FRX INNOVATIONS INC.

Management Discussion and Analysis

For the year ended December 31, 2023

GENERAL

FRX INNOVATIONS INC. ("FRX", "Company"), was formed through an amalgamation of FRX POLYMERS, INC. a Delaware corporation formed on December 27, 2006 and Good2GORTO, a Canadian federally incorporated company. The Company's Canadian office is located at 1170 – 1040 West Georgia St., Vancouver.

This management's discussion and analysis ("MD&A") should be read in conjunction with FRX's audited consolidated financial statements and related notes-disclosure as of December 31, 2023, and for the year ended December 31, 2023 as prepared in accordance with International Financial Reporting Standards, as issued by the International Accounting Standards Board ("IFRS").

The Company's subsidiary FRX Polymers Inc., held for sale as presented in the December 31, 2023 consolidated financial statements, operates in the chemical industry and manufactures polyphosphate polymers, copolymers and oligomers. FRX's products are sold under its Nofia® trade name.

The Company presents its consolidated financial statements in United States dollars. In this MD&A, all references to "$" or "dollars" are to United States dollars unless otherwise indicated. Due to rounding, certain totals and subtotals may not foot and certain percentages may not reconcile.

Information contained in this MD&A is based on information available to management as of December 03, 2024

FORWARD-LOOKING STATEMENTS

This MD&A contains forward-looking statements that relate to management's current expectations and views of future events. In some 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", "predict", or "likely", or the negative of these terms, or other similar expressions intended to identify forward-looking statements. Management has based these forward-looking statements on its current expectations and projections about future events and financial trends that it believes might affect the FRX's financial condition, results of operations, business strategy and financial needs. These forward-looking statements include, among other things, statements relating to the FRX's financial position, business strategy, growth strategies, addressable markets, budgets, operations, financial results, taxes, plans and objectives. Particularly, information regarding the FRX's expectations of future results, performance, achievements, prospects or opportunities or the markets in which we operate is forward-looking information.

Forward-looking statements are based on certain assumptions and analyses made in light of management's experience and perception of historical trends, current conditions and expected future developments and other factors management believes are appropriate. Although management believes that the assumptions underlying these statements are reasonable, they may prove to be incorrect and there can be no assurance that actual results will be consistent with these forward-looking statements. Given these risks, uncertainties and assumptions, readers should not place undue reliance on these forward-looking statements. Whether actual results, performance or achievements will conform to the FRX's expectations and predictions is subject to a number of known and unknown risks, uncertainties, assumptions and other factors, including those listed under "PART IV - Risk Factors" in the Filing Statement, which factors should not be considered exhaustive and should be read together with the other cautionary statements in this MD&A.

If any of these risks or uncertainties materialize, or if assumptions underlying the forward-looking statements prove incorrect, actual results might vary materially from those anticipated in those forward-looking statements.

Although management bases these forward-looking statements on assumptions that it believes are reasonable when made, FRX 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 the 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.

Given these risks and uncertainties, investors are cautioned not to place undue reliance on these forward-looking statements. Any forward-looking statement that is made in this MD&A 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.

RECENT DEVELOPMENTS

Strategic Options Undertaking

1. In September 2023, it became apparent to the Company that an equity funding round it had been relying on would not close. Management reported notwithstanding that the Company had growing market opportunities, the working capital deficiency could not be solved by equity funding.

2. On September 26, 2023 the Board appointed a strategic sub-committee (the "Strategic Committee") which was mandated to explore all viable options for the working capital issues.

Events related to the capital deficiency were:

3. On September 27, 2023, management informed its secured lender that it was no longer able to meet its obligations under the loan agreement.

4. On October 1, 2023, the Company received a formal demand from its landlord and critical raw material supplier in Antwerp, for the amount due of $572,577.

5. On October 10, 2023, the landlord informed FRX that it would begin bankruptcy against FRX Polymers (Europe) NV, the Company's Belgian subsidiary and threatened the cessation of utilities to FRX's Antwerp production site.

6. On October 31, 2023, FRX received a summons to appear in Belgium bankruptcy court on November 9, 2023 relating to the landlord's claim.

7. Concurrently, a second critical supplier threatened imminent legal action for amounts due of approximately $719,000.

8. As FRX Polymers NV was default of its loan, the parent companies, FRX Polymers Inc. and FRX Innovations Inc. became exposed as a result of their respective guarantees of the debt.

9. On October 13, 2023, the Company appointed Echelon Wealth Partners to assist the Special Committee in its strategic options process including possible joint ventures, capital funding, or the outright sale of the business.

10. By early November 2023, the Company had distributed a confidential information memorandum to approximately 20 potential acquirers. These efforts resulted in subsequent due diligence discussions with five parties. Ultimately in the prevailing market conditions, no economic offers were received.

11. On October 30, 2023, the Company executed a standstill agreement with its Belgian bank, (the "Standstill Agreement") which allowed the Company not to pay the interest and principal amounts due. The initial term of the standstill agreement was to February 15, 2024 and subject to the Company receiving a bona fide offer from a qualified buyer for the sale of the shares of the Company's subsidiaries or all or substantially all of its business and/or assets.

    Other key requirements include:

    - The sale of FRX Polymers, Inc. shares to a third party who will settle the obligation to the Belgian bank.
    - A pledge of the Company's intellectual property in favour of the Belgian bank.
    - The Company securing between $1 million and $1.5 million of additional working capital from other investors.
    - The provision of a liquidity plan sufficient for the duration of the standstill term.
    - Up to $3 million of security alongside the bank to be comprised of a maximum of $1.5 million dollars of new investment funds and a further $1.5 million for previously unsecured creditors.
    - An immediate termination should there be a bankruptcy, or a failure to complete a sale transaction within the standstill including any extensions.

12. The Standstill Agreement, enabled the Company to negotiate a second standstill agreement on November 24, 2023. Under the terms of the agreement, $110,620 was paid upon signing, followed by monthly payments of $32,633. The remaining obligation of $707,304 was granted security under the terms of the bank's Standstill Agreement.

13. On November 27, 2023, a third standstill agreement was reached the critical supplier, for the amount of $719,000 described above. The terms of this agreement required monthly payments of $ 25,000 beginning November 30, 2023, and a payment equal to 5% of all sales proceeds during the Company's Strategic Option process. The balance of the amount owing was granted security under the terms of the bank's Standstill Agreement.

14. By March 2024, despite several expressions of interest, the feedback from the market was that despite the Company's growth prospects, the capital structure of the Company, was cited as a major roadblock to proceeding to a transaction.

15. On March 16, 2024, discussions were held with a major flame-retardant supplier aimed at developing a funded distribution agreement. On September 24, 2024 a funded distribution agreement was entered by the parties, which included an inventory assignment secured factoring arrangement for $2,212,400 to be released in four equal tranches over 18 months .

16. As an alternative to an outright sale, during the early part of April 2024, the Strategic Committee initiated a further outreach to a combination of 15 customers and strategic partners with a proposal to invest. This process resulted in interest from a Japanese distributor. However, in management's opinion, this option could not be implemented in time to solve the severe working capital deficiency FRX.

17. In May 2024, interested shareholders, in discussion with the Strategic Committee, developed a proposal base on the following terms. A targeted capital raise of $10 million, of which the interested shareholders committed to provide up to $4 million on the following conditions:

    - the plan included raising the balance from an investor group,
    - a sale by FRX Innovations, Inc. of all the shares of FRX Polymers Inc ,
    - that the liabilities of FRX Polymers Inc. and FRX Polymers (Europe) NV be substantially restructured so allow the deployment future working capital towards the relaunch and growth of the business.
    - that the proposed agreement with a major flame-retardant supplier be consummated, and
    - the management team of FRX Polymers, Inc. be strengthened.

18. On May 20, 2024, the Company appointed a Special Transaction Committee ("STC") to be comprised of disinterested directors and management to negotiate and to recommend to the Board a final term sheet for consideration.

19. As a direct consequence of the decision by the Company to hold its assets for sale, a discontinued operation approach under IFRS 5 was taken in the preparation of the December 31, 2023 consolidated financial statements. This change caused a major delay in the preparation and audit of the statements. On July 23, 2024, a cease-trade order was issued by the Ontario Securities Commission (OSC) against the Company for failing to file its audited annual financial statements for the period ended December 31, 2023, the management's discussion and analysis relating to the audited annual financial statements for the period ended Dec. 31, 2023, the interim financial statements for the period ended March 31, 2024, the management's discussion and analysis relating to the interim financial statements for the period ended March 31, 2024, and the certification of the foregoing filings as required by National Instrument 52-109, and Certification of Disclosure in Issuers' Annual and Interim Filings. Upon revocation of the cease-trade order, the Company's shares will remain suspended until the company meets TSX Venture Exchange requirements. Members are prohibited from trading in the securities of the Company during the period of the suspension or until further notice. Prior to the cease-trade order, the common shares of the Company traded on the TSX Venture Exchange under the trading symbol "FRXI.V".

20. On July 31, 2024, the Company, executed a non-binding term sheet received from the investment group. As contemplated the transaction will in effect be a sale of all or substantially all of the Company's assets including the shares of FRX Polymers

(Europe) NV, itself a subsidiary of FRX Polymers, Inc., and all intellectual property rights, relevant applications, knowhow, customer lists, supply contracts and other relevant information owned by FRX Polymers Inc. and FRX Polymers (Europe) NV. Under the proposed terms, consideration will comprise of $1.5 million plus an amount of deferred consideration.

21. On November 27, 2024, the Company signed a definitive agreement under the terms above.

22. On November 29, 2024, the Board of Directors unanimously approved the release of the Informational Circular for distribution to FRX Innovations Shareholders in advance of the December 27th AGM and Special Shareholders Meeting.

DESCRIPTION OF BUSINESS – Continuing Operations

As at December 31, 2023 management concluded that the prevailing circumstances of the Company as noted in the Overview section above met the conditions under IFRS 5 (non-current assets held for sale and discontinued operations). Consequently, in anticipation of the pending sale transaction, our results are presented with the financial results of FRX's Nofia flame retardant operations segregated in the statement of income as discontinued operations. This includes our anticipated impairment loss on the disposition. In accordance with IFRS, our comparative results also reflect the segregation of these segments as discontinued operations. For the year ending December 31, 2023 the net assets of FRX Polymers Inc. and FRX Polymers, Europe (NV) have been removed from the balance sheet. The balance sheet for December 31, 2022 is not restated.

It is the intent of FRX Innovations Inc. the Canadian public entity to seek new investment opportunities upon the conclusion of the sale of its Nofia flame retardant operations.

SELECTED ANNUAL INFORMATION

	2023	2022	2021
Loss from continuing operations	$1,009,380	$2,487,233	$1,338,321
Loss from discontinued operations	$7,495,276	$11,685,935	$7,393,216
Loss per share Basic and diluted – continuing operations	$0.01	$ 0.04	$ 0.05
Loss per share Basic and diluted – discontinued operations	$0.08	$ 0.19	$ 0.30
Total Assets	$18,729,223	$23,386,035	$25,467,159
Total Current Liabilities	$18,147,863	$13,774,352	$4,099,444
Total Long-term Liabilities	$-	$3,599,480	$29,551,383

REVIEW OF FINANCIAL RESULTS

DESCRIPTION OF BUSINESS – Continuing

During the year, plant operations were curtailed in line with working capital constraints specifically the plant started in April 2023 and operated continuously until September 30, 2023. Shut down at that time was due to severe cash flow shortages. FRX wase however able to maintain reasonable delivery of product by drawing down inventory. During the period October 2023 to March 2024 approximately $3 million of purchase orders were received. On the basis of this demand, the Company was able to raise through equity financing $697,494 (CAD $945,313) in the first quarter of 2024. This financing along with additional funds received from insiders was sufficient to restart the plant in March 2024. At the time of this report the plant is running on a skeleton crew and we are fulfilling priority orders.

As a consequence of the decision to classify the Flame retardant of the Company, this MDA represents continuing operations.

Operating results for the 3 months ended December 31, 2023 - Continuing

At December 2023, the Company had cash of $2,750 (2022 - $559,466). The cash balance from the prior year was largely the product of a financing. From November to December 2022, the Company completed a private placement and sold 5,316,011 units at a price of $0.22 (CAD $0.30) per unit for the gross proceeds of $1,168,097 (CAD $1,594,803).

There are no revenues recorded for continuing operations in the fourth quarter.

The Company incurred $154,489 in administrative expenses (2022 - $655,793). The decrease of $501,304 is due to the decrease in activity in the fourth quarter.

The Company's recent quarterly results are presented below:

Description	Q4 December 31 2023	Q3 September 30 2023	Q2 June 30, 2023	Q1 March 31, 2023
Loss from continuing operations	$(144,638)	$(325,065)	$(257,881)	$(281,796)
Income (loss) from discontinued operations	$(6,331,016)	$(528,239)	$698,261	$(1,334,282)
Loss per share (basic and diluted) – continuing operations	$(0.001)	$(0.003)	$(0.003)	$(0.003)
Earnings (loss) per share (basic and diluted) – discontinued operations	$(0.07)	$(0.01)	$0.01	$(0.02)
Description	**Q4 December 31 2022**	**Q3 September 30 2022**	**Q2 June 30, 2022**	**Q1 March 31, 2022**
Income (loss) from continuing operations	$981,566	$296,213	$(1,774,253)	$(1,990,759)
Loss from discontinued operations	$(4,206,881)	$(2,060,702)	$(2,764,975)	$(2,653,377)
Earnings (loss) per share (basic and diluted) – continuing operations	$0.02	$0.004	$(0.04)	$(0.07)
Loss per share (basic and diluted) – discontinued operations	$(0.07)	$(0.03)	$(0.07)	$(0.10)

Operating results for the 12 months ended December 31, 2023 - Continuing

There are no revenues to report for continuing operations for the 12 months ended December 31, 2023 and 2022.

Operating expenses recorded were for administrative expenses of $1,009,380 (2022 - $822,842), which represents an increase of $186,538. During the year, there were significant professional fees paid for share issuances and other complex transactions.

The key components are:

i. Personnel expenses of $217,367 (2022 - $211,416) are comprised of fees paid to the CFO, which were consistent, as expected, when compared to the prior year.
ii. General and administrative expenses of $658,882 (2022 - $410,571), which represent an increase of $248,311 due to significant amounts spent on investor relations and marketing in the current year when compared to the prior year.
iii. Share-based compensation was $133,131 (2022 - $200,855) which represents expenses recorded on stock options granted during the current year.

Net losses were $1,009,380 (2022 - $2,487,233) where prior year's net loss included significant expenses related to listing fees.

LIQUIDITY AND CAPITAL RESOURCES

Working capital surplus (deficit) was $1,581,360 (2022 – $(9,224,762)) a significant increase of $10,806,122, due to the reclassification of assets and liabilities held for sale as being current.

Continuing Operating Activities

Net cash provided used in operations was $3,135,273 (2022 – $5,749,589). Significant adjustments to reconcile net loss to net cash were:

	2023	2022
Share based compensation	$ 133,131	$ 200,855
Non-cash listing expense	-	1,376,580
Unrealized currency translation adjustments loss (gain)	-	(35,633)
Changes in operating assets		
Decrease in other current assets	27,154	(35,790)
Increase in accounts payable	413,193	(80,260)
Increase in accrued expenses and other current liabilities	(7,084)	216,144
Intercompany receivables	(2,692,287)	(4,904,252)

Investing Activities

The was no significant investing activities during the year.

Financing Activities

The Company raised $2,715,550 (2022 - $5,938,329) from a private placement during the year.

The Company raised $nil (2022 - $134,418) from the proceeds of warrants exercised.

Subsequent to the 2023 year-end, On March 1, 2024 FRX announced the close of a non-brokered private placement offering of 18,906,266 units of the Company at a price per Unit of $0.05 for aggregate gross proceeds of $945,313. Each Unit consists of one common share of the Company and one common share purchase warrant of the Company. Each warrant entitles the holder thereof to purchase one additional common share of the Company at $0.10 at any time on or before March 01, 2026.

To date, the Company has funded its development on external financing, share issuances and where possible, government assistance to establish its technology in the marketplace. The Company has found it increasingly difficult to raise capital. Insiders have bridged capital requirements in an effort to sustain the Company whilst the strategic option initiative

COMMITMENTS AND OBLIGATIONS

The Company has no commitments and obligations.

OFF-BALANCE SHEET ARRANGEMENTS

The Company has no off-balance sheet arrangements.

RELATED PARTIES TRANSACTIONS

The Company has an administrative services agreement related to certain human resource, IT and other administrative services with a company whose principal owner is the chairman of the Board of the Company. Fees are based on actual services performed and are billed monthly. In addition, the Company is responsible for reasonable and necessary expenses associated with the services provided. For the years ended December 31, 2023 and 2022, administrative expenses incurred under this agreement totaled approximately $17,197 and $42,000, respectively, and are recorded in administrative expenses in the accompanying consolidated statements of loss and comprehensive loss.

The Company has a consulting services agreement with an executive of the Company who has also been granted stock options. Fees are based on actual services performed and are billed monthly. For the year ended December 31, 2023, consulting expenses incurred under this agreement totaled approximately $250,300 (2022 - $190,000) and are recorded in administrative expenses in the accompanying consolidated statements of loss and comprehensive loss. Included in accounts payable is an amount of $31,533 (2022 - $35,108) in the accompanying consolidated statements of financial position as of December 31, 2023 and 2022.

OUTSTANDING SHARE DATA

Common shares
As of the date of this MD&A, the Company has 118,363,925 issued and outstanding common shares.

Stock options
As of the date of this MD&A, the Company has 1,259,306 stock options outstanding.

Share purchase warrants
As of the date of this MD&A, the Company has 42,481,668 share purchase warrants outstanding.

OTHER MD&A REQUIREMENTS

Additional information relating to the Company is on SEDAR+ at www.sedarplus.ca.

FINANCIAL INSTRUMENTS AND OTHER INSTRUMENTS

The Company's financial instruments consist of cash, trade receivables, account payables, notes payable, convertible debentures, convertible debentures – derivative liabilities and common stock warrant liabilities.

MATERIAL CONTROL WEAKNESS

i. The Company does not consistently have ready the information required for disclosures in the notes to the consolidated financial statements such as consolidated workbook, share capital, financing transactions, The internal accounting team was under-staffed and faced several changes below CFO level. There is lack of segregation of duties with internal accounting control functions which is limited to a relatively few individuals in the accounting department.

   Management identified the need to replace the controller after abrupt resignation in June of 2023. Further systems are required address the specific IFRS reporting requirements of a geographically dispersed company.

ii. Management does not have a robust inventory cost model in place and was is not adequately able to identify costs incurred in inventory production. There is the risk that the inventory of finished goods is not presented at the correct cost. Additionally, the standard cost updated in the accounting software is outdated and does not represent current raw material prices.

iii. Management has identified a replacement ERP system that is better suited to the current outdated an overly complicated system that was intended for much larger organizations.

iv. Management experienced difficulties in projecting the Company's revenues and expenses for the period required for an impairment assessment.

v. In light of the difficulty in projecting future sales and commodity inputs, management took the approach of obtaining independent third party expert valuations in 2023. While not a substitute for internally developed discounted future cash flows, management believes the carrying value of the assets to be reasonably supported at this time.

RISK MANAGEMENT

The following risk factors, as well as other information contained in this MD&A, should be considered carefully. The operations of the Company are speculative due to the high-risk nature of its business, which relates to manufacturing and marketing new technology in the chemical additive flame retardant industry. These risk factors could materially affect the Company's future operating results and could cause actual events to differ materially from those described in forward–looking information relating to the Company.

Liquidity Concerns and Going Concern

The Company currently has limited financial resources, and is in breach of debt covenants and repayment obligations to lender's, suppliers, contractors and staff. The conclusion of management and its director's is that to the working capital needs exceed the abilities of the Company and that a significant restructuring and or sale of the business will be required

Risks related to Discontinued Operations

Long and Complex Flame Retardant Sales Cycle

It has been the experience of the Company that the average sales cycle for its flame retardant products can range from one to multiple years from the time a customer begins testing the Company's product until the time that they could be used in a commercial product. The product introduction timing will vary based on the target market and target end user. The sales and development cycles for the Company's products are subject to customer budgetary constraints, internal acceptance procedures, competitive product assessments, scientific, development resource allocations, and applicable regulatory compliances among other factors beyond the Company's control. If the Company is not able to successfully accommodate these factors to enable customer development success, the Company may be unable to achieve sufficient sales to reach profitability. Failure to achieve profitability may have a material adverse effect on the Company's operating results. The flame retardant additive sales cycle is long and complex. Several milestones have to be reached in order to see a widespread adoption of the company's products in several markets.
Product validation: This includes technical performance, financial validation, sustainability, processability and logistic, and more. Different players in the supply chain are involved in validating the performance of the Company's flame retardant additive in the resulting product. OEMs, molders, and formulators are all involved in these steps, making it a time consuming process and often unpredictable.

Economic and Political Conditions

The Company has international operations, including operations in the United States, Asia and Europe. Worldwide financial and economic cycles or conditions are uncertain, and recovery from a business downturn or recession could be very slow and have significant impact on the Company's business. The Company's business is sensitive to changes in economic and political conditions, including interest rates, currency issues, energy prices, trade issues, international or domestic conflicts or political crises, and epidemics or pandemics, such as the strain of COVID-19. Global reactions to the spread of COVID-19 have led to, among other things, significant restrictions on travel and gatherings of individuals, quarantines, temporary business closures and a general reduction in consumer activity. While these effects are expected to be temporary, the duration of the disruptions to business internationally and the related financial impact cannot be estimated with any degree of certainty at this time. In addition, increasing numbers of individuals infected with COVID-19 or any potential similar virus could result in an even greater global health crisis that could adversely affect global economies and financial markets, resulting in a protracted economic downturn that could have an adverse effect on the Company's prospects. The responses of governmental authorities and corporate entities, including through mandated or voluntary shutdowns, may also lead to a general long-term slow-down in the economy and may lead to disruptions to the Company's workforce and facilities, customers, sales and operations and supply chain. Measures taken by the governments worldwide and voluntary measures undertaken by the Company with a view to the safety of the Company's employees may adversely impact the Company's business.

Product Development and Technological Change

As there is limited sustained history of successful use of the Company's flame retardant additives in products in commercial and consumer applications, there is no assurance that broad successful commercial applications may be commercially feasible. The Company competes with flame retardant manufacturing in highly competitive markets. As the markets for the Company's products and other services expand, it is possible that new competing products may be developed. However, it seems most probable that future regulatory trends will continue to favor polymeric phosphorus based flame retardants, and FRX has a significant lead in this type of product, protected with a strong patent portfolio.

Market Development and Sustained Growth

Failure to further develop the Company's key markets and existing geographic markets or to successfully expand its business into new markets could have an adverse impact on sales growth and operating results. The Company's ability to further penetrate its key markets and the existing geographic markets in which it competes, and successfully expand its business into other countries, is subject to numerous factors, many of which are beyond its control. There can be no assurance that efforts to increase market penetration in the Company's key markets and existing geographic markets will be successful. Failure to achieve these goals may have a material adverse effect on the Company's operating results.

Competition

The Company competes with flame retardant manufacturing and marketing companies, in highly competitive markets. Many of the Company's competitors have substantially greater financial, marketing and other resources and higher market share than the Company has in certain products or geographic areas. As the markets for the Company's products and other services expand, additional competition may emerge and competitors may commit more resources to products which directly compete with the Company's products. There can be no assurance that the Company will be able to compete successfully with existing competitors or that its business will not be adversely affected by increased competition or by new competitors.

Dependence on Management and Key Personnel

The Company is dependent on the services of key executives, including a small number of highly skilled and experienced executives and personnel. The Company's development to date has largely depended, and in the future will continue to depend, on the efforts of key management and other key personnel to develop its projects. Loss of any of these people, particularly to competitors, in the short term, could have a material adverse impact upon the Company's business.

Qualified Employees
Recruiting and retaining qualified personnel is critical to the Company's success. Finding skilled scientists and a sales team familiar with the subject matter is difficult. As the Company grows further, the need for skilled labour will increase. The number of persons skilled in the high-tech manufacturing and chemical additive business is limited and competition for this workforce is intense. This risk is exacerbated by the current financial limitations of the Company and are affecting the business by complicating its ability to recruit and retain qualified personnel as and when required.

Timing of Implementing New Regulations Banning Toxic Flame Retardants.
The sales growth of new materials requires a catalyst to drive the adoption of new materials in a significant way. While significant new regulations have been introduced starting in 2022 and clear deadlines for making the switch over to greener flame retardant technologies are announced, these deadlines are prone to appeals and consequently delays as lobbying efforts challenge changes to the lislation. A significant shift could impact the rate of growth of the Company.

Launch and Operational Costs
The launch of new business, in an existing or new facility, is a complex process, the success of which depends on a wide range of factors, including the production readiness of the Company and its suppliers, as well as factors related to tooling, equipment, employees, initial product quality and other factors. A failure to successfully launch new material business could have an adverse effect on profitability. Significant launch costs were incurred by the Company in the past. The Company's manufacturing processes are vulnerable to operational problems that can impair its ability to manufacture its products in a timely manner, or which may not be performing at expected levels of profitability. The Company's facilities contain complex and sophisticated equipment that are used in its manufacturing processes. The Company has in the past experienced equipment failures and could experience equipment failure in the future due to wear and tear, design error or operator error, among other things, which could have an adverse effect on profitability. From time to time, it is inevitable that the Company will experience operations which are not performing at expected levels of profitability. Significant underperformance of one or more operations are likely to have a material adverse effect on the Company's profitability and operations.

Cost Absorption and Purchase Orders
Given the current trends in the industry, the Company is under continuing pressure to absorb costs related to final product costs. Some contract volumes for customer programs not yet in production are based on the Company's customers' estimates of their own future production levels. However, actual production volumes may vary significantly from these estimates due to a reduction in consumer demand or customer product delays. Typical purchase orders issued by customers do not require that they purchase a minimum number of the Company's products. For programs currently under production, the Company is generally challenged to request price changes when volumes differ significantly from production estimates used during the quotation stage. If estimated production volumes are not achieved, costs incurred by the Company may not be fully recovered. Similarly, future pricing pressure or volume reductions by the Company's customers may also reduce the amount of amortized costs otherwise recoverable in the sales price of the Company's products. Either of these factors could have an adverse effect on the Company's profitability. While it is generally the case that once the Company receives a purchase order for products from a particular customer it would continue to supply those products until customers may cease to source their production requirements from the Company for a variety of reasons, including the Company's refusal to accept demands for price reductions or other concessions.

Inter-Competition of Competitive Plastics in Key Segments of the Market Risk

In the electronic housing market several plastic resin systems compete with one another. A short term over supply of one of these plastics resin systems can cause that plastic resin system to have unsustainably low prices making competing higher cost resin systems unsustainable. Even short period of such an event can have the impact of predominantly moving a high percentage of the demand in a sector to the low cost plastic resin system for this period of time. If the Company's products are used to flame retard the higher cost plastics resin system, then the sales growth ramp in the sector can be impacted in the short term.

Supply Chain Risk

The Company's product line requires a key raw material to produce its product offering. The Company's primary supplier has agreed to keep an inventory of this key raw material on hand in sufficient quantity for the Company's demand. A major supply disruption of this key raw material could be beyond the Company's control and impact the Company's ability to produce its product line in a timely manner.

Material Cost Fluctuations Risk

Like is the case for the Chemical Industry generally, the company is exposed to short term fluctuations of oil prices. Events such as war, embargoes and such can impact the price of oil and consequently the price paid by the company for some of its raw materials. While the company is protected from rising oil prices, owing to the fact that it produces a co-product which is also sold on the basis of oil prices, sudden and extensive shocks to oil prices can cause a short term reduction in contribution margin. Also, significant cost increase in our key raw material could impact our contribution margin.

Laws and Regulations, Licenses and Permits

Legislation is evolving in a manner that is creating stricter standards, while enforcement, fines and penalties for non compliance in the company's general market are also increasingly stringent. A significant change in the legal and regulatory environment in which the Company currently carries on business could adversely affect the Company's operations. In addition, the Company's operations could be adversely impacted by significant changes in tariffs and duties imposed on its products, particularly significant changes to the United States-Mexico-Canada Agreement on Trade ("USMCA"), the adoption of domestic preferential purchasing policies in other jurisdictions, particularly the United States, or positive or negative changes in tax or other legislation. The Company could be exposed to increased customs audits due to governmental policy which could lead to additional administrative burden and costs. Changes in legislation or regulation could lead to additional administrative burden and costs in general, and also carry the potential of a material fine or significant reputational risk.

Intellectual Property

The Company relies on the patent, trade secret and other intellectual property laws of the United States and the other countries where it does business to protect its intellectual property rights. The Company may be unable to prevent third parties from using its intellectual property without its authorization. The unauthorized use of the Company's intellectual property could reduce any competitive advantage that it has developed, reduce its market share or otherwise harm its business. In the event of unauthorized use of the Company's intellectual property, litigation to protect and enforce the Company's rights could be costly, and the Company may not prevail. Many of the Company's technologies are not covered by any patent or patent application, and the Company's issued and pending United States and other countries' patents may not provide the Company with any competitive advantage and could be challenged by third parties. The Company's inability to secure issuance of pending patent applications may limit its ability to protect the intellectual property rights these pending patent applications were intended to cover. The Company's competitors may attempt to design around its patents to avoid liability for infringement and, if successful, could adversely affect the Company's market share. Furthermore, the expiration of the Company's patents may lead to increased competition. In addition, effective patent, trade secret and other intellectual property protection may be unavailable or limited in some foreign countries. In some countries, the Company does not apply for patent or other intellectual property protection. The Company also relies on unpatented technological innovation and other trade secrets to develop and maintain its competitive position. Although the Company generally enters into confidentiality agreements with its employees and third parties to protect its intellectual property, these confidentiality agreements are limited in duration, could be breached and may not provide meaningful protection of its trade secrets. Adequate remedies may not be available if there is an unauthorized use or disclosure of the Company's trade secrets and manufacturing expertise. In addition, others may obtain knowledge about the Company's trade secrets through independent development or by other legal means. The failure to protect the Company's processes, technology, trade secrets and proprietary manufacturing expertise, methods and compounds could have a material adverse effect on its business by jeopardizing critical intellectual property. Where a product formulation or process is kept as a trade secret, third parties may independently develop or invent and patent products or processes identical to such trade secret products or processes. This could have a material adverse effect on the Company's ability to make and sell products or use such processes and could potentially result in costly litigation in which the Company might not prevail. The Company could face intellectual property infringement claims that could result in significant legal costs and damages and impede its ability to produce key products, which could have a material adverse effect on its business, financial condition, and results of operations.

Cybersecurity Threats

The reliability and security of the Company's information technology ("IT") systems is important to the Company's business and operations. Although the Company has established and continues to enhance security controls intended to protect the Company's IT systems and infrastructure, there is no guarantee that such security measures will be effective in preventing unauthorized physical access or cyberattacks. A significant breach of the Company's IT systems could, among other things, cause disruptions in the Company's manufacturing operations (such as operational delays from production downtime, inability to manage the supply chain or produce product for customers, disruptions in inventory management), lead to the loss, destruction, corruption or inappropriate use of sensitive data, including employee information or intellectual property, result in lost revenues due to theft of funds or due to a disruption of activities, including remediation costs, or from litigation, fines and liability or higher insurance premiums, the costs of maintaining security and effective IT systems, which could negatively affect results of operations and the potential adverse impact of changing laws and regulations related to cybersecurity or result in theft of the Company's, its customers' or suppliers' intellectual property or confidential information. If any of the foregoing events (or other events related to cybersecurity) occurs, the Company may be subject to a number of consequences, including reputational damage, a diminished competitive advantage and negative impacts on future opportunities which could have a material adverse effect on the Company.

Share Price Fluctuations

The market price of securities of many companies, particularly development stage companies, experience wide fluctuations in price that are not necessarily related to the operating performance, underlying asset values or prospects of such companies. There can be no assurance that fluctuations in the Company's share price will not occur. In particular, the fluctuations may be exaggerated if the trading volume of the Common Shares of the Company is low.

Cyclical Risks

A portion of the business of the Company is cyclical. It is dependent on, among other factors, general economic conditions globally. There can be no assurance that global markets in the Company's sector overall or specific applications will not decline in the future or that the Company will be able to utilize any existing unused capacity or any additional capacity it may add in the future. A continued or a substantial additional decline in the Company's market may have a material adverse effect on the Company's financial condition and results of operations and ability to meet existing financial covenants. Although the Company continues to diversify its business applications and customer reach, there is no assurance that it will be successful.

Uninsured Risks

The Company maintains insurance to cover normal business risks In the course of its manufacturing businesses, certain risks and, in particular, unexpected or unusual catastrophic events including explosions and fire although unlikely, may occur. It is not always possible to fully insure against such risks as a result of high premiums or other reasons. Should such liabilities arise, they could reduce or eliminate any future profitability and result in increasing costs and a decline in the value of the Common Shares of the Company.

Foreign Exchange

The Company operates internationally and is exposed to foreign exchange risk mainly related to expenses and sales in currencies other than the respective functional currencies of the Company, primarily with respect to the US dollar. Management has set up a policy that requires the Company to manage its currency risk and imposes strict limits on the maximum exposures that can be entered into. The risk associated with sales denominated in US dollars is are partially offset by the raw material purchases denominated in US dollars.

Litigation

The Company has entered into legally binding agreements with various third parties, including supply, distribution, nondisclosure, consulting and partnership agreements. The interpretation of the rights and obligations that arise from such agreements is open to interpretation and the Company may disagree with the position taken by the various other parties resulting in a dispute that could potentially initiate litigation and cause the Company to incur legal costs in the future. Given the speculative and unpredictable nature of litigation, the outcome of any such disputes could have a material adverse effect on the Company's business.

Impact of Ukraine Russia War Escalating Risk

The Ukraine war caused an escalation of oil prices which impacted chemical industry margins. Together with the lock downs caused by Covid and certain trade restrictions and sanctions, supply chains were impacted, which caused inflation and consequently led to increasing interest rates and recession in some parts of the world. If there is an escalation of the war, this cycle can repeat itself which could affect the cost to produce the Company's products and demand for flame retardant plastics more generally.

Escalation of China Taiwan Conflict Risk

Like the impact that the invasion of the Ukraine had on global markets, a similar escalation of the conflict between Taiwan and China could similarly have the same impact on global markets and thus impact demand for the Company's products and the cost to produce its products. Should sanctions be imposed by the west on China for instance, this could affect the supply and demand for flame retardant plastics.

Credit Risk

Arises from the potential that a counter party will fail to perform its obligations. The Company is exposed to credit risk from customers. In order to reduce its credit risk, the Company reviews a new customer's credit history before extending credit and conducts regular reviews of its existing customers' credit performance. An allowance for doubtful accounts is established based upon factors surrounding the credit risk of specific accounts, historical trends and other information. Seven customers represented approximately 99% of the outstanding accounts receivable balance as of December 31, 2023. Approximately 99% of sales were to 20 customers for the twelve months ended December 31, 2023.

An allowance for doubtful accounts is established based upon factors surrounding the credit risk of specific accounts, historical trends and other information. As at December 31, 2023, allowance was established for $165,022 (2022 – $254,328) out of the trade account receivable.

Currency Risk
The risk to the Company's earnings that arise from fluctuations of foreign exchange rates and the degree of volatility of these rates. The Company does not use derivative instruments to reduce its exposure to foreign currency risk. For each 1.00% change in the Euro exchange rate, based on the monetary assets and liabilities held at year end, the Company's net earnings would be impacted by approximately $22,187 (2022 - $125,032).

Interest Rate Risk
The risk that the value of a financial instrument might be adversely affected by a change in the interest rates. In seeking to minimize the risks from interest rate fluctuations, the Company manages exposure through its normal operating and financing activities. The Company is exposed to interest rate cash flow risk primarily through its floating interest credit facility as the required cash flow to service the debt will fluctuate interest rates change, and in particular the Euribor rate which is used by its European bankers. Fixed-interest instruments are subject to fair value risk. The Company's credit facilities bear variable rate interest. For each 0.25% change in rate, the Company's net earnings would be impact by $34,182 (2022 - $38,138).

Other Price Risk
The risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices (other than those arising from interest rate risk or currency risk), whether those changes are caused by factors specific to the individual financial instrument or its issuer, or factors affecting all similar financial instruments traded in the market.

Other Risk Factors
Additional risks not currently known to the Company or that the Company currently deems immaterial may also impair the Company's operations.