

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

The following management's discussion and analysis ("MD&A") dated November 11, 2015 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, 2014. Financial data has been prepared in conformity with International Financial Reporting Standards ("IFRS").

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, 2014.

### 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 2015. 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 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 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; 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, 2014. 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 August 5, 2015 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 bio-based materials that are used as inputs in a wide range of products. Bio-based materials 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 within paper & paperboard, building materials and a wide range of other relevant markets. We have developed processes that leverage “green” technology to produce bio-based materials from natural feedstocks, such as potato, 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. Our two bio-based technology platforms have generated four product families to date, namely EcoSphere® biopolymers, EcoMer® biomonomers, EcoStix® bio-based pressure sensitive adhesives and DuraBind™ engineered biopolymers. Our lead product, EcoSphere biolatex® binders, has generated substantially all of our revenues from the paper & paperboard market to date. Our DuraBind engineered biopolymers are effective replacements for formaldehyde-based binders in the building materials market. To date, this product has been developed for application in insulation and wood composites.

We market our products to customers with a compelling value proposition that includes:

1. Improved economics through overall reduction of cost of manufacturing and offering price stability
2. Providing equal or superior performance in comparison to synthetic latex and formaldehyde binders
3. Reduced carbon footprint by minimizing or eliminating petroleum based products

## **Factors Affecting the Results of Operation**

### **Commercialization**

Our customers typically go through three evaluation stages prior to commercial adoption of our products, including:

- (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 clients. 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 a potential customer that is evaluating the product.

We are currently operating on a commercial scale in the coated paper and paperboard industry. Our lead product, EcoSphere biolatex binders, is used commercially by leading manufacturers within the coated paper and paperboard industry.

### **Net Sales**

Our sales are 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 the 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, 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 primarily relates to salaries & benefits and other employee related costs which collectively represent approximately greater than 50% of our expenses. In addition to this, selling, general and administrative expenses include: travel expenses, professional fees, occupancy related costs, insurance costs and marketing costs.

## **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 those incurred to develop and test our products. Salaries & benefits related to employees directly involved in research and development activities represent approximately 50% of total research and development expenses. In addition, research and development expenses include costs related to consultants, facility costs, supplies and other costs directly associated with product development. These costs are partially offset by government grants related to such expenditures, if eligible.

## **Share-based compensation**

The Company operates an equity settled, share-based compensation plan under which the Company receives services from employees advisors, officers, contractors and consultants as consideration for equity instruments which include share options, performance-based share options (PSOs), restricted share units (RSUs) and deferred share units (DSUs) of the Company. Share-based compensation expense is recorded in accordance with the provisions under *IFRS 2, Share-based payment*.

## **Depreciation and amortization**

Depreciation and amortization included in operating expenses includes depreciation on property, plant and equipment not utilized in our production process and amortization of intangible assets.

Depreciation expense included in cost of sales relates to depreciation on property, plant and equipment associated with our production processes.

## **Foreign exchange loss (gain)**

Foreign exchange represents the revaluation of monetary assets and liabilities denominated in foreign currencies. The change in foreign exchange revaluation 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.

## **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 our results of operations for the three and nine months ended September 30, 2015 and 2014:

|   | <b>Three months ended (unaudited)</b> |                           | <b>Change</b> |          |
|---|---------------------------------------|---------------------------|---------------|----------|
|   | <b>September 30, 2015</b>             | <b>September 30, 2014</b> | <b>\$</b>     | <b>%</b> |
| Net sales                                     | 3,333,534                             | 4,840,892                 | (1,507,358)   | -31%     |
| Gross profit                                  | 486,839                               | 494,479                   | (7,640)       | -2%      |
| Loss from operations                          | (2,010,403)                           | (4,084,208)               | 2,073,805     | -51%     |
| Net loss                                      | (1,941,231)                           | (4,000,178)               | 2,058,947     | -51%     |
| Weighted average number of shares outstanding | 58,323,037                            | 56,628,449                | 1,694,588     | 3%       |
| Basic and diluted loss per share              | (0.03)                                | (0.07)                    | 0.04          | -53%     |
| Adjusted EBITDA                               | (1,580,207)                           | (3,593,261)               | 2,013,054     | -56%     |

|   | <b>Nine months ended (unaudited)</b> |                           | <b>Change</b> |          |
|---|--------------------------------------|---------------------------|---------------|----------|
|   | <b>September 30, 2015</b>            | <b>September 30, 2014</b> | <b>\$</b>     | <b>%</b> |
| Net sales                                     | 11,598,469                           | 14,377,604                | (2,779,135)   | -19%     |
| Gross profit                                  | 1,758,027                            | 2,430,147                 | (672,120)     | -28%     |
| Loss from operations                          | (8,729,252)                          | (11,317,569)              | 2,588,317     | -23%     |
| Net loss                                      | (8,506,171)                          | (11,064,294)              | 2,558,123     | -23%     |
| Weighted average number of shares outstanding | 57,099,413                           | 56,883,831                | 215,582       | 0%       |
| Basic and diluted loss per share              | (0.15)                               | (0.19)                    | 0.05          | -23%     |
| Adjusted EBITDA                               | (7,423,791)                          | (9,708,058)               | 2,284,267     | -24%     |

*Net Sales* – Net sales for the three months ended September 30, 2015 were \$3.3 million compared to \$4.8 million in the same period last year, a decrease of \$1.5 million or 31%. This decrease was due to lower sales volume of \$1.1 million and \$0.4 million of pricing pressure as a result of competitive pricing dynamics. The reduction in sales volume was primarily due to continued decreases in demand for coated paper in the North American market which has resulted in the closure of two paper mills in North America since August 2014. The closure of these paper mills negatively impacted our third quarter sales by \$0.4 million compared to last year.

Net sales for the nine months ended September 30, 2015 were \$11.6 million compared to \$14.4 million in the same period last year, a decrease of \$2.8 million or 19%. The decrease in sales was primarily due to lower sales volume of \$1.6 million and \$1.2 million of pricing pressure as a result of competitive pricing dynamics. The decrease in sales volume was primarily due to the closure of two paper mills in North America.

*Gross profit* – Gross profit for the three months ended September 30, 2015 remained consistent at \$0.5 million compared to the same period last year as the impact of pricing pressure and lower sales volume were offset by lower production costs and a \$0.3 million charge related to the closure of a North American paper mill in the third quarter of last year. Gross Profit as a percentage of revenue increased from 10.2% to 14.6% due to lower production costs and the \$0.3 million charge recognized last year partly offset by the unfavourable impact of pricing pressure. Gross profit adjusted for non-cash items and the \$0.3 million charge recognized last year as a percentage of sales remained consistent at 21.1% compared to the same period last year.

Gross profit for the nine months ended September 30, 2015 was \$1.8 million compared to \$2.4 million in the same period last year, a decrease of \$0.7 million or 28%. Gross profit as a percentage of sales decreased from 16.9% to 15.2% during the same period. The decrease in gross profit was principally due to pricing pressure and lower sales volume partly offset by lower manufacturing production costs and a \$0.3 million charge recorded in the prior year. Gross profit adjusted for manufacturing depreciation and a \$0.3 million charge recognized in prior year as a percentage of sales decreased from 24.8% in prior year to 20.8% in the current period

## Operating Expenses

The following table sets forth the breakdown of our operating expenses by category during the three and nine months ended September 30, 2015 and 2014:

|  | Three Months Ended (unaudited) |                    | Change             |             |
|--|--------------------------------|--------------------|--------------------|-------------|
|  | September 30, 2015             | September 30, 2014 | \$                 | %           |
| Selling, general and administrative <sup>1</sup> | 1,356,973                      | 2,949,959          | (1,592,986)        | -54%        |
| Research and development <sup>1</sup>            | 869,982                        | 1,230,949          | (360,967)          | -29%        |
| Share-based compensation                         | 79,000                         | 111,000            | (32,000)           | -29%        |
| Provision for termination benefits               | -                              | 38,960             | (38,960)           | -100%       |
| Depreciation and amortization                    | 134,883                        | 129,703            | 5,180              | 4%          |
| Foreign exchange loss (gain)                     | 56,404                         | 118,116            | (61,712)           | -52%        |
| <b>Total operating expenses</b>                  | <b>2,497,242</b>               | <b>4,578,687</b>   | <b>(2,081,445)</b> | <b>-45%</b> |

|  | Nine Months Ended (unaudited) |                    | Change             |             |
|--|-------------------------------|--------------------|--------------------|-------------|
|  | September 30, 2015            | September 30, 2014 | \$                 | %           |
| Selling, general and administrative <sup>1</sup> | 5,365,361                     | 8,727,247          | (3,361,886)        | -39%        |
| Research and development <sup>1</sup>            | 2,646,092                     | 3,949,158          | (1,303,066)        | -33%        |
| Share-based compensation                         | 241,427                       | 366,000            | (124,573)          | -34%        |
| Provision for termination benefits               | 1,220,080                     | 236,473            | 983,607            | 416%        |
| Depreciation and amortization                    | 414,594                       | 387,636            | 26,958             | 7%          |
| Foreign exchange loss (gain)                     | 599,725                       | 81,202             | 518,523            | 639%        |
| <b>Total operating expenses</b>                  | <b>10,487,279</b>             | <b>13,747,716</b>  | <b>(3,260,437)</b> | <b>-24%</b> |

<sup>1</sup> For the purposes of this MD&A, selling, general and administrative expenses and research and development expenses excludes share-based compensation, depreciation and amortization and foreign exchange loss / (gain)

Total operating expenses for the three months ended September 30, 2015 were \$2.5 million compared to \$4.6 million in the same period last year, a decrease of \$2.1 million or 45%. The decrease was primarily due to lower selling, general and administrative expenses and research and development costs. For the nine months ended September 30, 2015, total operating expenses decreased \$3.3 million or 24% from \$13.7 million last year to \$10.5 million. The decrease was primarily due to lower selling, general and administrative expenses and lower research and development costs which were partly offset by an increase in provision for termination benefits and foreign exchange losses during the year.

*Selling, general and administrative*<sup>1</sup> – Selling, general and administrative (SG&A) expenses were \$1.4 million for the three months ended September 30, 2015 compared to \$2.9 million in the same period last year, a decrease of \$1.6 million or 54%. SG&A expenses were \$5.4 million for the nine months ended September 30, 2015 compared to \$8.7 million in the same period last year, a decrease of \$3.4 million or 39%. The decrease in both periods was primarily due to lower salaries and benefits, lower bad debt expense and reduced discretionary spending. The reduction in salaries and benefits and discretionary spending was primarily attributable to the workforce reduction in the first quarter of fiscal 2015 and the favourable impact of a weaker Canadian dollar versus U.S. dollar. The Canadian dollar weakened approximately 20% during the current quarter compared to the same period last year. Bad debt expense decreased due to the recognition of a \$0.4 million charge to allowance for doubtful accounts in the third quarter last year.

*Research and development*<sup>1</sup> – Research and development costs (R&D) for the three months ended were \$0.9 million compared to \$1.2 million in the same period last year, a decrease of \$0.4 million or 29%. R&D costs for the nine months ended September 30, 2015 were \$2.6 million compared to \$3.9 million during the same period last year, a decrease of \$1.3 million or 33%. The decrease during both periods was primarily due to lower salaries and benefits, lower discretionary costs due to the favourable impact of a weaker Canadian dollar versus U.S. dollar and the recognition of \$0.6 million (year-to-date) in government grants associated with funding from Bioindustrial Innovation Canada (BIC), which was announced in September 2014.

*Provision for termination benefits* – During the first quarter of fiscal 2015, the Company recognized \$1.2 million in termination benefits as a result of a workforce reduction of approximately 20% and the termination of employment with the former CEO effective May 1, 2015. As a result of this termination of employment, the former CEO is entitled to an aggregate of \$0.9 million, representing a 24 month severance period, inclusive of all salary, perquisites, allowances, statutory entitlements and bonus accounts. Accordingly, the Company recorded a \$0.9 million provision for termination benefits during the first quarter of the current year. The former CEO is also entitled to a maximum of 24 months of severance related to the value of long-term incentives during this period. The Company has determined that no additional amounts are owed with respect to these long-term incentives as the associated performance conditions have not been met. Accordingly, the Company ascribes no value to the long-term incentives for the 24 month severance period. If the value of the long-term incentives is disputed, the Company's potential exposure is estimated to range from nil to \$0.7 million.

*Depreciation and amortization* – Depreciation and amortization for the three and nine months ended September 30, 2015 remained comparable to the same periods last year.

*Foreign currency exchange loss* – For the three months ended September 30, 2015, foreign exchange losses were \$0.1 million which was comparable to the same period in fiscal 2014. For the nine months ended September 30, 2015 foreign exchange losses were \$0.6 million compared to \$0.1 million in the same period last year, an increase of \$0.5 million. The increase in foreign exchange losses were primarily due to translation losses on cash balances denominated in Canadian dollars caused by the weakening of the Canadian dollar versus the U.S. dollar in the current year.

*Loss from operations* – Loss from operations for the three months ended September 30, 2015 were \$2.0 million compared to \$4.1 million in the same period last year, a decrease of \$2.1 million or 51%. For the nine months ended September 30, 2015, loss from operations were \$8.7 million compared to \$11.3 million in the same period last year, a decrease of \$2.6 million or 23%. The decrease during the three months ended September 30, 2015 was primarily due to lower operating expenses of \$2.1 million. The decrease during the nine months ended September 30, 2015 was primarily due to lower operating expenses of \$3.3 million partly offset by lower gross profit of \$0.7 million.

*Interest income* – Interest income for the three and nine months ended September 30, 2015 decreased slightly compared to prior year principally due to lower cash on hand.

*Net Loss* – Net loss for the three months ended September 30, 2015 was \$1.9 million or \$0.03 per common share compared to \$4.0 million or \$0.07 per common share in the same period last year, a decrease of \$2.1 million or 51%. Net loss for the nine months ended September 30, 2015 were \$8.5 million or \$0.15 per common share compared to \$11.1 million or \$0.19 per common share last year, a decrease of \$2.6 million or 23%. The decrease in both periods is primarily due to a decrease in loss from operations.

## Financial Condition

|                           | September 30 | December 31, | Change      |      |
|---------------------------|--------------|--------------|-------------|------|
|                           | 2015         | 2014         | \$          | %    |
| Total current assets      | 67,999,062   | 75,355,310   | (7,356,248) | -10% |
| Total assets              | 79,492,631   | 87,098,065   | (7,605,434) | -9%  |
| Total current liabilities | 1,658,167    | 1,571,976    | 86,191      | 5%   |

*Total current assets* – Total current assets were \$68.0 million compared to \$75.4 million at December 31, 2014, a decrease of \$7.4 million or 10%. The decrease was primarily due to lower cash of \$5.2 million and lower inventory of \$1.6 million. The decrease in cash was principally due to \$4.6 million of cash utilized in operating activities, \$0.8 million of capital asset purchases and revaluation losses of \$0.8 million caused by the weaker Canadian dollar versus U.S. dollar. These decreases were partly offset by \$0.5 million of cash proceeds related to government grants and \$0.6 million of cash received through the exercise of common share options.

*Total assets* – Total assets at September 30, 2015 were \$79.5 million compared to \$87.1 million, a decrease of \$7.6 million or 9%. The decrease was principally due to lower current assets.

*Total current liabilities* – Total current liabilities at September 30, 2015 remained comparable at \$1.7 million compared to December 31, 2014.

## **Liquidity and Capital Resources**

We currently fund our business operations through cash flow generated from our operations and 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 provided by / (used in) operating activities, financing activities and investing activities for the three and nine months ended September 30, 2015 and 2014:

|  | Three months ended (unaudited) |                    | Change             |             |
|--|--------------------------------|--------------------|--------------------|-------------|
|  | September 30, 2015             | September 30, 2014 | \$                 | %           |
| Cash used in operating activities                            | (251,507)                      | (3,391,847)        | 3,140,340          | -93%        |
| Cash used in investing activities                            | (140,573)                      | (8,300)            | (132,273)          | 1594%       |
| Cash provided by/(used in) financing activities              | 573,119                        | (220,495)          | 793,614            | -360%       |
| Effect of exchange rate changes on cash and cash equivalents | (253,994)                      | -                  | (253,994)          | n/a         |
| Net decrease in cash   | (72,955)                       | (3,620,642)        | 3,547,687          | -98%        |
| Beginning cash   | 62,168,543                     | 73,863,213         | (11,694,670)       | -16%        |
| <b>Ending cash</b>   | <b>62,095,588</b>              | <b>70,242,571</b>  | <b>(8,146,983)</b> | <b>-12%</b> |

|  | Nine months ended (unaudited) |                    | Change             |             |
|--|-------------------------------|--------------------|--------------------|-------------|
|  | September 30, 2015            | September 30, 2014 | \$                 | %           |
| Cash used in operating activities                            | (4,631,035)                   | (9,477,610)        | 4,846,575          | -51%        |
| Cash used in investing activities                            | (777,720)                     | (279,993)          | (497,727)          | 178%        |
| Cash provided by/(used in) financing activities              | 1,028,868                     | (506,783)          | 1,535,651          | -303%       |
| Effect of exchange rate changes on cash and cash equivalents | (770,495)                     | -                  | (770,495)          | n/a         |
| Net decrease in cash   | (5,150,382)                   | (10,264,386)       | 5,114,004          | -50%        |
| Beginning cash   | 67,245,970                    | 80,506,957         | (13,260,987)       | -16%        |
| <b>Ending cash</b>   | <b>62,095,588</b>             | <b>70,242,571</b>  | <b>(8,146,983)</b> | <b>-12%</b> |

*Cash used in operating activities* – Cash used in operating activities for the three months ended September 30, 2015 was \$0.3 million compared to \$3.4 million in the same period last year, a decrease of \$3.1 million or 93%. The decrease was due to a \$2.2 million reduction in net losses adjusted for non-cash items and an increase in cash generated through lower working capital of \$0.9 million. Net losses adjusted for non-cash items decreased primarily due to lower operating expenses. Working capital as at September 30, 2015 decreased \$1.0 million compared to June 30, 2015 primarily due to lower accounts receivable of \$1.0 million and decreased inventory of \$0.5 million partly offset by lower accounts payable and accrued liabilities of \$0.4 million. Working capital as at September 30, 2014 decreased \$0.1 million compared to June 30, 2014 as lower accounts receivable balances were partly offset by an increase in inventory.

Cash used in operating activities for the nine months ended September 30, 2015 was \$4.6 million compared to \$9.5 million in the same period last year, a decrease of \$4.8 million or 51%. The decrease was primarily due to a \$2.5 million reduction in net losses adjusted for non-cash items and an increase in cash generated through lower working capital of \$1.9 million. Net losses adjusted for non-cash items decreased primarily due to lower operating expenses partly offset by lower gross profit. Working capital as at September 30, 2015 decreased \$1.8 million compared to December 31, 2014 primarily due to lower inventory and accounts receivable balances were partly offset by an increase in government grant receivables. Working capital at September 30, 2014 remained comparable to December 31, 2013 as lower accounts receivable were offset by lower accounts payable and accrued liabilities.

*Cash used in investing activities* – Cash used in investing activities for the three and nine months ended September 30, 2015 were \$0.1 million and \$0.8 million, respectively, compared to a nominal amount and \$0.3 million for the same periods last year, respectively. The increase was due to capital asset purchases related to our high-priority development projects.

*Cash provided by/(used in) financing activities* – Cash provided by financing activities during the three and nine months ended September 30, 2015 were \$0.6 million and \$1.0 million, respectively, compared to cash used in financing activities of \$0.2 million and \$0.5 million in the same periods last year. During the current quarter \$0.6 million of cash proceeds were received from the exercise of common share options. In the third quarter of fiscal 2014, \$0.2 million of common shares were repurchased related to a normal course issuers bid (“NCIB”).

For the nine months ended September 30, 2015, the Company received \$1.0 million of proceeds of which \$0.6 million were received through the exercise of share options and \$0.5 million were received related to government grants. For the nine months ended September 30, 2014, \$0.7 million of common shares were repurchased related to the NCIB which was partly offset by \$0.2 million of proceeds received through the exercise of warrants.

*Effect of exchange rate changes on cash* – During the three and nine months ended September 30, 2015, the effect of exchange rates changes on cash and cash equivalents was a loss of \$0.3 million and \$0.8 million, respectively. The loss related to the revaluation of our cash denominated in Canadian dollars and the impact of a weaker Canadian dollar versus 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 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 September 30, 2015:

|                          |             |
|--------------------------|-------------|
| Less than one year ..... | \$ 570,525  |
| One – two years .....    | \$1,687,325 |
| Two – three years .....  | \$ 376,082  |
| Three – four years ..... | \$ 330,671  |
| Thereafter .....         | \$ 661,343  |

During the normal course of operations, 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. As at September 30, 2015, the Company was committed to purchases of feedstock in the approximate amount of \$1.8 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 September 30, 2015. 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.

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. 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 operating costs are expanding.

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

|   | Three months ended (unaudited) |                 |                   |                      |                       |                  |                   |                      |
|---|--------------------------------|-----------------|-------------------|----------------------|-----------------------|------------------|-------------------|----------------------|
|   | September 30<br>2015           | June 30<br>2015 | March 31,<br>2015 | December 31,<br>2014 | September 30,<br>2014 | June 30,<br>2014 | March 31,<br>2014 | December 31,<br>2013 |
| Net sales                                     | 3,333,534                      | 4,094,987       | 4,169,948         | 4,464,141            | 4,840,892             | 4,542,648        | 4,994,064         | 5,159,069            |
| Gross profit                                  | 486,839                        | 689,920         | 581,268           | 740,502              | 494,479               | 952,679          | 982,989           | 895,594              |
| Loss from operations                          | (2,010,403)                    | (2,514,339)     | (4,204,510)       | (3,528,101)          | (4,084,208)           | (3,828,006)      | (3,405,355)       | (3,723,691)          |
| Net loss                                      | (1,941,231)                    | (2,440,321)     | (4,124,619)       | (3,450,295)          | (4,000,178)           | (3,741,862)      | (3,322,254)       | (3,636,080)          |
| Weighted average number of shares outstanding | 58,323,037                     | 56,477,460      | 56,477,460        | 56,580,168           | 56,628,449            | 56,655,530       | 56,731,241        | 55,802,382           |
| Basic and diluted loss per share              | (0.03)                         | (0.04)          | (0.07)            | (0.06)               | (0.07)                | (0.07)           | (0.06)            | (0.07)               |
| Adjusted EBITDA <sup>(1)</sup>                | (1,580,207)                    | (2,010,816)     | (3,832,768)       | (2,914,246)          | (3,593,261)           | (3,274,361)      | (2,840,436)       | (3,264,621)          |

|                                | Three months ended (unaudited) |                  |                   |                      |                       |                  |                   |                      |
|--------------------------------|--------------------------------|------------------|-------------------|----------------------|-----------------------|------------------|-------------------|----------------------|
|                                | September 30<br>2015           | June 30,<br>2015 | March 31,<br>2015 | December 31,<br>2014 | September 30,<br>2014 | June 30,<br>2014 | March 31,<br>2014 | December 31,<br>2013 |
| Net loss                       | (1,941,231)                    | (2,440,321)      | (4,124,619)       | (3,450,295)          | (4,000,178)           | (3,741,862)      | (3,322,254)       | (3,636,080)          |
| Depreciation and amortization  | 351,196                        | 376,096          | 336,742           | 523,855              | 379,947               | 433,645          | 429,919           | 596,824              |
| Share-based compensation       | 79,000                         | 127,427          | 35,000            | 90,000               | 111,000               | 120,000          | 135,000           | (137,754)            |
| Interest income                | (69,172)                       | (74,018)         | (79,891)          | (77,806)             | (84,030)              | (86,144)         | (83,101)          | (87,611)             |
| Adjusted EBITDA <sup>(1)</sup> | (1,580,207)                    | (2,010,816)      | (3,832,768)       | (2,914,246)          | (3,593,261)           | (3,274,361)      | (2,840,436)       | (3,264,621)          |

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).

## Adjusted EBITDA

Adjusted EBITDA loss for the three months ended September 30, 2015 was a loss of \$1.6 million compared to a loss of \$3.6 million in the same period last year, a decrease of \$2.0 million or 56%. The decrease was principally due to lower operating expenses.

Adjusted EBITDA loss for the nine months ended September 30, 2015 was a loss of \$7.4 million compared to a loss of \$9.7 million, a decrease of \$2.3 million or 24%. Adjusting for the provision for termination benefits and unrealized foreign exchange translation losses, adjusted EBITDA for the nine months ended was \$5.9 million compared to \$9.5 million, a decrease of \$3.5 million or 37%.

## 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 involves 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 (loss) 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, preferred stock options (PSOs), restricted share unit plan (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 values 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 can also be subject to the achievement of performance hurdles. If applicable, 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**

There were no changes in the Company's internal control over financial reporting during the three months ended September 30, 2015 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, 2014. 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, 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 September 30, 2015, the Company had the equivalent of 58,868,912 common shares issued and outstanding assuming conversion of all rights pursuant to the put/call agreement. In addition, 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 60,442,764 common shares issued and outstanding on a fully diluted basis as at September 30, 2015.

### **Outlook**

While market softness in the coated paper industry is anticipated to continue into the next few quarters, the Company's focus on product innovation, market diversification and disciplined organizational growth has created strengthening momentum in EcoSynthetix's commercial efforts beyond this sector. Converting on these opportunities has the potential to more than offset the decline in sales to coated paper producers. Additionally, the Company's strong organization, robust intellectual property and product portfolio, as well as its solid financial

position, form a strong foundation on which to build sustainable growth.

### **1. Defined product pipeline**

EcoSynthetix has allocated development resources to select projects, in a targeted and disciplined manner, in order to expand its bio-based product portfolio. The Company is focused on opportunities that demonstrate both technical feasibility and strong commercial value in the short- and long-term.

In addition to its existing bio-solutions for the paper coating and wood composites space, EcoSphere and DuraBind, respectively, EcoSynthetix is developing a defined number of additional products using its proprietary chemistries and manufacturing processes. The Company continues to invest in a small number of longer-term development opportunities, including those in conjunction with its university partners.

### **2. Diversified business verticals**

EcoSynthetix is focused on expanding its presence in paper while also commercializing its offerings in new markets, including building products.

EcoSynthetix has identified applications for its bio-based solutions across targeted segments of the paper value chain where it can offer a strong value proposition. As such, it has signed a marketing agreement with a leading Asian specialty chemicals supplier, Amazon Papyrus, to market, sell and distribute EcoSphere biolatex in China. The relationship will allow the Company to tap into an important and growing market in the pulp and paper industry by getting the EcoSphere product in front of key decision makers in the near-term. The Company anticipates that building a strong presence in China will be beneficial as it looks to introduce other bio-based solutions across the paper value chain over the longer-term. Although this is a new relationship that will take time to start delivering commercial results, both parties are committed to the development of opportunities.

Third party analysis has confirmed that the characteristics of DuraBind supports a strong value proposition. This is further reinforced by the Company's ability to secure multi-shift trials with select accounts as clear validation of the commercial value created by using DuraBind in the wood composites space, and provides a strong indication that the Company remains on track for commercial success in the near term.

### **3. Disciplined organizational growth**

EcoSynthetix right-sized its organization in early 2015 by redeploying resources to high-priority projects with meaningful revenue potential. Today, a majority of the Company's human and financial resources are allocated towards commercializing the DuraBind solution in the wood composites space. Going forward, prudent resource allocation will be closely tied to the Company's innovation engine and sales cycle; this approach will ensure that EcoSynthetix returns to its expected growth trajectory.