("DC&P"), or caused them to be designed under their supervision, to provide reasonable assurance that material information relating to the issuer, including its consolidated subsidiaries, is made known, particularly during the period in which interim or annual filings are being prepared, and

information required to be disclosed by the Company in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation. Although certain weaknesses have been identified, these items do not constitute a material weakness or a weakness in DC&P that are significant. A control system, no matter how well conceived or operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. DC&P are reviewed on an ongoing basis.

#### *Internal control risks*

The Company's management, with the participation of the Chief Executive Officer and Chief Financial Officer of the Company, have designed such internal control over financial reporting ("ICFR"), or caused it to be designed under their supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. Such design also uses the framework and criteria established in Internal Control over Financial Reporting - Guidance for Smaller Public Companies, issued by The Committee of Sponsoring Organizations of the Treadway Commission. The Company relies on entity-wide controls and programs including written codes of conduct and controls over initiating, recording, processing and reporting significant account balances and classes of transactions. Other controls include centralized processing controls, including a shared services environment and monitoring of operating results.

Based on the evaluation of the design and operating effectiveness of the Company's ICFR, the CEO and CFO concluded that the company's ICFR was effective as at September 30, 2021.

The Company does not believe that it has any material weakness or a weakness in ICFR that are significant. Control deficiencies have been identified within the Company's accounting and finance departments and its financial information systems over segregation of duties and user access respectively. Specifically, certain duties within the accounting and finance departments were not properly segregated due to the small number of individuals employed in these areas. To our knowledge, none of the control deficiencies has resulted in a misstatement to the financial statements. However, these deficiencies may be considered a material weakness resulting in a more-than remote likelihood that a material misstatement of the Company's annual or interim financial statements would not be prevented or detected.

As the Company incurs future growth, we plan to expand the number of individuals involved in the accounting function. At the present time, the CEO and CFO oversee all material transactions and related accounting records. In addition, the Audit Committee reviews on a quarterly basis the financial statements and key risks of the Company and queries management about significant transactions, there is a quarterly review of the company's condensed interim unaudited financial statements by the Company's auditors and daily oversight by the senior management of the Company.

## **15. COVID-19 BASED RISKS**

The ongoing global COVID-19 pandemic has created a number of risks in Electrovaya's business, not all of which may be quantifiable to or immediately identifiable by the Company. To date, the Company believes the impact of the virus on the Company's operations and workforce has been mitigated as the Company was exempt from government lockdown orders, as manufacturing has generally been deemed an essential service in Ontario and the Company has continued to operate throughout the pandemic.

While the efficiency of the Company's day-to-day operations has not to date been negatively impacted by the need for physical separation and increased sanitation, depending on future outbreaks and their severity, there may be a risk of such negative impacts on efficiency and productivity in the future. Social distancing restrictions to protect the safety of our employees may limit the volume of product the Company is able to manufacture and distribute. In addition, some employees may have been affected in their ability to travel on public transit or otherwise work due to safety fears, or may be subjected to lockdowns or quarantines, particularly if exposed to the virus, even if not infected themselves, which could lead to absenteeism and impacts on productivity. Any on-site exposure to the virus could result in complete shutdowns to operations.

The Company has not experienced significant detrimental effects on productivity or costs due to mitigation strategies, including the implementation of social distancing (including work-from-home policies for those employees who could work from home), personal protective equipment requirements, employee education, and sanitation measures, particularly as knowledge of the risk profile for viral infection has increased throughout 2020 and 2021 and targeted sanitation measures were adjusted accordingly. Through the early phases of the COVID-19 pandemic, the Company's scientists understood, based on information available at the time, that the virus had a high possibility of airborne transmission through respiration of aerosol droplets. Therefore in addition to mandatory masking, social distancing, increased hand washing, and increased surface sanitary precautions, the Company also installed UV-C devices which flooded the workplace air ducts with UV radiation, and installed several portable UV-C devices with HEPA filters in the workplace. The Company can infer these precautions were effective as the Company did not experience any instances of workplace COVID-19 transmission. However, the Company is located in a designated "hot" zone for COVID-19 in Ontario, Canada, and there is no certainty the effectiveness of these measures will persist during future or variant outbreaks.

The Company's principal operations consist of manufacturing, engineering and research, and prior to the COVID-19 outbreak, most Company personnel worked from the Company's premises. After the outbreak, the Company implemented a work-from-home policy where any individual who could work from home, did so. The Company encouraged all its employees to vaccinate as early as possible and supported the vaccination drive by providing employees information on vaccine availability. The Company also gave time off with pay for employees to take vaccinations or COVID-19 tests. However, while the Company has not experienced any substantial COVID-19-related employee turnover or absenteeism to date, there is no certainty that the Company will not experience such negative effects during future or variant outbreaks that may occur.

The virus also disrupted the Company's global supply chain, as lockdowns in many countries affected some of its suppliers' ability to produce needed components. These supply constraints and increases in shipping costs may have resulted, and may still result, in increased component costs to the Company. Transport of the Company's products both domestically and across

international borders may be affected by the impact of COVID-19 on workers in the transportation industry, and border closures or other travel restrictions. At the beginning of the outbreak, some of the Company's component suppliers from Asia, Europe and North America faced difficulties in supplying production components on time, due to material availability and transport restrictions. To mitigate these effects, the Company changed its purchasing patterns to purchase critical components in greater amounts and prior to their need, instituted risk purchasing policies, and sought out and developed multiple alternative sources and suppliers. The Company believes these mitigation strategies have been effective to date, and critical components including microprocessor chips, electrical and electronic components, steel parts and other items have been made available on time to the Company's production team, however the Company has experienced marginal inflation of production costs. The costs in designing and implementing the COVID-19 mitigation efforts are recognized as general overhead costs and are not segregated in the Company's financial statements. However, despite what the Company believes is the institution of successful mitigation efforts on supply chain disruption to date, there is no certainty the effectiveness of these supply-chain disruption mitigation measures will persist during future outbreaks or variant outbreaks.

During the pandemic, the Company's customers and potential customers, especially those from outside Canada, could not visit the Company's operations, nor could they meet with the Company at trade shows and product exhibitions. It is possible, but not quantifiable, that these restrictions could have led to reduction in revenues during the course of the pandemic from foregone sales.

Costs related to COVID-19 and potential revenue reduction as a result was mitigated through certain government assistance programs, described in the financial statements for the year ended September 30, 2021.

Electrovaya currently depends on a relatively small number of significant customers for a large percentage of its overall revenue. Its customers include end users of material handling electric vehicles (primarily forklifts) who purchase its battery products through the Company's direct sales channel, and the customer base has more recently expanded to include forklift manufacturers who distribute Electrovaya's products to their own customers through the manufacturer's distribution channels under the manufacturer's brand. COVID-19 has had and may continue to have unanticipated consequences on the Company's business, overall revenue, and the timing for revenue as a result of effects on the Company's customers, as delivery schedules under supply agreements with manufacturers have been subject to a high degree of variability as compared to the parties' negotiated intentions. In particular, global supply chain effects, particularly for semiconductors, a key components of forklifts, has resulted in an inability on the part of the Company's forklift manufacturing customers to obtain necessary components for their manufacturing operations and therefore disrupted their ability to deliver their products to customers, and in turn disrupted expected ordering patterns and volumes of the Company's batteries for sales through the manufacturer's channels. This effect was not foreseeable at the time of negotiating the supply agreement, and Electrovaya depends on communications from its customers to understand external impacts on their ordering patterns, which either may not be apparent to the customer or not shared with the Company. The delay in revenue for deliveries under the supply agreement led the Company to withdraw full-year revenue guidance for its 2021 fiscal year in May 2021. The Company believes this is a normal course learning curve in dealing with a new distribution channel, and is in contact with its customers to optimize purchasing patterns under the supply relationships and understand the

pressures its customers face to mitigate these effects and create more predictable revenue patterns.

COVID-19 may also have other general and unquantifiable effects on the Company as global retail sales of goods have been affected by restrictions on store openings, and global shipping of goods has been constrained through capacity issues. Such global impacts on retail sales of goods may have an effect on the Company, as customers have less volume of orders to fulfill and therefore less need to purchase the Company's products. However the Company believes this effect may be offset by higher e-commerce volumes and changing consumer behaviour patterns and an increasing dependence on e-commerce while subject to government-order restrictions on mobility and commercial activity.

*Other Risk Factors.*

The risks described above are not the only risks and uncertainties that we face. Additional risks the Company faces are described under the heading "Risk Factors" in the Company's AIF for the year ended September 30, 2021.

Other additional risks and uncertainties not presently known to us or that we currently consider immaterial may also impair our business operations. These risk factors could materially affect our future operating results and could cause actual events to differ materially from those described in our forward-looking statements.

Additional information relating to the Company, including our AIF for the year ended September 30, 2021, is available on SEDAR.