

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

The following management's discussion and analysis ("**MD&A**") dated March 4, 2014 is intended to assist the readers in understanding EcoSynthetix Inc. ("**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, 2013. Financial data has been prepared in conformity with International Financial Reporting Standards ("**IFRS**").

The Company directly or indirectly owns a majority of the equity interest in each of EcoSynthetix Ltd. ("**EcoSynthetix U.S.**"), EcoSynthetix B.V., EcoSynthetix Technologies Inc. and EcoSynthetix Corporation. 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 for the fiscal year-ended December 31, 2012.

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. 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. 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 market products successfully to our customers; that we will continue to face no direct competition; 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; and that we do not and will not infringe third party intellectual property rights. Some of our assumptions are based upon internal estimates and analyses 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: 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 feedstocks 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; 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 inability to expand technology; 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 for the fiscal year-ended December 31, 2012. 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.

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 March 4, 2014 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 use 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 is defined as consolidated net income (loss) before interest, income taxes, depreciation, amortization, accretion, and other non-cash charges deducted in determining consolidated net income (loss).

Overview

We are a renewable chemicals company specializing in biomaterials. Biomaterials are commonly used as inputs in industrial manufacturing for a wide range of end products. We have commercial bio-based products that have equal or superior performance and significant cost advantages compared to currently available petroleum-based products. Our strategy is to commercialize a broad range of bio-based polymer and monomer products across a wide range of industries. We have developed processes that leverage “green” technology to produce bio-based materials from natural feedstock, such as corn, tapioca and dextrose from 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 industries: (i) a biopolymer nanosphere technology that has been fully scaled and validated; and (ii) a bio-based sugar macromer technology that has been validated on a pilot scale and is being developed for the pre-commercialization plant stage. Our two bio-based technology platforms have generated three product families to date, namely ECOSPHERE BIOLATEX polymers, ECOMER and ECOSTIX.

Our lead product, ECOSPHERE BIOLATEX binders, has achieved commercialization in the coated paper, paperboard and personal care industries. While our technology platform offers a significantly reduced carbon footprint, we market our products to customers on the basis of reduced cost, stable pricing and superior product performance.

Factors Affecting the Results of Operation

Commercialization

A major source of our revenue has resulted from the conversion of customer evaluations of our products into commercial sales. Generally, the adoption of our products by customers is evaluated in three stages prior to acceptance of the product on a commercial basis: (i) laboratory evaluation; (ii) pilot scale production testing; and (iii) mill trials representing full scale production.

Following a period of evaluations, we first achieved commercial sales in the first quarter of 2008. We are currently operating on a commercial scale in the coated paper and paperboard industry. Manufacturers generating greater than 60% in SB latex demand in the global paper and paperboard market are either evaluating or commercial with our ECOSPHERE BIOLATEX binders. Due to the low capital expenditure required to switch to our products, reduced cost, improved performance and a significantly reduced carbon footprint, our experience suggests volume demand can be relatively steady post-conversion, which creates the potential for continuous recurring revenue. Despite certain customer mills having unique material handling requirements, we have the capability of rapidly designing and delivering state-of-the art dry material handling solutions for our customers resulting in a seamless integration of our ECOSPHERE BIOLATEX binders.

Our performance will be influenced by our success in converting prospects from the mill trial phase into full commercial clients. The mill 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 with which the potential customer is evaluating the product.

Since entering commercial production, we have achieved significant sales growth. Our lead product, ECOSPHERE BIOLATEX binders, is used commercially by 4 of the global top 20 manufacturers in the coated paper and paperboard industry and an additional 11 of the global top 20 manufacturers are currently in the process of evaluating the Company's products.

Our objective is to achieve significant growth across multiple industries through continuous innovation of new bio-based polymer and monomer products using widely available raw materials and our scalable production techniques. In addition, we will continue to expand the functionalities and applications of our existing products, which are readily applicable across numerous markets where petroleum-based polymers and monomers currently dominate.

Net Sales

Our sales are primarily derived from the sale of our products to our customers. 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. Sales are recorded when significant risks and rewards of ownership have passed on to the buyer, which generally occurs at the time of shipment or delivery depending on terms of the agreement.

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 cornstarch feedstock and process chemicals. Cost of sales is mainly affected by the cost of cornstarch and contract manufacturing costs. Cornstarch is the most significant raw material cost.

Selling, general and administrative

Selling, general and administrative expense primarily relates to personnel costs, including salaries & benefits, share-based compensation, recruitment and training costs, professional fees, marketing costs, corporate insurance costs, occupancy-related costs, depreciation on property, plant and equipment not utilized in our production process, amortization of intangible assets, and travel expenses.

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 consist of expenses incurred to develop and test our products, and include personnel and related costs, consultants, facility costs, supplies and other associated product development expenses. These costs are partially offset by government grants recorded related to such expenditures.

Other Factors Affecting the Results of Operations and Financial Conditions

Our financial condition and results of operations are influenced by a variety of 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 petroleum substitutes for our products.
- Feedstock, other input and production costs.

Results of operations

The following is a summary of selected consolidated annual information extracted from the Company's audited consolidated financial statements over the latest three year period.

	Fiscal year-ended December 31,		
	2013	2012	2011
Net sales	22,229,846	19,552,345	20,769,851
Gross Profit	3,609,075	3,857,858	4,973,021
Operating expenses	18,731,393	15,649,372	11,034,659
Loss from operations	(15,122,318)	(11,791,514)	(6,061,638)
Net loss	(14,764,804)	(11,430,735)	(252,708,148)
Basic and diluted loss per share	(0.26)	(0.21)	(10.93)

Net Sales – Net sales in fiscal 2013 were \$22.2 million compared to \$19.6 million in fiscal 2012, an increase of \$2.7 million or 14%. The increase was due to higher sales in North America, Latin America and Europe of \$4.4 million, \$0.5 million and \$0.2 million, respectively, partly offset by lower sales in Asia Pacific of \$2.4 million. Sales decreased in Asia Pacific due to competitive pressures resulting from unfavorable market dynamics caused by the over-supply of butadiene and the related drop in butadiene and SB latex prices. Sales to existing customers represented an 11% increase in fiscal 2013 revenue compared to prior year. We commercialized 5 new customers during the fiscal year which accounted for 2% of total revenue. Two customers were commercialized each in Asia Pacific and North America while one new customer was commercialized in EMEA.

Gross profit – Gross profit in fiscal 2013 was \$3.6 million or 16.2% of sales compared to \$3.9 million or 19.7% of sales in fiscal 2012, a decrease of \$0.2 million or 6.4%. Gross profit adjusted for non-cash items (manufacturing depreciation) as a percentage of sales decreased 3.6% from 24.9% in fiscal 2012 to 21.3%. The decrease in gross profit was primarily due to higher corn starch prices and lower selling prices partially offset by higher sales volume.

Operating Expenses

The following table sets forth the breakdown of our operating expenses by category in fiscal 2013 compared to fiscal 2012:

	Fiscal year-ended December 31,		Change	
	2013	2012	\$	%
Selling, general and administrative ¹	11,629,307	10,179,128	1,450,179	14%
Research and development ¹	5,467,870	4,382,854	1,085,016	25%
Share-based compensation	956,225	847,104	109,121	13%
Depreciation and amortization	604,096	198,220	405,876	205%
Foreign exchange loss	73,895	42,066	31,829	76%
Total operating expenses	18,731,393	15,649,372	3,082,021	20%

¹ For the purposes of this MD&A, selling, general and administrative and research and development expenses exclude share-based compensation, depreciation and amortization and foreign exchange loss

Total operating expenses in fiscal 2013 were \$18.7 million compared to \$15.6 million in fiscal 2012, an increase of \$3.1 million or 20%. The increase in total operating expenses was principally due to higher selling, general and administrative costs and increased research and development activities.

Selling, general and administrative¹ - Selling, general and administrative costs increased \$1.5 million or 14% to \$11.6 million from \$10.2 million in fiscal 2012. The increase was principally due to higher salaries and benefits associated with increased headcount compared to the prior year. Our headcount increased 20% in fiscal 2013 compared to fiscal 2012.

*Research and development*¹ - Research and development costs were \$5.5 million in fiscal 2013 compared to \$4.4 million in fiscal 2012, an increase of \$1.1 million or 25%. The increase represents continued investment in research and development net of government assistance. In fiscal 2013, we recognized \$0.4 million of government incentives compared to \$0.1 million in fiscal 2012, an increase of \$0.3 million.

Share-based compensation - Share-based compensation was \$0.9 million in fiscal 2013 compared to \$0.8 million in the prior year, an increase of \$0.1 million or 13%. The increase was primarily due to stock options issued in the current fiscal year partly offset by a \$0.3 million reversal in share-based compensation expense related to performance hurdles associated with performance stock options (PSOs) which were not achieved.

Depreciation and Amortization - Depreciation of property, plant and equipment and amortization of intangible assets in fiscal 2013 was \$0.6 million compared to \$0.2 million in fiscal 2012, an increase of \$0.4 million or 205%. The increase was primarily due to a \$0.2 million impairment loss related to redundant machinery & equipment and higher amortization of intangible assets.

Foreign currency exchange loss - Foreign exchange represents the revaluation of monetary assets and liabilities denominated in foreign currencies. In fiscal 2013 foreign exchange revaluation losses were \$0.07 million compared to foreign exchange revaluation losses of \$0.04 million in the prior year. The change in foreign exchange revaluation losses are primarily related to foreign exchange rate fluctuations between the U.S. dollar (our functional currency) and the Canadian dollar and Euro on our net monetary position in those respective foreign currencies.

Loss from operations – Our loss from operations in fiscal 2013 was \$15.1 million compared to \$11.8 million in fiscal 2012, an increase of \$3.3 million or 28%. The increase in loss from operations was due to increased operating expenses and lower gross profit.

Interest income – Interest income in fiscal 2013 remained comparable to fiscal 2012 as an increase in interest rates were offset by lower cash balances.

Net Loss - We incurred a net loss of \$14.8 million or \$0.26 per common share in fiscal 2013 compared to a net loss of \$11.4 million or \$0.21 per common share in fiscal 2012. The increase in net loss during this period is principally due to increased operating expenses and lower gross profit.

Financial condition

	December 31, 2013	December 31, 2012	Change \$	%
Total current assets	91,207,662	104,730,880	(13,523,218)	-13%
Total assets	104,106,859	118,068,797	(13,961,938)	-12%
Total current liabilities	3,947,385	4,509,216	(561,831)	-12%

Total current assets – Total current assets as at December 31, 2013 were \$91.2 million compared to \$104.7 million as at December 31, 2012, a decrease of \$13.5 million or 13%. The decrease was principally due to lower cash as a result of cash utilized in operations.

Total assets – Total assets as at December 31, 2013 were \$104.1 million compared to \$118.1 million as at December 31, 2012, a decrease of \$14.0 million or 12%. The decrease was primarily due to lower current assets.

Total current liabilities – Total current liabilities as at December 31, 2013 were \$3.9 million compared to \$4.5 million as at December 31, 2012, a decrease of \$0.6 million or 12%. The decrease was principally due to the settlement of accounts payable and accrued liabilities in addition to the extinguishment of the deferred government grant.

Liquidity and Capital Resources

We currently fund our business operations from existing cash which was provided through the initial public offering (IPO) in 2011. 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 at least the next 12 months.

Below is a summary of our cash flows used in operating activities, financing activities and investing activities for the fiscal year-ended December 31, 2013 and 2012:

	Fiscal year-ended December 31, 2013	Fiscal year-ended December 31, 2012	Change \$	%
Cash used in operating activities	(11,272,437)	(6,566,015)	(4,706,422)	72%
Cash used in investing activities	(1,889,374)	(5,748,063)	3,858,689	-67%
Cash provided by (used in) financing activities	408,472	(139,331)	547,803	-393%
Net decrease in cash	(12,753,339)	(12,453,409)	(299,930)	2%
Beginning cash	93,260,296	105,713,705	(12,453,409)	-12%
Ending cash	80,506,957	93,260,296	(12,753,339)	-14%

Cash used in operating activities – In fiscal 2013 cash utilized in operating activities was \$11.3 million compared to \$6.6 million in fiscal 2012, an increase of \$4.7 million or 72%. The increase was principally due to higher losses from operations and a decrease in cash flows related to changes in working capital compared to the same period in prior year.

During fiscal 2013, non-cash working capital decreased \$0.8 million compared to a decrease in non-cash working capital of \$2.8 million during fiscal 2012. The decrease in non-cash working capital in fiscal 2013 was principally due to lower accounts receivable and inventory which decreased \$0.6 million and \$0.5 million, respectively, at December 31, 2013 compared to December 31, 2012. In fiscal 2012, the non-cash working capital decrease was primarily related to lower inventory levels partly offset by increased accounts receivable.

Cash used in investing activities – Cash used in investing activities during fiscal 2013 was \$1.9 million compared to \$5.7 million in fiscal 2012, a decrease of \$3.9 million or 67%. The decrease was primarily due to purchases of capital equipment related to the expansion of our production capacity in fiscal 2012.

Cash provided by (used in) financing activities – Cash flows provided by financing activities in fiscal 2013 were \$0.4 million compared to cash flows used in financing activities of \$0.1 million in fiscal 2012. The increase is primarily due to an increase in the number of common share options and warrants exercised in fiscal 2013 and the repurchase of common shares which occurred in fiscal 2012.

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 toward financial leverage and management of financial risk. The Company's capital is composed of the net cash received related to common shares, warrants 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 so that we can 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.

Contractual Obligations

Our contractual obligations include operating leases for premises and purchase obligations. The following table summarizes our cash commitments as of December 31, 2013.

2014	\$5,654,871
2015	\$435,699
2016	\$376,082
2017	\$330,671
Thereafter	\$992,014

During the normal course of operations, the Company may enter into feedstock contracts to secure raw material availability over a twelve month period based on market pricing at the time of purchase. As at December 31, 2013, the Company was committed to purchases of feedstock prior to June 30, 2014 in the approximate amount of \$5.0 million.

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, 2013. 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.

Historically, our quarterly operating results have fluctuated and may continue to fluctuate in the future. Therefore, we believe that past operating results and period-to-period comparisons should not be relied upon as an indication of our future performance. See "Risk Factors" outlined elsewhere in this document.

	Three months ended (unaudited)							
	December 31, 2013	September 30, 2013	June 30, 2013	March 31, 2013	December 31, 2012	September 30, 2012	June 30, 2012	March 31, 2012
Net sales	5,159,069	5,416,621	5,533,678	6,120,478	5,923,661	5,915,571	3,734,766	3,978,347
Gross profit	895,594	836,873	820,482	1,056,126	1,192,753	1,280,527	624,764	759,814
Loss from operations	(3,723,691)	(4,051,221)	(3,728,548)	(3,618,858)	(3,480,133)	(2,410,005)	(2,868,263)	(3,033,113)
Net loss	(3,636,080)	(3,960,546)	(3,634,692)	(3,533,486)	(3,394,357)	(2,324,278)	(2,772,608)	(2,939,492)
Weighted average number of shares outstanding	55,802,382	55,764,273	55,709,678	55,689,778	55,297,736	55,324,997	55,248,933	55,248,203
Basic and diluted loss per share	(0.07)	(0.07)	(0.07)	(0.06)	(0.06)	(0.04)	(0.05)	(0.05)
Adjusted EBITDA ⁽¹⁾	(3,264,621)	(3,186,884)	(3,076,975)	(2,905,848)	(2,950,364)	(1,804,122)	(2,428,644)	(2,553,696)

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

	December 31, 2013	September 30, 2013	Three months ended (unaudited)					
			June 30, 2013	March 31, 2013	December 31, 2012	September 30, 2012	June 30, 2012	March 31, 2012
Net loss	(3,636,080)	(3,960,546)	(3,634,692)	(3,533,486)	(3,394,357)	(2,324,278)	(2,772,608)	(2,939,492)
Depreciation and amortization	596,824	387,337	365,697	381,907	384,769	320,883	262,515	239,417
Share-based compensation	(137,754)	477,000	285,876	331,103	145,000	285,000	177,104	240,000
Interest income	(87,611)	(90,675)	(93,856)	(85,372)	(85,776)	(85,727)	(95,655)	(93,621)
Adjusted EBITDA ⁽¹⁾	(3,264,621)	(3,186,884)	(3,076,975)	(2,905,848)	(2,950,364)	(1,804,122)	(2,428,644)	(2,553,696)

Notes:

- (1) Adjusted EBITDA is not a measure recognized under IFRS and does not have a standardized meaning prescribed by IFRS. See "IFRS and Non-IFRS Measures." The Company presents Adjusted EBITDA because the Company believes it facilitates investors' use of operating performance comparisons from period to period and company to company by backing out potential differences caused by variations in capital structures (affecting relative interest expense), the book amortization of intangibles (affecting relative amortization expense) and the age and book value of property and equipment (affecting relative depreciation expense). The Company also presents Adjusted EBITDA because it believes it is frequently used by securities analysts, investors and other interested parties as a measure of financial performance. Adjusted EBITDA as presented herein are 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 net interest expense, income taxes, depreciation, amortization, other non-cash expenses and charges deducted in determining consolidated net income (loss).

Key factors that account for the fluctuations in quarterly results include the growth in the Company's revenue and the pace at which the Company's sales and administrative personnel are expanding.

Fourth Quarter Results

	Three months ended (unaudited)		Change	
	December 31, 2013	December 31, 2012	\$	%
Net sales	5,159,069	5,923,661	(764,592)	-13%
Gross profit	895,594	1,192,753	(297,159)	-25%
Loss from operations	(3,723,691)	(3,480,133)	(243,558)	7%
Net loss	(3,636,080)	(3,394,357)	(241,723)	7%
Weighted average number of shares outstanding	55,802,382	55,297,736	504,646	1%
Basic and diluted loss per share	(0.07)	(0.06)	(0.01)	9%
Adjusted EBITDA	(3,264,621)	(2,950,364)	(314,257)	11%

Net sales – Sales in the fourth quarter of fiscal 2013 decreased \$0.8 million or 13% from \$5.9 million during the same period in fiscal 2012 to \$5.2 million in the current period. The decrease in sales was principally due to lower sales volume. No new paper mills were commercialized during the fourth quarter of fiscal 2013 while 5 new paper mills commercialized on a year-to-date basis accounted for 3% of total revenues in the quarter. Sales to existing customers represented a 16% decrease during the three months ended December 31, 2013 compared to the same period last year. The decrease in sales to existing customers was a result of lower sales to customers in Asia Pacific.

From a territorial perspective, sales increased \$0.9 million in North America principally due to higher volumes to existing customers. This increase was offset by lower sales in Asia Pacific and EMEA of \$1.0 million and \$0.7 million respectively. Sales decreased in EMEA primarily due to the closure of a customer's coated paper production line in the region during the quarter.

Gross profit – Gross profit decreased from \$1.2 million during the fourth quarter of fiscal 2012 to \$0.9 million during the fourth quarter of 2013, a decrease of \$0.3 million or 25%. The decrease was principally due to lower sales volume and higher corn starch costs. Gross profit as a percentage of sales adjusted for non-cash items (manufacturing depreciation) decreased 2.3% to 22.9% from 25.2% in the prior year. The decrease was principally due to higher corn starch costs.

Operating Expenses

The following table sets forth the breakdown of our operating expenses by category for the fourth quarter of 2013 compared to the fourth quarter of 2012:

	Three months ended (unaudited)		Change	
	December 31, 2013	December 31, 2012	\$	%
Selling, general and administrative ¹	2,894,750	2,906,458	(11,708)	0%
Research and development ¹	1,530,894	1,518,916	11,978	1%
Share-based compensation	(137,754)	145,000	(282,754)	-195%
Depreciation and amortization	310,585	81,913	228,672	279%
Foreign exchange loss	20,810	20,599	211	1%
Total operating expenses	4,619,285	4,672,886	(53,601)	-1%

¹ For the purposes of this MD&A, selling, general and administrative and research and development expenses exclude share-based compensation, depreciation and amortization and foreign exchange loss

Total operating expenses during the fourth quarter of fiscal 2013 remained consistent with prior year at \$4.6 million. Lower share-based compensation expense was offset by higher depreciation and amortization.

*Selling, general and administrative*¹ – Selling, general and administration expenses remained comparable during the fourth quarter of fiscal 2013 at \$2.9 million compared to the prior year.

*Research and development*¹ – Research and development costs remained consistent in the fourth quarter of fiscal 2013 at \$1.5 million compared to the same period in prior year. The expense represents our investment in product development and innovation which will allow for further market penetration in the paper and paperboard industry in addition to other key markets as we continue to displace petrochemical polymers with our low cost, bio-based alternative.

Share-based compensation – During the fourth quarter of fiscal 2013, the Company determined that the PSOs and restricted share units (RSUs) had not been achieved for fiscal 2013. As a result, the company recorded a reversal of share-based compensation expense of \$0.3 million during the current quarter. This was partly offset by share-based compensation expense related to the vesting of options that have no performance conditions.

Foreign currency exchange loss - Foreign exchange represents the revaluation of monetary assets and liabilities denominated in foreign currencies. Foreign exchange revaluation losses during the fourth quarter of fiscal 2013 remained comparable to the same period in fiscal 2012 at \$0.02 million. The change in foreign exchange revaluation losses are primarily related to foreign exchange rate fluctuations between the U.S. dollar (our functional currency) and the Canadian dollar and Euro on our net monetary position in those respective foreign currencies.

Loss from operations – Our loss from operations in the fourth quarter of fiscal 2013 was \$3.7 million compared to a loss from operations of \$3.5 million in the comparable period of the prior year, an increase of \$0.2 million or 7%. The increase was primarily due to lower gross profit.

Interest income – Interest income during the fourth quarter of fiscal 2013 remained comparable to the same period in the prior year at \$0.1 million as an increase in interest rates was partially offset by lower cash balances.

Net Loss – We incurred a net loss of \$3.6 million or \$0.07 per common share in the fourth quarter of fiscal 2013 compared to a net loss of \$3.4 million or \$0.06 per common share in the comparable period of prior year. The increase in net loss of \$0.2 million was primarily due to lower gross profit.

Liquidity

Below is a summary of our cash flows provided by (used in) operating activities, financing activities and investing activities for the three months ended December 31, 2013 and 2012:

	Three months ended (unaudited)		Change	
	December 31, 2013	December 31, 2012	\$	%
Cash used in operating activities	(3,277,731)	(1,191,478)	(2,086,253)	175%
Cash used in investing activities	(161,302)	(403,264)	241,962	-60%
Cash provided by financing activities	37,216	240,614	(203,398)	-85%
Net decrease in cash	(3,401,817)	(1,354,128)	(2,047,689)	151%
Beginning cash	83,908,774	94,614,424	(10,705,650)	-11%
Ending cash	80,506,957	93,260,296	(12,753,339)	-14%

Cash used in operating activities – Cash used in operations in the fourth quarter of fiscal 2013 was \$3.3 million compared to \$1.2 million for the comparable period in prior year, an increase of \$2.1 million. The increase was principally due to higher working capital investments and higher operating losses compared to the same period in prior year.

During the fourth quarter of fiscal 2013, working capital had a nominal impact on operating cash flows as lower inventories and accounts receivable were offset by lower accounts payable and accrued liabilities. For the three months ended December 31, 2012, non-cash working capital decreased \$1.7 million principally due to lower inventories, increased accounts payable and accrued liabilities and lower accounts receivable.

Cash used in investing activities – Cash used in investing activities during the fourth quarter of fiscal 2013 was \$0.2 million compared to \$0.4 million in the comparable period of fiscal 2012, a decrease of to \$0.2 million. The decrease was primarily due to capital asset purchases in the current period.

Cash provided by financing activities – Cash provided by financing activities in the fourth quarter of 2013 was \$0.04 million compared to \$0.2 million for the same period in fiscal 2012. The decrease was principally due to lower cash provided by government grants in the current period.

Adjusted EBITDA

Adjusted EBITDA in the fourth quarter of fiscal 2013 was a loss of \$3.3 million compared to a loss of \$3.0 million in the same period of the prior year. The increase in adjusted EBITDA loss is primarily due to lower gross profit.

Critical Accounting Policies and Estimates

The preparation of the financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses and the disclosure of contingent assets and liabilities. These estimates and assumptions are affected by management's application of accounting policies and historical experience, and are believed by management to be reasonable under the circumstances. Such estimates and assumptions are evaluated on an ongoing basis and form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ significantly from these estimates.

Management believes the following critical accounting policies reflect the more significant estimates and assumptions used in the preparation of our financial statements. We believe that there have been no significant changes in our critical accounting estimates for the time periods presented in our interim financial statements.

Inventory

Inventory valuation assessments are performed periodically or when indicators of impairment are present. These assessments may involve significant uncertainty and are subject to change in that they could require the use of forward looking assumptions such as estimating the amount and timing of revenues as well as projecting the likelihood of an item becoming obsolete or unusable in the future. Recognition of inventory valuation provisions may have a material impact on our net income and the value of our inventory.

Impairment of long-lived assets

Long-lived assets (including property, plant and equipment and intangible assets with definite lives) are reviewed for impairment at each reporting date to determine whether there is an indication that an asset may be impaired. If any indication exists we estimate the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating units (CGU) fair value less costs to sell and its value in use and is determined for individual assets unless the asset does not generate cash inflows that are largely independent of those from other assets or group of assets. Where the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and it is written down to its recoverable amount. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Asset impairment assessments involve significant uncertainty and are susceptible to change they require the use of forward looking assumptions such as sales, costs, foreign exchange rates and market growth rates. Recognition of impairment may have a material impact on our net income and the value of our long-lived assets. Whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable, a long-lived asset or asset group is required to be tested for possible impairment.

Share-based compensation

The company operates equity-settled share-based compensation plans under which the company receives services from employees, directors, advisers, officers, contractors and consultants as consideration for equity instruments (share options, PSOs, RSUs, and deferred share units (DSUs)) of the company.

Each tranche of a share option award is considered a separate award with its own vesting period and recorded at fair value on the date of grant. The fair value of each tranche is measured at the date of grant using the Black-Scholes option pricing model. Compensation expense is recognized over the tranche's vesting period, based on the number of awards expected to vest, by increasing contributed surplus. The number of awards expected to vest is reviewed periodically, with any impact being recognized in the consolidated statement of operations. Any contribution paid by an employee or director on the exercise of share options is credited to common shares with any previously recognized compensation expense.

A PSO provides a right, but not an obligation, to purchase common shares of the company at a stated price for a given period of time. PSOs vest at a rate of 33.33% per year following the grant date subject to the achievement of performance hurdles and can only be settled in common shares issued from treasury. In the event that performance exceeds targeted performance hurdles, vesting can accelerate for PSOs granted; however, in no event can the cumulative vesting exceed 100%. All PSOs expire at the end of 10 years. The fair value of a PSO is recorded over the expected vesting period, subject to management's estimate of the achievement of the performance hurdles. The fair value of the PSOs are recognized as compensation expense over the vesting period with a corresponding increase to contributed surplus. Fair value is determined based on the average closing price of common shares on the Toronto Stock Exchange (TSX) five trading days immediately prior to the date as of which market value is determined. The company has estimated the length of the expected vesting period at grant date based on the most likely outcome of the performance conditions. The company will revise its estimate of the length of the vesting period, if necessary, if subsequent information indicates that the length of the vesting period differs from previous estimates and any change to compensation cost will be recognized in the period in which the revised estimate is made. Forfeitures are estimated at the grant date and are revised to reflect a change in expected or actual forfeitures.

The restricted share unit plan (RSU Plan) provides that restricted share unit awards (the RSUAs) may be granted by a committee that administers the RSU Plan to full-time employees, officers and eligible contractors of the company or an affiliate in a calendar year as a bonus for services rendered to the company as determined at the

sole discretion of the Board. The number of restricted share units awarded will be credited to the participants' accounts effective on the grant date of the RSUs. Each RSUA entitles the holder to receive common shares issued from treasury of the company. RSUs fully vest at the end of a three-year period subject to continued employment with the company and the achievement of performance hurdles. The company has estimated the probability of achieving the performance hurdles and will revise its estimate if subsequent information indicates that the expected outcome related to the achievement of the performance hurdles differs from previous estimates. Accordingly, any change to compensation cost will be recognized in the period in which the revised estimate is made. Forfeitures are estimated at the grant date and are revised to reflect a change in expected or actual forfeitures.

The deferred share unit plan (DSU Plan) provides for awards of DSUs to non-employee directors of the company. Under the DSU Plan, non-executive directors may receive a grant of DSUs in satisfaction of their annual retainer. Each DSU is equivalent to one common share and vest on a quarterly basis. DSUs must be retained until the director leaves the Board, at which time the DSUs will be settled through common shares. In the event dividends are declared and paid, additional DSUs would be credited to reflect dividends paid on common shares. The number of DSUs to be awarded are determined based on the average closing price of the common shares on the TSX on five trading days immediately prior to the date as of which market value is determined. Compensation cost for DSUs granted under the DSU Plan is recorded as an expense with a corresponding increase in contributed surplus.

Valuation of Future Income Tax Assets

Significant management judgment is required in determining the valuation allowance recorded against our net income tax assets. We record a valuation allowance to reduce our future income tax assets recorded on our consolidated balance sheet to the amount of future income tax benefit that is more likely than not to be realized. We have recorded a full valuation allowance to reflect the uncertainties associated with the realization of our future income tax assets based on management's best estimates as to the certainty of realization.

Internal control over financial reporting

Management is responsible for establishing and maintaining a system of disclosure controls and procedures to provide reasonable assurance that all material information relating to the Company and its subsidiaries is gathered and reported to senior management on a timely basis so that appropriate decisions can be made regarding public disclosures. Management is also responsible for establishing and maintaining adequate internal controls over financial reporting to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial reports for external purposes in accordance with IFRS.

As required by National Instrument 52-109 (Certification of Disclosure in Issuer's Annual and Interim Filings), the Chief Executive Officer and the Chief Financial Officer have caused to be evaluated under their supervision the effectiveness of such internal controls over financial reporting using the framework as established by The Committee of Sponsoring Organizations of the Treadway Commission (COSO) in 1992. Based on the evaluation, they have concluded that the design and operation of the Company's internal controls over financial reporting were effective as at December 31, 2013.

In designing such controls, it should be noted that due to inherent limitations, any controls, no matter how well designed and operated can provide reasonable assurance of achieving the desired control objectives and may not prevent or detect misstatements. Additionally management is necessarily required to use judgment in evaluating controls and procedures.

There were no changes in the Company's internal control over financial reporting during the fourth quarter of 2013 that have materially affected, or are reasonable likely to materially affect, the Company's internal control over financial reporting.

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 for the fiscal year-ended December 31, 2012. The Company is not aware of any significant changes to the Company's risk factors from those disclosed at that time.

Additional Information

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

Common Share Trading Information

The Company's common shares trade on the TSX under the symbol "ECO". As at March 3, 2014, the Company had the equivalent of 56,884,300 common shares issued and outstanding assuming conversion of all rights pursuant to the put/call agreement. Subsequent to December 31, 2013, all outstanding warrants were exercised prior to March 3, 2014. In addition, if all outstanding share options were exercised, there would be the equivalent of 62,723,021 common shares issued and outstanding on a fully diluted basis as at March 3, 2014.

Outlook

In this past year we experienced growth in the North American paper industry. Unfortunately, performance in other regions was well below expectation. This was primarily due to a decline in butadiene prices that we believe is temporary. Butadiene is one of the two major ingredients of styrene butadiene latex, or SB latex, which is the incumbent technology our products primarily compete with in the paper industry. Butadiene prices over the past year enabled our competitors to lower their SB latex prices, which together with high corn starch prices, negatively affected our product costs and margins. As a result, our value proposition of similar performance at a lower price in the paper industry was compromised in Asia and Europe. We expect that lower corn costs and higher synthetic latex prices will restore the value proposition in these regions this year.

During the past year we invested significant resources in product development and research. We launched new products in the paper industry last year that are gaining traction with both existing and prospective customers. Our product development focus in the paper market continues to be on improved performance at higher substitution rates. We are making progress on this front and expect new grades to be launched within the coming year.

In addition to our innovations in the paper market, we also invested considerably in the development of new sustainable, formaldehyde-free products for the building materials industry, specifically fiberglass and mineral wool insulation and wood composites (particle board, and medium density fiber board). The building materials industry is under increasing regulatory pressure to reduce and/or eliminate formaldehyde from their products, as it has now been rated by the EPA as a "likely carcinogen". We are in the final stages of the product qualification process and are running extended industrial-scale trials with prospective customers. Breaking into a new industry with a new product takes considerable time, but with our strong value proposition and the encouraging feedback from the prospective customers to our test results, we believe we are making progress. The first customer win in this new market for our binders will be a significant milestone and a key indicator of our future growth. As we begin moving towards profitability, we are in an excellent position to monetize the investments we made in product development for these new market segments with our ability to leverage the existing manufacturing capability we have in place.

Beyond these commercial applications in paper and building materials we are also collaborating with several universities on fundamental research in new sustainable technologies. We expect to leverage the innovation from this fundamental research into the applied development we conduct internally by scaling and validating the product properties. In summary, we believe EcoSynthetix is well positioned for growth. With a strong product pipeline, we will continue commercializing new bio-based solutions to replace a number of petroleum-based polymers in a variety of industrial applications. The bio-based economy is growing today, and future growth is inevitable. The focus of our team today is one of execution. Driving sales in the paper and paperboard market and delivering on our commercialization strategy in the building products segment is the path we are focused on to deliver the level of growth that we expect of the business.