

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

The following management's discussion and analysis ("MD&A") dated July 27, 2021 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, 2020. Financial data has been prepared in conformity with International Financial Reporting Standards ("IFRS") 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, 2020.

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 March 2, 2021.

### 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, requirements for additional capital, production costs, future demand for latex-based products, business prospects and opportunities. 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 2021. 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 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: global pandemics and their impacts on the worldwide economy; 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 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 March 2, 2021. 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.

## **Risk Factors**

For a detailed description of the risk factors associated with the Company, refer to the "Risk Factors" section of the Company's Annual Information Form dated March 2, 2021.

## **Impact of COVID – 19**

The outbreak of the novel coronavirus (COVID-19 and its variants), which has been declared by the World Health Organization to be a "pandemic", has spread across the globe and is impacting worldwide economic activity. The governments of many countries, states, cities and other geographic regions have taken preventative or protective actions, such as imposing restrictions on travel and business operations and temporary closures of businesses. In addition, numerous other businesses have temporarily closed voluntarily. Such actions are creating disruption in global supply chains, increasing rates of unemployment and adversely impacting many industries.

During the six months ended June 30, 2020, the impact of COVID-19 has caused both the global demand for paper products to decrease and a decrease in the pricing of petroleum-related products with which the Company's products compete with. This resulted in reduced sales volume, lower pricing and reduced gross profit for the Company. During the six months ended June 30, 2021 the impacts of COVID-19 on sales volume, pricing and gross profit have partially diminished as vaccines continue to roll-out and countries emerge from containment measures. COVID-19 has continued to reduce the Company's ability to effectively market and trial its products with customers where on-site collaboration is preferred. The impact of COVID-19 on the economy also continues to keep interest rates low reducing interest income earned on cash deposits and short-term investments. During the six months ended June 30, 2021, the Company also applied for and received government assistance under the Canadian Emergency Wage Subsidy (CEWS) program and the Canadian Emergency Rent Subsidy (CERS) program. No other COVID-19 related risks identified below have materialized during the period and there has been no other direct impact on operating results.

The global impact of COVID-19 continues to evolve rapidly, and in 2021, COVID-19 will likely continue to have impacts on the global economy and our relevant markets. For the Company, this outbreak might materially impact the Company's ability to manufacture, source (including the delivery of raw materials to its facilities) or distribute its products both domestically and internationally; reduce our ability to effectively market and sell our products; reduce demand for our products; result in labor shortages or social unrest; cause a significant decrease in the market price for petroleum related feedstocks which our products compete with, and cause increased credit risk. Any of these additional risks factors could have a significant negative impact on the Company's financial results.

Given the dynamic nature of this outbreak, the extent to which the COVID-19 virus impacts the Company's operational results and financial performance will depend on future developments, which remain highly uncertain and cannot be accurately predicted at this time, including 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.

Should one or more of these risks or uncertainties materialize, or should assumptions underlying those forward-looking statements prove incorrect, actual results may vary materially from those anticipated in such forward-looking statements. Although the forward-looking statements contained in this MD&A are based upon what we believe to be reasonable assumptions, there can be no assurance that such forward-looking information will prove to be accurate and we cannot assure that actual results will be consistent with these forward-looking statements. Accordingly, readers should not place undue reliance on forward-looking statements. The information contained in this document, including the information provided under the heading "Risk Factors", identifies additional factors that could affect the Company's operating results and performance. Forward-looking information contained in this MD&A is made as of July 27, 2021 and we disclaim any obligation to update any forward-looking information, whether as a result of new information, future events or results, except as may be required by applicable securities laws. Accordingly, potential investors should not place undue reliance on forward-looking information.

### **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 recognized measures 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. Our flagship products, DuraBind® and EcoSphere®, are used to manufacture wood composites, paper and paperboard, 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 feedstocks, such as potato, tapioca and cornstarch, 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 two products, EcoSphere biopolymers and DuraBind biopolymers. Our bio-based sugar macromer technology has generated two products, 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

### **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 the cost of 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 60% 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 60% 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 six months ended June 30, 2021 and 2020:

	Three months ended		Change	
	June 30, 2021	June 30, 2020	\$	%
Net sales	4,897,107	3,102,881	1,794,226	58%
Gross profit	1,102,486	515,542	586,944	114%
Loss from operations	(744,766)	(780,596)	35,830	-5%
Net loss	(729,097)	(608,245)	(120,852)	20%
Weighted average number of shares outstanding	57,241,838	57,119,605	122,233	0%
Basic and diluted loss per share	(0.01)	(0.01)	(0.00)	20%
Adjusted EBITDA <sup>1</sup> loss	(178,864)	(242,467)	63,603	-26%

  

	Six months ended		Change	
	June 30, 2021	June 30, 2020	\$	%
Net sales	8,570,554	7,327,297	1,243,257	17%
Gross profit	1,854,575	1,615,756	238,819	15%
Loss from operations	(1,520,591)	(1,428,964)	(91,627)	6%
Net loss	(1,478,981)	(1,055,500)	(423,481)	40%
Weighted average number of shares outstanding	57,248,524	57,522,911	(274,387)	0%
Basic and diluted loss per share	(0.03)	(0.02)	(0.01)	41%
Adjusted EBITDA <sup>1</sup> loss	(475,086)	(432,706)	(42,380)	10%

<sup>1</sup> Refer to "IFRS and Non-IFRS Measures" section in this MD&A

**Net Sales** – Net sales for the three months ended June 30, 2021 were \$4.9 million compared to \$3.1 million in the same period last year, an increase of \$1.8 million or 58%. The increase was due to higher sales volumes which increased sales \$1.1 million, or 36%, and a higher average selling price which increased sales by \$0.7 million, or 22%. Net sales for the six months ended June 30, 2021 were \$8.6 million compared to \$7.3 million in the same period last year, an increase of \$1.2 million or 17%. The increase was due to higher sales volumes which increased sales \$0.7 million, or 10%, and a higher average selling price which increased sales by \$0.5 million, or 7%.

During the past 24 months, the paper market dynamics have been impacted by decreased macro demand, compounded by the COVID-19 pandemic, which ultimately led to paper mill consolidation in the industry. Third-party research reports manufacturing capacity of coated freesheet, the company's primary end market, has declined by 28% year over year in North America. Despite the industry-wide mill consolidation, all of the mills the Company sells to remain operational. This industry-wide consolidation has led to higher manufacturing operating rates at the remaining mills. At the same time, as the recovery from COVID-19 has taken hold, the depressed pricing experienced during the pandemic of petroleum-related products which the Company's products compete with has reversed. The combination of higher manufacturing operating rates and higher pricing for incumbent chemistries has resulted in improved volumes and pricing dynamics for our products when compared to the prior period.

During the three months ended June 30, 2021 the Company also realized increased sales to strategic accounts using its bio-based Durabind resin in wood composites, including sales to a leading retailer and manufacturer of wood composite products. This retailer ran multiple large scale production runs during the quarter in support of further end product validation and testing. These large scale production runs represent a necessary positive step towards ongoing and expanded commercial production.

*Gross profit* – Gross profit for the three and six months ended June 30, 2021 was \$1.1 million and \$1.8 million compared to \$0.5 million and \$1.6 million in the same periods last year, an increase of \$0.6 million and \$0.2 million, or 114% and 15% respectively. The increase in both periods was due to higher sales volumes and a higher average selling price offset by higher manufacturing costs.

Gross profit as a percentage of sales for the three and six months ended June 30, 2021 was 22.5% and 21.6% compared to 16.6% and 22.1% in the same periods last year. Gross profit as a percentage of sales adjusted for manufacturing depreciation for the three and six months ended June 30, 2021 was 26.3% and 26.2% compared to 23.6% and 27.2% in the same periods last year. The increase in gross profit percentage of sales and gross profit percentage of sales adjusted for manufacturing depreciation during the three months ended June 30, 2021 was primarily due to a higher average selling price offset by higher manufacturing costs. The decrease in gross profit percentage of sales and gross profit percentage of sales adjusted for manufacturing depreciation during the six months ended June 30, 2021 was primarily due to higher manufacturing costs 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 six months ended June 30, 2021 and 2020:

	<b>Three months ended</b>		<b>Change</b>	
	<b>June 30, 2021</b>	<b>June 30, 2020</b>	<b>\$</b>	<b>%</b>
Selling, general and administrative	1,294,822	858,254	436,568	51%
Research and development	552,430	437,884	114,546	26%
<b>Total operating expenses</b>	<b>1,847,252</b>	<b>1,296,138</b>	<b>551,114</b>	<b>43%</b>

  

	<b>Six months ended</b>		<b>Change</b>	
	<b>June 30, 2021</b>	<b>June 30, 2020</b>	<b>\$</b>	<b>%</b>
Selling, general and administrative	2,493,811	2,230,741	263,070	12%
Research and development	881,355	813,979	67,376	8%
<b>Total operating expenses</b>	<b>3,375,166</b>	<b>3,044,720</b>	<b>330,446</b>	<b>11%</b>

*Selling, general and administrative (SG&A)* – SG&A expenses for the three and six months ended June 30, 2021 were \$1.3 million and \$2.5 million compared to \$0.9 million and \$2.2 million in the same periods last year, an increase of \$0.4 million and \$0.3 million, or 51% and 12% respectively. The increase in SG&A comparing the three months ended June 30, 2021 to the same period last year was primarily due to lower payments received under the Canadian Emergency Wage Subsidy program (CEWS) of \$0.1 million, a change in foreign exchange gains and losses of \$0.1 million and an increase in variable based compensation of \$0.2 million. The increase in SG&A comparing the six months ended June 30, 2021 to the same period last year was primarily due to a provision for variable based compensation of \$0.2 million and other discretionary spend of \$0.1 million.

*Research and development (R&D)* – R&D expenses for the three and six months ended June 30, 2021 were \$0.5 million and \$0.9 million compared to \$0.4 million and \$0.8 million, an increase of \$0.1 million in both periods or 26% and 8% respectively. The increase in R&D expenses of \$0.1 million in both periods is primarily due to an increase in salaries and benefits and discretionary spend. R&D expense as a percentage for the three and six months ended June 30, 2021 was 11% and 10% compared to 14% and 11% in 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 and six months ended June 30, 2021 was \$0.7 million and \$1.5 million compared to \$0.8 million and \$1.4 million in the same periods last year, a decrease in loss of \$0.1 million and an increase in loss of \$0.1 million respectively. The decrease in loss comparing three months ended June 30, 2021 to the same period last year was due to higher gross profit partly offset by higher SG&A and R&D expenses. The increase in loss comparing the six months ended June 30, 2021 to the same period last year was due to higher SG&A and R&D expenses partially offset by higher gross profit.

*Net Loss* – Net loss for the three months ended June 30, 2021 was \$0.7 million, or \$0.01 net loss per common share, compared to \$0.6 million, or \$0.01 net loss per common share in the same period last year. The increase in net loss is primarily due to lower interest income partially offset by a lower loss from operations. Net loss for the six months ended June 30, 2021 was \$1.5 million, or \$0.03 net loss per common share, compared to \$1.1 million, or \$0.02 net loss per common share. The increase in net loss is due to lower interest income and a higher loss from operations.

## Financial Condition

	June 30	December 31	Change	
	2021	2020	\$	%
Total current assets	45,847,476	46,102,570	(255,094)	-1%
Total assets	51,047,661	51,723,375	(675,714)	-1%
Total current liabilities	2,066,860	1,179,097	887,763	75%
Total liabilities	3,040,500	2,251,384	789,116	35%

*Total current assets* – Total current assets at June 30, 2021 were \$45.8 million compared to \$46.1 million at December 31, 2020, a decrease of \$0.3 million or 1%. The decrease is primarily due to lower cash and short-term investments of \$0.8 million offset by higher inventory of \$0.5 million.

*Total assets* – Total assets at June 30, 2021 were \$51.0 million compared to \$51.7 million at December 31, 2020, a decrease of \$0.7 million. The change was due to a decrease in current assets of \$0.3 million and depreciation on PP&E of \$0.6 million offset by additions to PP&E of \$0.2 million. The \$0.2 million of PP&E additions relate to manufacturing equipment and equipment for research and development.

*Total current liabilities* – Total current liabilities at June 30, 2021 were \$2.1 million compared to \$1.2 million at December 31, 2020, an increase of \$0.9 million or 75%. The increase was primarily due to the timing of settlement of trade accounts payable and accrued liabilities.

*Total liabilities* – Total liabilities at June 30, 2021 were \$3.0 million compared to \$2.3 million at December 31, 2020, an increase of \$0.8 million or 35%. The increase was primarily due to higher current liabilities of \$0.9 million offset by a \$0.1 million reduction in the non-current portion of the lease liability. The reduction of the non-current portion of the lease liability was due to payments made during the period partly offset by the foreign currency revaluation of the liability.

## 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 provided by / (used in) operating activities, financing activities and investing activities for the three and six months ended June 30, 2021 and 2020:

	Three months ended		Change	
	June 30, 2021	June 30, 2020	\$	%
Cash used in operating activities	(234,246)	(28,470)	(205,776)	723%
Cash used in investing activities	(193,791)	(24,905)	(168,886)	678%
Cash used in financing activities	(242,738)	(1,033,354)	790,616	-77%
Effect of exchange rate changes on cash	(40,661)	270,222	(310,883)	-115%
Change in cash	(711,436)	(816,507)	105,071	-13%
Beginning cash	41,915,025	7,803,595	34,111,430	437%
<b>Ending cash</b>	<b>41,203,589</b>	<b>6,987,088</b>	<b>34,216,501</b>	<b>490%</b>

  

	Six months ended		Change	
	June 30, 2021	June 30, 2020	\$	%
Cash provided by operating activities	133,729	555,487	(421,758)	-76%
Cash provided by (used in) investing activities	24,761,652	(113,860)	24,875,512	-21847%
Cash used in financing activities	(299,995)	(1,511,970)	1,211,975	-80%
Effect of exchange rate changes on cash	(28,958)	81,718	(110,676)	-135%
Change in cash	24,566,428	(988,625)	25,555,053	-2585%
Beginning cash	16,637,161	7,975,713	8,661,448	109%
<b>Ending cash</b>	<b>41,203,589</b>	<b>6,987,088</b>	<b>34,216,501</b>	<b>490%</b>

*Cash (used in) provided by operating activities* – Cash used in operating activities for the three months ended June 30, 2021 was \$0.2 million compared to nominal amount in the same period last year. The increase was primarily due to investments in working capital offset by a lower net loss adjusted for non-cash items. Cash provided by operating activities for the six months ended June 30, 2021 were \$0.1 million compared to \$0.5 million in the same period last year, a decrease of \$0.4 million. The decrease was primarily due to a higher net loss adjusted for non-cash items, less cash received from working capital and lower interest payments received from short-term investments.

*Cash (used in) provided by investing activities* – Cash used in investing activities for the three months ended June 30, 2021 was \$0.2 million compared to cash used in investing activities of a nominal amount in the same period last year. Both amounts relate to purchases of PP&E. Cash provided by investing activities for the six months ended June 30, 2021 were \$24.8 million compared to cash used in investing activities of \$0.1 million in the same period last year. During the six months ended June 30, 2021, \$25.0 million of short-term investments matured which was partly offset by \$0.2 million of purchases of PP&E. During the six months ended June 30, 2020, cash used in investing activities were \$0.1 million which related to purchases of PP&E.

*Cash used in financing activities* – Cash used in financing activities during the three months ended June 30, 2021 was \$0.2 million compared to cash used in financing activities of \$1.0 million in the same period last year, a decrease of \$0.8 million. During the three months ended June 30, 2021, \$0.2 million was used to purchase common shares through the NCIB compared to \$1.0 million in the same period last year. Cash used in financing activities during the six months ended June 30, 2021 were \$0.3 million compared to \$1.5 million in the same period last year, a decrease of \$0.8 million. During the six months ended June 30, 2021, \$0.4 million of common shares were purchased through the NCIB and \$0.1 million in payments were made on the lease liability which was offset by \$0.2 million in proceeds received from the exercise of common share options. During the six months ended June 30, 2020, \$1.4 million of common shares were purchased through the NCIB and \$0.1 million in payments were made on the lease liability which was offset by a nominal amount of proceeds received from the exercise of common share options.

*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 received related to common shares and shareholder option exercises. 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 and cash raised through share issuances. 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 June 30, 2021:

- I. The Company is committed to purchases of feedstock of approximately \$2.2 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 \$0.9 million of other production raw materials and equipment related to its production facilities over the next twelve months.

## 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 June 30, 2021. 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.

	June 30, 2021	March 31, 2021	December 31, 2020	Three months ended September 30, 2020	June 30, 2020	March 31, 2020	December 31, 2019	September 30, 2019
Net sales	4,897,107	3,673,447	3,343,823	2,991,591	3,102,881	4,224,416	4,398,305	4,505,533
Gross profit	1,102,486	752,089	679,331	443,286	515,542	1,100,214	1,012,936	1,004,569
Loss from operations	(744,766)	(775,825)	(792,126)	(786,501)	(780,596)	(648,368)	(864,227)	(594,751)
Net loss	(729,097)	(749,884)	(705,904)	(640,690)	(608,245)	(447,255)	(587,793)	(312,441)
Weighted average number of shares outstanding	57,241,838	57,247,344	56,823,364	56,924,245	57,119,605	57,926,217	58,101,864	58,378,346
Basic and diluted loss per share	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Adjusted EBITDA <sup>(1)</sup> (loss)	(178,864)	(296,222)	(123,634)	(227,925)	(242,467)	(190,239)	(237,330)	(40,330)

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

	June 30, 2021	March 31, 2021	December 31, 2020	Three months ended September 30, 2020	June 30, 2020	March 31, 2020	December 31, 2019	September 30, 2019
Net loss	(729,097)	(749,884)	(705,904)	(640,690)	(608,245)	(447,255)	(587,793)	(312,441)
Depreciation	338,417	360,126	391,098	365,426	369,103	313,877	363,391	327,711
Share-based compensation	227,485	119,477	277,394	193,150	169,026	144,252	263,506	226,710
Interest income	(15,669)	(25,941)	(86,222)	(145,811)	(172,351)	(201,113)	(276,434)	(282,310)
Adjusted EBITDA <sup>(1)</sup> (loss)	(178,864)	(296,222)	(123,634)	(227,925)	(242,467)	(190,239)	(237,330)	(40,330)

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 six months ended June 30, 2021 and 2020.

	Three months ended		Change	
	June 30, 2021	June 30, 2020	\$	%
Net loss	(729,097)	(608,245)	(120,852)	20%
Depreciation	338,417	369,103	(30,686)	-8%
Share-based compensation	227,485	169,026	58,459	35%
Interest income	(15,669)	(172,351)	156,682	-91%
Adjusted EBITDA <sup>(1)</sup> loss	(178,864)	(242,467)	63,603	-26%

  

	Six months ended		Change	
	June 30, 2021	June 30, 2020	\$	%
Net loss	(1,478,981)	(1,055,500)	(423,481)	40%
Depreciation	698,543	682,980	15,563	2%
Share-based compensation	346,962	313,278	33,684	11%
Interest income	(41,610)	(373,464)	331,854	-89%
Adjusted EBITDA <sup>(1)</sup> loss	(475,086)	(432,706)	(42,380)	10%

Notes:

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

Adjusted EBITDA loss for the three months and six months ended June 30, 2021 was \$0.2 million and \$0.5 million compared to \$0.2 million and \$0.4 million in the same periods last year. Adjusted EBITDA loss during both periods remained largely comparable to the prior year as a higher net loss was partially offset by lower interest income. The lower interest income is due to lower interest rates on cash and short-term investments for the three and six months ended June 30, 2021.

## Internal control over financial reporting

There were no changes in the Company's internal control over financial reporting during the three months ended June 30, 2021 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](http://www.sedar.com).

## Common Share Trading Information

The Company's common shares trade on the Toronto Stock Exchange under the symbol "ECO". As at July 27, 2021, the Company had **57,313,016** 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 **63,060,376** common shares issued and outstanding on a fully diluted basis.

## Outlook

Despite the ongoing challenges of the COVID-19 pandemic and its impact on our markets, significant progress has been made towards achieving sustainable growth and profitability. EcoSynthetix has lowered its cost footprint, invested in leadership and talent, focused its R&D efforts and pursued a growth strategy which leverages its foundation in paper and paperboard packaging and the commercialization of DuraBind within the building materials space and our all-natural ingredients within the personal care space. The progress achieved with its renewable, bio-based materials positions the Company strongly to help global leaders in these markets achieve their increasingly aggressive sustainability and ESG goals.

EcoSynthetix will continue to execute on the following priorities to drive profitable growth

- 1. Execute our “multiple shots on goal” commercial strategy** – The majority of the Company’s sales will continue to be driven by the paper and paperboard market in 2021. However, with the Company’s commercial progress within the wood composites and personal care markets, it has started to and expects to continue to transition over time to a more diversified approach with contributions growing from DuraBind and its biopolymer for personal care.
- 2. Support our paper and paperboard accounts** – The Company’s relationships with key customers in the paper & paperboard packaging market continue to provide a strong foundation for its business and EcoSynthetix will continue to pursue growth opportunities in this market, specifically in the more focused specialty paper and packaging categories.
- 3. Drive growth in wood composites markets** – The Swiss Krono Group is the Company’s first commercial account in the building materials market, with its BE.YOND particleboard, a no-added formaldehyde (“NAF”) product using EcoSynthetix’ DuraBind binder. The Swiss Krono Group is one of the world’s leading wood-based panel manufacturers. 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. Manufacturers are actively pursuing new technologies as alternatives to conventional formaldehyde binders and seeking solutions which lower the carbon footprint of their operations and products. EcoSynthetix has expanded its relationship with its first key customer, winning new lines and expanding the number of SKUs that use DuraBind. Our key targets within the wood composites market are highly engaged and the Company continues to make progress with its commercialization activities. The conversion of its robust pipeline of industrial trial opportunities into commercial accounts remains its highest priority.
- 4. Drive growth in personal care markets** – The Company introduced its third product category in 2019, personal care. The Company has an exclusive development, marketing and distribution agreement for its biopolymer with a leading global chemical company in the personal care space. Consumer demand for green ingredients is driving rapid change in the personal care market today and the Company’s biopolymer plays directly into that shift. Its biopolymer is an all-natural film former and the first application in this new market is hair fixatives. Formulations using its biopolymer are designed to replace existing chemistries at a competitive price with the same or better performance.
- 5. Product Development** - The Company’s product development efforts focus on applications for its existing EcoSphere and DuraBind biopolymer products in market segments where their value proposition is strong, and on further improvements to both 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 and the paper and paperboard packaging markets. The Company generated positive cash flow from operations in 2020 and 2019 and management believes it can leverage its next steps in growth and continued cost discipline to deliver long-term value to its shareholders.