MANAGEMENT'S DISCUSSION AND ANALYSIS OF
FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following management's discussion and analysis ("**MD&A**") dated February 28, 2023 is intended to assist the readers in the understanding of EcoSynthetix Inc. and its wholly owned subsidiaries ("**EcoSynthetix**" or the "**Company**"), its business environment, strategies and performance and risk factors. It should be read in conjunction with the audited annual consolidated financial statements for the year ended December 31, 2022. Financial data has been prepared in conformity with International Financial Reporting Standards ("**IFRS**") as issued by the International Accounting Standards Board ("IASB") and using the same accounting policies and methods as those used in the Company's audited consolidated financial statements for the year ended December 31, 2022.

The Company, together with its consolidated subsidiaries, is referred to as the "Company", "we", "us", or "our". Our functional currency and reporting currency is the U.S. dollar. Unless otherwise indicated, all references to "$" and "dollars" in this discussion and analysis mean U.S. dollars.

Certain measures used in this MD&A do not have any standardized meaning under IFRS. When used, these measures are defined in such terms as to allow the reconciliation to the closest IFRS measure. It is unlikely that these measures could be compared to similar measures presented by other companies. See "IFRS and non-IFRS Measures".

Forward-looking statements are included in this MD&A. See "Forward-Looking Statements" below for a discussion of risks, uncertainties and assumptions relating to these statements. For a description of the risks relating to the Company, refer to the "Risk Factors" section of this MD&A and the "Risk Factors" section of the Company's Annual Information Form dated February 28, 2023.

Forward-looking Statements

Certain statements contained in this MD&A constitute forward-looking statements. All statements other than statements of historical fact may be forward-looking statements. These statements relate to, but are not limited to, future events or future performance, our expectations regarding the Company's growth, results of operations, estimated future revenues, and requirements for additional capital, production costs, future demand for latex-based products, business prospects and opportunities, our ability to successfully commercialize our products, expectations as to the amount of reduction that the Company's products may have on a manufacturer's carbon footprint. Forward-looking statements are often, but not always, identified by use of words such as ''may'', ''will'', ''should'', ''could'', ''seek'', ''anticipate'', ''contemplate'', ''continue'', ''expect'', ''intend'', ''plan'', ''potential'', ''budget'', ''target'', ''believe'', ''estimate'' and similar expressions. The forward-looking statements in this document include, but are not limited to, statements regarding the Company's expected product pipeline, plans to expand the Company's business into new markets, the Company's ability to achieve organizational efficiencies, and other statements regarding the Company's plans and expectations in 2023. Such statements reflect our current views and beliefs with respect to future events, are subject to risks and uncertainties, and are based upon a number of estimates and assumptions that, while considered reasonable by us, are inherently subject to significant business, economic, competitive, political and social uncertainties and contingencies. Those assumptions and risks include, but are not limited to, the Company's ability to successfully allocate capital as needed and to develop new products, as well as the fact that our results of operations and business outlook are subject to significant risk, volatility and uncertainty. Many factors could cause actual results, performance or achievements to be materially different from any future results, performance, or achievements that may be expressed or implied by such forward-looking statements.

We have made material assumptions regarding, among other things: that our intellectual property rights are adequately protected; our ability to obtain the materials or services necessary for the production of our products; our ability to convert prospects from the industrial trial phase into full commercial customers; our ability to market products successfully to our customers; that we will continue to possess unique intellectual property rights; changes in demand for and prices of our products or the materials required to produce those products; labour and material costs remaining consistent with our current expectations; the price and availability of substitute or competitive products; and that we do not and will not infringe third party intellectual property rights. Some of our assumptions are based upon internal estimates and analysis of current market conditions and trends, management plans and strategies, economic conditions and other factors and are necessarily subject to risks and uncertainties inherent in projecting future conditions and results.

Some of the risks that could affect our future results and could cause those results to differ materially from those expressed in the forward-looking information include, among other things: the impact of the novel coronavirus (COVID-19 and its variants) pandemic on our business; an inability to protect, defend, enforce or use our intellectual property and/or infringement of third-party intellectual property; dependence on certain customers and changes in customer demand; the availability and price of natural feedstock's used in the production of our products; the inability to maintain or effectively expand our production facilities; variations in our financial results; increase in industry competition; the risk of volatility in global financial conditions, as well as significant decline in general economic conditions; our ability to effectively commercially market and sell our products; our ability to protect our know-how and trade secrets; Company growth and the impact of significant operating and capital cost increases; changes in the current political and regulatory environment in which we operate; the inability to retain key personnel; changes to regulatory requirements, both regionally and internationally, governing development, production, exports, taxes, labour standards, waste disposal, and use, environmental protection, project safety and other matters; enforcement of intellectual property rights; a significant decrease in the market price of petroleum related feedstocks; a shortage of supplies, equipment and parts; the inability to secure additional government grants; a deterioration in our cash balances or liquidity; the inability to obtain equity or debt financing; the ability to acquire intellectual property; the risk of litigation; changes in government regulations and policies relating to our business; losses from hedging activities and changes in hedging strategy; insufficient insurance coverage; the impact of issuance of additional equity securities on the trading price of the common shares; the impact of ethical, legal and social concerns relating to genetically modified organisms and the food versus fuel debate; the risk of business interruptions; the impact of changes in interest rates; the impact of changes in foreign currency exchange; and credit risk, as well as the factors identified in the "Risk Factors" section of the Company's Annual Information Form dated February 28, 2023. Such factors are not intended to represent a complete list of the factors that could affect us. These factors should be considered carefully, and prospective investors should not place undue reliance on forward-looking information.

Impact of COVID – 19

In March 2020, the World Health Organization declared the outbreak of COVID-19 to be a global pandemic and recommended containment and mitigation measures worldwide. In response, government authorities have issued an evolving set of mandates, including requirements to shelter-in-place, curtail business operations, restrict travel and avoid physical interaction. These mandates and the continued spread of COVID-19 have disrupted normal business activities in many segments of the global economy, resulting in weakened economic conditions. Government mandates have been lifted by certain public authorities and economic conditions have improved in certain sectors of the economy. Certain regions of the world have experienced increasing numbers of COVID-19 cases, however, and if this continues and if public authorities intensify efforts to contain the spread of COVID-19, normal business activity may be further disrupted and economic conditions could weaken.

The Company has been able to operate without significant negative financial impacts from the pandemic, however, it has experienced unprecedented inflationary pressures and supply chain challenges, including feedstock supply challenges which has been exacerbated by conflict in the Ukraine. This has resulted in higher inventory costs, cost of goods sold and selling prices. Our ability to continue to operate without any significant additional negative impacts will in part depend on our ability to protect our employees and our supply chain. We have endeavored to follow actions recommended by governments and health authorities to protect our employees, with particular measures in place for those working in our manufacturing and research and development laboratory facilities. We have been able to broadly maintain our operations, and we intend to continue to work with our stakeholders, including customers, employees, suppliers, and local communities, to responsibly address this global pandemic. Given the dynamic nature of the pandemic, the extent to which the pandemic impacts the Company's financial results will depend on future developments, which remain highly uncertain and cannot be accurately predicted at this time; these developments include the duration, scope and severity of the pandemic; the actions taken to contain or mitigate its impact; and the direct and indirect economic effects of the pandemic and related containment measures, among others.

IFRS and Non-IFRS Measures

This MD&A makes reference to certain non-IFRS measures. These non-IFRS measures are not recognized measures under IFRS, do not have a standardized meaning prescribed by IFRS and are therefore unlikely to be comparable to similar measures presented by other companies. Rather, these measures are provided as additional information to complement those IFRS measures by providing a further understanding of results of operations of the Company from management's perspective. Accordingly, they should not be considered in isolation or as a substitute for analysis of the financial information of the Company reported under IFRS. We use non-IFRS measures such as Adjusted EBITDA to provide investors with a supplemental measure of operating performance and thus highlight trends in our core business that may not otherwise be apparent when relying solely on IFRS financial measures. We also believe that securities analysts, investors and other interested parties frequently use non-IFRS measures in the evaluation of issuers. Our management also uses non-IFRS measures in order to facilitate operating performance comparisons from period to period, prepare annual operating budgets and assess its ability to meet its capital expenditure and working capital requirements.

Adjusted EBITDA as presented herein is not a recognized measure under IFRS and should not be considered as an alternative to operating income or net income as measures of operating results or an alternative to cash flows as measures of liquidity. Adjusted EBITDA is defined as consolidated net income (loss) before interest, income taxes, depreciation, amortization, impairment loss on property, plant and equipment (PP&E), accretion, and other non-cash expenses deducted in determining consolidated net income (loss).

Overview

We are a renewable chemicals company specializing in bio-based materials that are used as inputs in a wide range of products that allow customers to reduce their use of harmful materials, such as formaldehyde and styrene-based chemicals and enable carbon footprint reductions. Our flagship products, DuraBind™, Bioform™, Surflock™,and EcoSphere®, are used to manufacture wood composites, personal care products, paperboard, paper, and tissue and, and enable performance improvements, economic benefits and sustainability. Our strategy is to commercialize a broad range of bio-based polymer and monomer products within specific market segments. We have developed processes that leverage “green” technology to produce bio-based materials from natural polysaccharide feedstocks, such as corn starch, as an alternative to petroleum-derived feedstocks.

To date, we have developed the following two bio-based technology platforms that support broad application across a wide range of industries: (i) a biopolymer nanosphere technology that has been fully scaled and validated; and (ii) a bio-based sugar macromer technology. Our biopolymer nanosphere technology has generated four product families, EcoSphere, Bioform, Surflock, and DuraBind biopolymers. Our bio-based sugar macromer technology has generated two product families, EcoMer® biomonomers and EcoStix® bio-based pressure sensitive adhesives. Substantially all of our revenue has been generated from the sale of our biopolymer nanosphere technology into the paper & paperboard and wood composite markets.

Factors Affecting the Results of Operation

Commercialization

Our customers typically go through the following evaluation stages prior to commercial adoption of our products:

(i) laboratory evaluation;
(ii) pilot scale production testing; and
(iii) industrial trials representing full scale production.

Our performance is influenced by our ability to convert prospects from the industrial trial phase into full commercial customers. The industrial trial stage is an important part of the sales cycle; it requires potential customers to invest significant resources, including labour and operating expenditures, and the product must meet or surpass rigorous qualification procedures. Successfully reaching the mill trial stage with a potential customer reflects substantial interest and commitment from them.

Our financial condition and results of operations are influenced by a variety of other factors, including:

- Optimizing the formulation of existing products to allow higher substitution rates by current and new customers and the ability to effectively develop products for new markets which could be a significant source of revenue growth in the future

- Pricing of incumbent technologies and other substitutes for our products

- Feedstock, other input and production costs and availability

Net Sales

Revenue is recognized when the Company has satisfied its performance obligations as set out in the contract with the customer, the contract has commercial substance, and it is probable that the Company will collect the consideration it is entitled to on performance of its obligations in the contract. These criteria are generally met when the transfer of control of goods has occurred which typically occurs at the time of shipment or delivery, depending on the terms of the agreement. Net sales are measured based on the price specified in the sales contract net of any discounts and estimated returns at the time of sale.

Cost of sales and gross profit

Our gross profit is derived from our net sales less our cost of sales. Cost of sales includes raw material costs, contract manufacturing costs, freight costs and depreciation related to manufacturing equipment. Direct materials consist of the costs of natural feedstock and process chemicals. Cost of sales is mainly affected by natural feedstock costs and contract manufacturing costs.

Selling, general and administrative

Selling, general and administrative expense (SG&A) primarily relates to salaries & benefits and other employee related costs which collectively represent approximately 50% of total SG&A. In addition to this, SG&A includes travel expenses, professional fees, facility costs, foreign exchange gains and losses, insurance, marketing costs and share-based compensation.

Foreign exchange represents the revaluation of monetary assets and liabilities denominated in foreign currencies. The change in foreign exchange gains and losses are primarily due to foreign exchange rate fluctuations between the U.S. dollar (our functional currency) and foreign currencies on our net monetary position in those respective currencies.

Research and development

Expenditures during the research phase are expensed as incurred. Expenditures during the development phase are expensed as incurred, unless they meet certain capitalization criteria. No development costs have been capitalized to date.

Our research and development expenses (R&D) consist of costs incurred to develop and test our products. Salaries & benefits related to employees directly involved in research and development activities represent approximately 50% of total R&D. In addition, R&D includes costs related to consultants, facility costs including depreciation on property, plant and equipment not utilized in our production process, supplies and other costs directly associated with product development. These costs are partially offset by government grants related to such expenditures.

Results of operations

The following is a summary of our results of operations for the three and twelve months ended December 31, 2022 and 2021:

	Three months ended		Change	
	December 31, 2022	December 31, 2021	$	%
Net sales	5,609,083	4,885,420	723,663	15%
Gross profit	921,720	1,013,419	(91,699)	-9%
Loss from operations	(906,757)	(947,366)	40,609	-4%
Net loss	(650,674)	(936,867)	286,193	-31%
Weighted average number of shares outstanding	58,994,283	57,871,822	1,122,461	2%
Basic and diluted loss per share	(0.01)	(0.02)	0.01	-32%
Adjusted EBITDA[1] loss	(336,308)	(332,981)	(3,327)	1%

	Twelve months ended		Change	
	December 31, 2022	December 31, 2021	$	%
Net sales	19,034,526	18,161,891	872,635	5%
Gross profit	4,154,106	3,971,670	182,436	5%
Loss from operations	(2,903,281)	(3,242,166)	338,885	-10%
Net loss	(2,375,244)	(3,179,740)	804,496	-25%
Weighted average number of shares outstanding	58,898,673	57,410,885	1,487,788	3%
Basic and diluted loss per share	(0.04)	(0.06)	0.02	-27%
Adjusted EBITDA[1] loss	(882,359)	(924,074)	41,715	-5%

[1] *Refer to "IFRS and Non-IFRS Measures" and "Adjusted EBITDA" sections in this MD&A*

Net Sales – Net sales for the three months ended December 31, 2022 were $5.6 million compared to $4.9 million in the same period last year, an increase of $0.7 million or 15%. The increase was due to a higher average selling price which increased sales $1.1 million, or 23% and was partly offset by lower volumes which decreased sales $0.4 million or 8%. Net sales during the twelve months ended December 31, 2022 were $19.0 million compared to $18.2 million in the same period last year, an increase of $0.9 million or 5%. The increase was due to a higher average selling price which increased sales $5.0 million, or 28% and was partly offset by lower volumes which decreased sales $4.2 million, or 23%. The higher average selling price during the three and twelve months ended December 31, 2022, was due to the offsetting of significant inflationary pressures with price increases. Volumes decreased during the three and twelve months ended December 31, 2022 as most products and regions experienced a stepdown in demand when compared to the prior period.

Gross profit – Gross profit for the three months ended December 31, 2022 was $0.9 million compared to $1.0 million in the same period last year, a decrease of $0.1 million or 9%. Gross profit for the twelve months ended December 31, 2022 was $4.2 million compared to $4.0 million in the same period last year, an increase of $0.2 million, or 5%. During both periods, a higher average selling price was offset by decreases in sales volumes and rising costs of manufacturing.

Gross profit as a percentage of sales for the three and twelve months ended December 31, 2022 was 16.4% and 21.8% compared to 20.7% and 21.9% in the same periods last year. Gross profit as a percentage of sales adjusted for manufacturing depreciation for the three and twelve months ended December 31, 2022 was 21.4% and 25.5% compared to 24.8% and 26.2% in the same periods last year. The decrease in gross profit percentage and gross profit percentage adjusted for manufacturing depreciation during the three and twelve months ended December 31, 2022 was due to higher costs of manufacturing partially offset by a higher average selling price.

Operating Expenses

The following table sets forth the breakdown of our operating expenses by category during the three and twelve months ended December 31, 2022 and 2021:

	Three months ended		Change	
	December 31, 2022	**December 31, 2021**	**$**	**%**
Selling, general and administrative	1,272,605	1,494,155	(221,550)	-15%
Research and development	555,872	466,630	89,242	19%
Total operating expenses	1,828,477	1,960,785	(132,308)	-7%

	Twelve months ended		Change	
	December 31, 2022	**December 31, 2021**	**$**	**%**
Selling, general and administrative	5,135,247	5,382,396	(247,149)	-5%
Research and development	1,922,140	1,831,440	90,700	5%
Total operating expenses	7,057,387	7,213,836	(156,449)	-2%

Selling, general and administrative (SG&A) – SG&A expenses for the three months ended December 31, 2022 were $1.3 million compared to $1.5 million in the same period last year, a decrease of $0.2 million, or 15%. The decrease in SG&A was primarily due to $0.1 million lower salaries and benefits and $0.1 million lower share based compensation. SG&A expenses for the twelve months ended December 31, 2022 were $5.1 million compared to $5.4 million, a decrease of $0.2 million or 5%. The decrease was primarily due to a decrease of $0.6 million in salaries and benefits, partially offset by $0.1 million lower payments received under the Canadian Emergency Wage Subsidy, higher discretionary spend of $0.2 million as well as a change in foreign exchange gains and losses of $0.1 million.

Research and development (R&D) – R&D expenses for the three and twelve months ended December 31, 2022 were comparable to the same periods last year. R&D expense as a percentage of sales for the three and twelve months ended December 31, 2022 was 10% which was comparable to the same periods last year. The Company's R&D efforts continue to focus on further enhancing value for our existing products and expanding addressable opportunities.

Loss from operations – Loss from operations for the three months ended December 31, 2022 was $0.9 million and was comparable to the same period last year. Loss from operations for the twelve months ended December 31, 2022 was $2.9 million compared to $3.2 million in the same period last year, a decrease in loss of $0.3 million, or 10%. The decrease in loss is due to higher gross profit of $0.2 million and lower operating costs of $0.1 million.

Net Loss – Net loss for the three months ended December 31, 2022 was $0.7 million, or $0.01 net loss per common share, compared to $0.9 million, or $0.02 net loss per common share in the same period last year, a decrease in net loss of $0.3 million or 31%. The decrease in net loss is primarily due to higher interest income of $0.2 million. Net loss for the twelve months ended December 31, 2022 was $2.4 million, or $0.04 net loss per common share, compared to $3.2 million, or $0.06 net loss per common share in the same period last year, a decrease in loss of $0.8 million, or 25%. The decrease in loss was due to a lower loss from operations of $0.3 million and higher interest income of $0.5 million. The higher interest income in both periods is due to an increase in interest rates on cash and term deposits.

Financial Condition

Current assets

	December 31 2022	December 31 2021	Change $	%
Cash	4,808,606	42,226,816	(37,418,210)	-89%
Term deposits	21,054,812	-	21,054,812	100%
Accounts receivable	2,912,000	1,912,390	999,610	52%
Inventory	5,317,367	2,073,800	3,243,567	156%
Government grants receivable	18,386	6,676	11,710	175%
Prepaid expenses	85,131	91,930	(6,799)	-7%
Total current assets	34,196,302	46,311,612	(12,115,310)	-26%

Total current assets – Total current assets at December 31, 2022 were $34.2 million compared to $46.3 million at December 31, 2021, a decrease of $12.1 million, or 26%. The decrease in cash of $37.4 million is primarily from $31.2 million cash used in investing activities to purchase term deposits, $3.2 million increased investment in inventory, $1.5 million cash used in financing activities, and a $1.0 million increase in accounts receivable. The increase in current term deposits of $21.1 million relates to the purchase of redeemable term deposits or term deposits that mature within the next 12 months. The Company also invested $10.1 million in non-current term deposits that mature in greater than 12 months. The increase in inventory of $3.2 million is due to rising supply chain costs as well as an increase in the amount of raw materials and finished goods on hand when compared to the prior period and the increase in accounts receivable of $1.0 million is due to the timing of revenue and trade receivables.

Total assets and liabilities

	December 31 2022	December 31 2021	Change $	%
Total assets	48,194,257	50,981,701	(2,787,444)	-5%
Total current liabilities	2,595,353	2,363,630	231,723	10%
Total liabilities	3,138,992	3,183,675	(44,683)	-1%

Total assets – Total assets at December 31, 2022 were $48.2 million compared to $51.0 million at December 31, 2021, a decrease of $2.8 million, or 5%. The change was primarily due to $1.5 million cash used in financing activities, and an investment in PP&E of $0.3 million.

Total current liabilities – Total current liabilities at December 31, 2022 were $2.6 million compared $2.4 million at December 31, 2021, an increase of $0.2 million, or 10%. The increase is primarily due to the timing of payments for trade accounts payable and accrued liabilities.

Total liabilities – Total liabilities at December 31, 2022 were $3.1 million and were comparable to the same period last year.

Liquidity and Capital Resources

We currently fund our business operations through cash flow generated from our operations and from existing cash. We believe that ongoing operations, working capital and associated cash flow in addition to our cash resources provide sufficient liquidity to support our ongoing business operations for the foreseeable future.

Below is a summary of our cash flows (used in) provided by operating activities, financing activities and investing activities for the three and twelve months ended December 31, 2022 and 2021:

	Three months ended		Change	
	December 31, 2022	December 31, 2021	$	%
Cash (used in) provided by operating activities	(1,224,649)	288,916	(1,513,565)	-524%
Cash (used in) investing activities	(3,419,878)	(34,474)	(3,385,404)	9820%
Cash (used in) provided by financing activities	(6,107)	1,197,561	(1,203,668)	-101%
Effect of exchange rate changes on cash	276,921	23,551	253,370	1076%
Change in cash	(4,373,713)	1,475,554	(5,849,267)	-396%
Beginning cash	9,182,319	40,751,262	(31,568,943)	-77%
Ending cash	**4,808,606**	**42,226,816**	**(37,418,210)**	**-89%**

	Twelve months ended		Change	
	December 31, 2022	December 31, 2021	$	%
Cash (used in) provided by operating activities	(4,895,958)	474,067	(5,370,025)	-1133%
Cash (used in) provided by investing activities	(31,153,339)	24,687,442	(55,840,781)	-226%
Cash (used in) provided financing activities	(1,514,594)	474,280	(1,988,874)	-419%
Effect of exchange rate changes on cash	145,681	(46,134)	191,815	-416%
Change in cash	(37,418,210)	25,589,655	(63,007,865)	-246%
Beginning cash	42,226,816	16,637,161	25,589,655	154%
Ending cash	**4,808,606**	**42,226,816**	**(37,418,210)**	**-89%**

Cash (used in) provided by operating activities – During the three months ended December 31, 2022, cash used in operating activities of $1.2 million primarily relates to cash used in inventory, accounts receivable and net loss excluding non-cash items of $0.6 million, $0.4 million and $0.4 million respectively, offset by a $0.2 million increase in trade accounts payable and accrued liabilities. During the three months ended December 31, 2021, cash provided operating activities of $0.3 million primarily relates to cash provided by inventory and accounts receivable of $0.5 million and $0.2 million respectively offset by $0.3 million in net loss adjusted for non-cash items.

During the twelve months ended December 31, 2022, cash used in operating activities of $4.9 million primarily relates to cash used in inventory, accounts receivable and net loss adjusted for non-cash items of $3.1 million, $1.0 million and $0.6 million respectively as well as accrued interest on term deposits of $0.3 million. During the twelve months ended December 31, 2021, cash provided by operating activities of $0.5 million primarily includes an increase in trade accounts payable and accrued liabilities of $1.1 million and $0.3 million in interest on term deposits offset by a net loss adjusted for non-cash items of $0.8 million.

Cash (used in) provided investing activities – Cash used in investing activities for the three months ended December 31, 2022 was $3.4 million and was primarily due to the purchase of new term deposits of $8.4 million which was offset by proceeds received on mature term deposits of $5.0 million. Cash used in investing activities for the three months ended December 31, 2021 was a nominal amount that related to the purchase of PP&E.

During the twelve months ended December 31, 2022 cash used in investing activities of $31.2 million primarily relates to $35.9 million of cash that was used to purchase term deposits and $0.3 million of cash that was used to purchase PP&E and was partially offset by $5.0 million in proceeds received due to the maturity of term deposits. During the twelve months ended December 31, 2021 cash received from investing activities of $24.7 million primarily relates to $25.0 million in proceeds that were received due to the maturity of term deposits which was partially offset by $0.3 million purchases of PP&E.

Cash (used in) provided by financing activities – Cash used in financing activities during the three months ended December 31, 2022 was a nominal amount as $0.8 million in cash used to purchase common shares through the NCIB was offset by $0.8 million in proceeds that were received from the exercise of common share options. Cash provided by financing activities during the three months ended December 31, 2021 was $1.2 million as $1.7 million in proceeds that were received from the exercise of common share options was offset by $0.4 million in cash used to purchase common shares through the NCIB.

Cash used in financing activities during the twelve months ended December 31, 2022 was $1.5 million as cash used to purchase common shares through the NCIB of $2.2 million, and principal payments made on the lease liability of $0.3 million, were offset by $1.0 million in proceeds that were received from the exercise of common share options. Cash provided by financing activities during the twelve months ended December 31, 2021 was $0.5 million as $1.9 million in proceeds that were received from the exercise of common share options was offset by $1.2 million in cash used to purchase common shares through the NCIB and $0.2 million in principal payments made on the lease liability.

Effect of exchange rate changes on cash – The effect of exchange rate changes on cash is primarily due to the revaluation of cash denominated in Canadian dollars and the impact of currency fluctuations between the Canadian dollar and U.S. dollar.

Capital Management

The Company's objective in managing capital is to ensure sufficient liquidity to pursue its growth strategy and fund research and product development, while at the same time taking a conservative approach towards managing financial risk. The Company's capital is composed of the net cash primarily received related to common shares, and cash flows generated from operating activities. Our primary uses of capital are financing operations, increasing non-cash working capital and capital expenditures. We currently fund these requirements from existing cash resources. Our objectives when managing capital are to ensure that we will continue to have enough liquidity to provide our products and services to our customers and a return to our shareholders. We monitor our capital on the basis of the adequacy of our cash resources to fund our business plan. In order to maximize the capacity to finance our ongoing growth, we do not currently pay a dividend to holders of our common shares.

Commitments

The Company entered the following contractual obligations in the normal course of operations that were not recognized as liabilities as at December 31, 2022:

I. The Company is committed to purchases of feedstock of approximately $1.2 million over the next twelve months. The Company may enter into feedstock contracts to secure raw material availability over a twelve to twenty-four-month period based on market pricing at the time of purchase.

II. The Company is committed to purchasing $0.3 million of other production raw materials and contract manufacturing as well as $0.1 million of PP&E related to manufacturing equipment.

Summary of Quarterly Results

The following table sets out selected financial information for each of the eight most recent quarters, the latest of which ended December 31, 2022. This information has been prepared on the same basis as the annual financial statements and all necessary adjustments have been included in the amounts stated below to present fairly the unaudited quarterly results when read in conjunction with the quarterly financial statements of the Company and the related notes to those statements.

	Three months ended							
	December 31, 2022	**September 30, 2022**	**June 30, 2022**	**March 31, 2022**	**December 31, 2021**	**September 30, 2021**	**June 30, 2021**	**March 31, 2021**
Net sales	5,609,083	5,019,650	4,167,838	4,237,955	4,885,420	4,705,917	4,897,107	3,673,447
Gross profit	921,720	1,034,861	1,117,485	1,080,040	1,013,419	1,103,676	1,102,486	752,089
Loss from operations	(906,757)	(545,818)	(759,327)	(691,379)	(947,366)	(774,209)	(744,766)	(775,825)
Net loss	(650,674)	(388,850)	(676,828)	(658,892)	(936,867)	(763,892)	(729,097)	(749,884)
Weighted average number of	58,994,283	58,809,507	58,855,891	58,913,708	57,871,822	57,277,143	57,241,838	57,247,344
Basic and diluted loss per share	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)
Adjusted EBITDA [(1)] (loss)	(336,308)	(131,471)	(227,719)	(186,861)	(332,981)	(116,007)	(178,864)	(296,222)

The following table reconciles net loss to Adjusted EBITDA for the three months ended:

	Three months ended							
	December 31, 2022	**September 30, 2022**	**June 30, 2022**	**March 31, 2022**	**December 31, 2021**	**September 30, 2021**	**June 30, 2021**	**March 31, 2021**
Net loss	(650,674)	(388,850)	(676,828)	(658,892)	(936,867)	(763,892)	(729,097)	(749,884)
Depreciation	396,293	228,313	280,307	232,552	324,387	357,902	338,417	360,126
Share-based compensation	174,156	186,034	251,301	271,966	289,998	300,300	227,485	119,477
Net interest income	(256,083)	(156,968)	(82,499)	(32,487)	(10,499)	(10,317)	(15,669)	(25,941)
Adjusted EBITDA [(1)] (loss)	(336,308)	(131,471)	(227,719)	(186,861)	(332,981)	(116,007)	(178,864)	(296,222)

Notes:

(1) *Refer to "IFRS and Non-IFRS Measures" section in this MD&A*

Adjusted EBITDA

The following table reconciles net loss to Adjusted EBITDA for the three and twelve months ended December 31, 2022 and 2021.

	Three months ended		Change	
	December 31, 2022	December 31, 2021	$	%
Net loss	(650,674)	(936,867)	286,193	-31%
Depreciation	396,293	324,387	71,906	22%
Share-based compensation	174,156	289,998	(115,842)	-40%
Net interest income	(256,083)	(10,499)	(245,584)	2339%
Adjusted EBITDA[(1)] loss	(336,308)	(332,981)	(3,327)	1%

	Twelve months ended		Change	
	December 31, 2022	December 31, 2021	$	%
Net loss	(2,375,244)	(3,179,740)	804,496	-25%
Depreciation	1,137,465	1,380,832	(243,367)	-18%
Share-based compensation	883,457	937,260	(53,803)	-6%
Net interest income	(528,037)	(62,426)	(465,611)	746%
Adjusted EBITDA[(1)] loss	(882,359)	(924,074)	41,715	-5%

Notes:
(1) *Refer to "IFRS and Non-IFRS Measures" section in this MD&A*

Adjusted EBITDA loss for the three and twelve months ended December 31, 2022 were comparable to the same periods last year.

Internal control over financial reporting

There were no changes in the Company's internal control over financial reporting during the three months ended December 31, 2022 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Additional Information

Additional information relating to EcoSynthetix Inc., including continuous disclosure documents, are available on SEDAR at www.sedar.com.

Common Share Trading Information

The Company's common shares trade on the Toronto Stock Exchange under the symbol "ECO". As at February 28, 2023, the Company had **59,271,918** common shares issued and outstanding. If all outstanding share options were exercised and assuming the settlement of outstanding RSU's and DSU's through common shares, there would be the equivalent of **62,460,099** common shares issued and outstanding on a fully diluted basis.

Outlook

Amid unprecedented inflationary pressures, global supply chain challenges, and corn starch availability constraints, exacerbated by the ongoing pandemic, severe drought conditions in Europe, a wet corn mill strike in North America, and conflict in the Ukraine, the Company continues to pursue a growth strategy which leverages its established business in graphic paper, commercialization of DuraBind within the building materials space, commercialization of Bioform all-natural ingredients within the personal care space, and commercialization of Surflock strength aids within the tissue and paperboard markets.

The progress achieved with our renewable, bio-based materials positions the Company strongly to help global leaders in these markets achieve their increasingly aggressive sustainability and environmental, social and governance goals. EcoSynthetix will continue to execute on the following priorities to drive profitable growth in 2023.

1. **Execute our "multiple shots on goal" commercial strategy** – The Company's commercialization strategy is a focused offering of sustainable bio-based polymers to displace petro-based chemicals. As we execute our multiple shots on goal strategy, beyond the graphic paper business, the revenue mix is diversifying with increasingly greater contributions from wood composites, personal care, paperboard, and tissue end markets.

2. **Drive growth in paperboard, tissue and support our paper accounts** – The Company's relationships with key customers in the paperboard, tissue and paper market continue to provide a strong foundation for its business and EcoSynthetix will continue to pursue growth opportunities in this market, specifically in the paperboard, and tissue categories.

3. **Drive growth in wood composites markets** – The Swiss Krono Group, a top 15 global manufacturer of wood composite products, is the Company's first commercial account in the building materials market, including the use of the Company's DuraBind binder in its BE.YOND particleboard, a no-added formaldehyde ("NAF") product. The Company also announced on November 12, 2021, an annual contract renewal and purchase orders for continuous monthly volumes of DuraBind into 2023 with a top 15 global manufacturer of wood composite products and a leading international retailer. The Company continues its efforts in expanding its presence in the building materials space. Consumer and regulatory factors are creating demand for NAF products, and the Company believes it is well-positioned to capitalize on these trends to rapidly grow its share of the $15 billion annual wood composite binder market.

4. **Drive growth in personal care markets** – As previously reported by the Company in 2019, on June 6, 2022, Dow Chemical Company ("Dow"), announced an exclusive agreement with EcoSynthetix to bring innovative bio-based, biodegradable and low-carbon solutions to the personal care industry. The Dow and EcoSynthetix engagement currently includes the Dow MaizeCare™ polymers portfolio. This consists of MaizeCare™ Style Polymer and MaizeCare™ Clarity Polymer, which are sustainable, corn-based ingredients that provide consumers with top-performing benefits like improved humidity resistance, curl retention and flexibility in styling in the most consumer-needed formats. MaizeCare™ Clarity Polymer is also compatible with crystal clear formulations. Beyond hair care, these ingredients can also be leveraged to provide a variety of benefits in color cosmetic applications. These polymers are based on the Company's Bioform biopolymer technology.

5. **Product Development –** The Company's product development efforts focus on applications for its existing EcoSphere, DuraBind, Surflock, and Bioform biopolymer products in end markets where their value proposition is strong, and on further improvements to these product lines to further enhance value and expand addressable opportunities. The Company is also pursuing new product categories in specific markets where strong commercial interest from recognized leaders exists.

6. **Top line growth with a sustainable bottom line** – The Company expects to continue making investments in areas of the business that allow it to accelerate growth while retaining a disciplined approach toward its cost structure. The Company remains confident in its ability to execute on the opportunities it has identified in the wood composites, personal care, paperboard and tissue end markets. Management believes it can leverage its next steps in growth and continued cost discipline to deliver long-term value to its shareholders.