ANNUAL INFORMATION FORM
FOR THE FINANCIAL YEAR ENDED DECEMBER 31, 2011

March 30, 2012

3365 Mainway,
Burlington, Ontario
L7M 1A6

ECOSYNTHETIX INC.
ANNUAL INFORMATION FORM
FOR THE FINANCIAL YEAR ENDED DECEMBER 31, 2011

TABLE OF CONTENTS

DESCRIPTION **PAGE NO.**

INTRODUCTORY NOTES 1
CORPORATE STRUCTURE 4
GENERAL DEVELOPMENT OF THE BUSINESS 5
DESCRIPTION OF THE BUSINESS 6
RISK FACTORS 16
DIVIDENDS 29
DESCRIPTION OF CAPITAL STRUCTURE 30
TRADING PRICE AND VOLUME 30
DIRECTORS AND OFFICERS 31
LEGAL PROCEEDINGS AND REGULATORY ACTIONS 34
INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS 35
TRANSFER AGENT AND REGISTRAR 35
MATERIAL CONTRACTS 35
INTERESTS OF EXPERTS 35
AUDIT COMMITTEE 35
ADDITIONAL INFORMATION 37
SCHEDULE "A"

INTRODUCTORY NOTES

General Matters

The information in this annual information form is stated as at March 30, 2012, unless otherwise indicated.

Unless otherwise noted or the context otherwise indicates, “EcoSynthetix”, the “Company”, “we”, “us” and “our” refer to EcoSynthetix Inc. and its direct and indirect subsidiaries or other entities controlled by them.

Cautionary Note Regarding Forward-Looking Statements

Certain statements contained in this annual information form 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.

With respect to forward-looking information contained in this annual information form, we have made material assumptions regarding, among other things: (i) that the general business, economic and competitive conditions remain favourable; (ii) that our intellectual property rights are adequately protected; (iii) our ability to obtain the materials necessary for the production of our products; (iv) our ability to market products successfully to our customers; (v) that we will continue to face no direct competition; (vi) changes in demand for and prices of our products or the materials required to produce those products; (vii) labour and material costs remaining consistent with our current expectations; and (viii) 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: (i) an inability to protect, defend, enforce or use our intellectual property and/or infringement of third-party intellectual property; (ii) our dependence on certain customers and changes in customer demand; (iii) the availability and price of natural feedstocks used by us in the production of our products; (iv) the inability to effectively expand our production facilities; (v) variations in our financial results; (vi) increase in industry competition; (vii) the risk of volatility in global financial conditions, as well as significant decline in general economic conditions; (viii) our ability to effectively commercially market and sell our products; (ix) our ability to protect our know-how and trade secrets; (x) company growth and the impact of significant operating and capital cost increases; (xi) changes in the current political and regulatory environment in which we operate; (xii) the inability to retain key personnel; (xiii) 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; (xiv) enforcement of intellectual property rights; (xv) a significant decrease in the market price of petroleum; (xvi) a shortage of supplies, equipment and parts; (xvii) the inability to secure additional government grants; (xviii) a deterioration in our cash balances or liquidity; (xix) the inability to obtain equity or debt financing; (xx) the ability to acquire intellectual property; (xxi) the risk of litigation; (xxii) changes in government regulations and policies relating to our business; (xxiii) losses from hedging activities and changes in hedging strategy; (xxiv) insufficient insurance coverage; (xxv) the inability to expand technology; (xxvi) the impact of issuance of additional equity securities on the trading price of the Common Shares; (xxvii) the impact of ethical, legal and social concerns relating to genetically modified organisms and the food versus fuel debate; (xxviii) the risk of business interruptions; (xxix) fluctuations in the market price of the Common

Shares; (xxx) our intent to retain earnings; (xxxi) the company is a holding company; (xxxii) the impact of changes in interest rates; (xxxiii) the impact of changes in foreign currency exchange; and (xxxiv) credit risk. There may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. These factors are not intended to represent a complete list of the risk factors that could affect us. Additional risk factors are discussed in the section entitled "Risk Factors" in this annual information form. These factors should be considered carefully and readers 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 herein 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 herein is made as of the date of this annual information form 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, readers should not place undue reliance on forward-looking information.

Market and Industry Data

We have obtained the market and industry data presented in this annual information form from third party and Company information, including from independent industry publications. While we believe the third party information is reliable, we have not verified it, nor has it been verified by any independent sources. While we are not aware of any misstatements regarding the market and industry data presented in this annual information form, such data involves risks and uncertainties and is subject to change based on various factors, including those factors discussed under "Cautionary Note Regarding Forward-Looking Statements" and "Risk Factors".

This annual information form contains references to metric tons and pounds. The following are the conversion rates for these two units of measure:

Metric Tons	=	Pounds
1		2,204.6

Trade-Marks, Business Names and Service Marks

This annual information form includes trade-marks, such as ECOSYNTHETIX®, ECOSPHERE®, BIOLATEX®, ECOMER® and ECOSTIX® which are registered in the United States, among other jurisdictions, in the name of EcoSynthetix Ltd. ("**EcoSynthetix U.S.**"). Solely for convenience, trade-marks and business names referred to in this annual information form may appear without the ™ or ® symbol, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights. See "Description of the Business — Intellectual Property"

Currency Presentation and Exchange Rate Information

This annual information form contains references to United States dollars and Canadian dollars. The Company presents its consolidated financial statements in United States dollars. All dollar amounts referenced, unless otherwise indicated, are expressed in United States dollars and Canadian dollars are referred to as "Canadian dollars" or "C$".

The high, low, average and closing exchange rates for Canadian dollars in terms of the United States dollar for the year ended December 31, 2011, as quoted by the Bank of Canada, were as follows:

Year ended December 31 2011

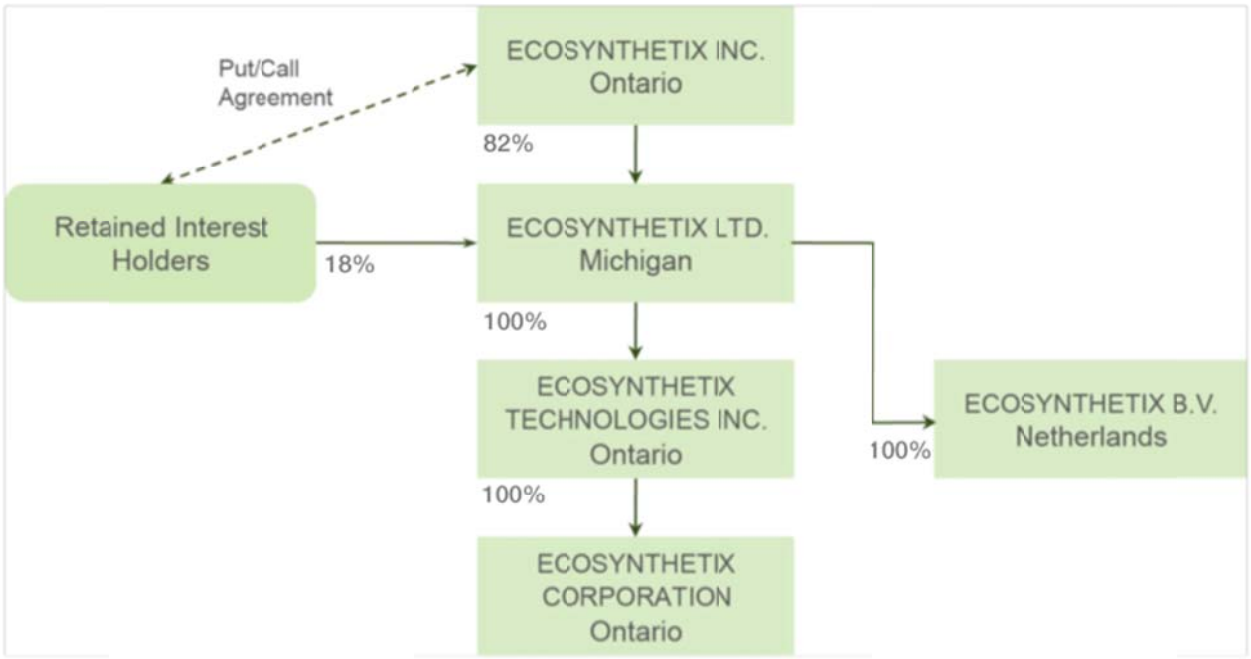
High	C$1.0604
Low	0.9449
Average [(1)]	0.9891
Closing	1.0170

(1) Calculated as an average of the daily noon rates for each period.

CORPORATE STRUCTURE

EcoSynthetix Inc. was incorporated under the *Business Corporations Act* (Ontario) (the "**OBCA**") on May 20, 2011. Our registered and head office is located at 3365 Mainway, Burlington, Ontario L7M 1A6.

The following chart illustrates the Company's principal subsidiaries (collectively, the "Subsidiaries"), together with the governing law of each company and the percentage of voting securities beneficially owned or over which control or direction is exercised by the Company.



GENERAL DEVELOPMENT OF THE BUSINESS

History

EcoSynthetix was founded to develop bio-based materials with performance capabilities equal to or greater than those of standard petroleum-based products, while also offering significant carbon footprint reductions.

The initial focus of EcoSynthetix was to develop bio-based products to meet the needs of the adhesives industry. In 2001, the research the company had undertaken resulted in a new technology platform to produce what is now called ECOSPHERE BIOLATEX. In 2005 the Company evaluated the use of ECOSPHERE BIOLATEX polymer as a binder in coated paper applications. This led to a commercial product launch in the 2006 and a first commercial customer in early 2008. During the years ended December 31, 2008, 2009 and 2010, EcoSynthetix U.S. completed various financings to scale up the ECOSPHERE BIOLATEX binders for production, research and development and commercialization activities.

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 representing greater than 60% of the global paper and paperboard market are either evaluating or commercial with our ECOSPHERE BIOLATEX binders.

We have also made significant investments to expand our production facilities. During 2009, we established a contract manufacturing partner agreement with PolyOne Corporation, located in Dyersburg, TN. The current line has an annualized capacity of 35 million pounds per year. An additional production line is currently being commissioned to increase the North American annualized capacity to 115 million pounds in 2012. During 2011 we also entered into a contract manufacturing partner agreement with Rodenburg Biopolymers for production in The Netherlands to support international expansion. The current annualized capacity at the European facility is 120 million pounds. Having additional capacity puts us in a stronger position as we build our customer base globally.

In January 2011, our research and development activities were moved from Michigan to our new 34,000 square foot head office and Global Innovation and Technology Demonstration Center (Center of Innovation) in Burlington, Ontario. This center houses a state-of-the-art pilot production line where we focus on developing and commercializing our products.

On August 4, 2011, the Company completed an initial public offering of 11,150,000 common shares (the "Common Shares") at a price of C$9.00 per share for gross proceeds of C$100,350,000. In connection with the offering, EcoSynthetix U.S. was acquired by the Company from certain of the existing shareholders in exchange for 33,640,663 Common Shares, on the basis of seven Common Shares for each share of common stock of EcoSynthetix U.S. held. The remaining approximately 23% of the outstanding shares of common stock of EcoSynthetix U.S. continued to be held by retained interest holders (the "**Retained Interest Holders**"). The Retained Interest Holders and the Company entered into a put/call agreement pursuant to which the Retained Interest Holders will be entitled to sell their shares of common stock of EcoSynthetix U.S. (the "**Covered Shares**") to the Company at any time prior to the date that is five years following the closing of the offering (the "**Put Expiry Date**") in exchange for Common Shares of the Company on the basis of seven common shares for one Covered Share, subject to adjustment. In addition, the Company will be entitled to purchase the Covered Shares held by the Retained Interest Holders at any time from the period commencing one year following the Put Expiry Date to the date that is two years following the Put Expiry Date in exchange for seven common shares for one Covered Share, subject to adjustment.

The Company's common shares trade on the Toronto Stock Exchange under the symbol "ECO" and commenced trading on August 4, 2011. As at March 29, 2012, the Company had the equivalent of 55,250,010 common shares issued and outstanding, assuming conversion of all rights pursuant to the put/call agreement. Assuming the exercise of all outstanding warrants and exercise of all outstanding share options, there would be the equivalent of 61,441,928 common shares issued and outstanding on a fully diluted basis.

DESCRIPTION OF THE BUSINESS

Company Overview

We are a renewable chemicals company specializing in bio-based products that can be used as inputs in industrial manufacturing for a wide range of consumer products. Our strategy is to commercialize a broad range of bio-based polymer and monomer products that are suitable across a wide range of industries. We have commercial bio-based products that have equal or superior performance and cost advantages compared to currently available petroleum-based products. Our lead product, ECOSPHERE BIOLATEX binders, achieved commercialization in the coated paper and paperboard industry and the personal care industry. While our technology platform offers a significantly reduced carbon footprint, we market our products to customers on the basis of reduced cost, sustainability, stable pricing and equal or superior performance. We have existing relationships with leading customers across multiple industries.

We have additional technology platforms under pilot testing producing bio-based chemicals under the trade-marks ECOMER and ECOSTIX which target applications requiring functionalized monomers, additive and adhesion functionalities. Within this technology platform, we can address additional applications including toners, water-based inks, water-based paints and coatings, surfactants and various pressure sensitive adhesives ("**PSAs**").

We have developed processes that leverage "green" technology to produce bio-based materials from natural feedstocks as an alternative to petroleum-derived feedstocks. Natural feedstocks enable our "green" technology to use a renewable source that is sustainable and friendlier to the environment than traditional petroleum alternatives and reduce the price volatility associated with petroleum feedstocks. To date, we have developed the following two bio-based technology platforms with broad applications across industries: (i) a biopolymer nanosphere technology based on biopolymer nanoparticles that has been fully scaled and validated and is currently the platform for ECOSPHERE BIOLATEX polymers; and (ii) a bio-based sugar macromer technology that has been validated on a pilot commercial scale and is in the process of being developed for full commercialization and provides the platform for ECOMER and ECOSTIX.

Products

Current Products

Based on our two bio-based technology platforms, our current product families are ECOSPHERE BIOLATEX polymers, ECOMER and ECOSTIX.

ECOSPHERE BIOLATEX Polymers

ECOSPHERE BIOLATEX polymers are a family of bio-based material derived from the biopolymer nanosphere technology platform that performs as an alternative to petroleum-based latex. The ECOSPHERE BIOLATEX polymer platform targets applications requiring binder, encapsulation and/or adhesion functionalities. The key performance characteristics of the ECOSPHERE BIOLATEX polymers make them viable materials for use in a variety of industries as a direct, economical substitute for petroleum-based latex. Positioned at a price point lower than petroleum-based latex, ECOSPHERE BIOLATEX binders have demonstrated that they possess a strong market potential in a highly concentrated competitive industry that is searching for margin enhancement opportunities. The switch by potential customers from petroleum-based products can be largely done without alteration to our customers' current equipment and processes, and where alterations are necessary, only minor alterations and minimal capital expenditures are generally required.

ECOSPHERE BIOLATEX polymers are in commercial use at mills around the world, providing cost savings, price stability, quality and productivity improvements, and environmental benefits.

The following chart highlights an example of the performance benefits of our ECOSPHERE BIOLATEX binders at 35% replacement as compared to traditional Styrene Butadiene ("**SB**") latex products in coated paper.

ECOSPHERE BIOLATEX Binder and Synthetic SB Latex Comparison			
Paper Properties	**ECOSPHERE BIOLATEX Binder**	**Synthetic SB Latex**	**Impact**
Gloss	70%	70%	↔
Opacity	95%	92%	↑
Brightness	91%	90%	↑
Whiteness	96%	95%	↑
Stiffness	10%- 30% Better		↑
Binder Strength	Better		↑
Print Mottle	Better		↑
Porosity	Better		↑
Fluorescence	Same		↔
Plybond	Same		↔
Tear & Burst Strength	Same		↔
Cost	Lower	Rising with oil	↑

Source: Customer product testing

Adding to our commercial success in the paper and paperboard industries, we intend to expand the current applications to include product extensions in these markets as well as additional new markets in which we have development activities underway, including: insulation for building and construction, including fiberglass and mineral wool insulation; binders for mining and mineral industries, including pelletization and flotation agents; and various other industries.

ECOMER

ECOMER is a family of novel patented sugar-based macromers that are available to polymer manufacturers as bio-based building blocks to create new waterborne sugar-acrylic polymers and resins. ECOMER is derived from the bio-based sugar macromer technology. Just as ECOSPHERE BIOLATEX polymers can partially replace petrochemical polymers such as SB latex, ECOMER as a bio-monomer can partially replace a wide variety of petrochemical monomers such as acrylate monomers, vinyl monomers and many others. An example of an acrylate monomer is butyl acrylate which is used to make polymers which are used in many industrial applications such as paints, adhesives, plastics, inks, toners, plasticizers and surfactants. There are multiple reasons for substituting monomers with ECOMER, including the fact that traditional monomers are derived from oil, which make them non-renewable, unsustainable and subject to price volatility. ECOMER can also impart new properties and improved performance capabilities to the end-product over traditional petrochemical monomers.

As a bio-based chemical building block, ECOMER can be used to replace petrochemical monomers to make traditional petrochemical polymers “greener” and give them new functionality. Different sugars and alcohols

can be used to make a number of grades of ECOMER for specific industrial applications. As one example among numerous applications, we have been able to chemically link ECOMER within the polymer structure of acrylic copolymers to provide new recycling-friendly PSAs. See "Description of the Business — Products — ECOSTIX" below.

ECOMER can be used in a variety of markets and we plan to scale the production of ECOMER to a level where it can be a cost effective substitute. We have scaled ECOMER to a small scale (500 gallon reactors) for internal production of an ECOMER containing PSA used for labels, stamps and tapes.

ECO STIX

ECOSTIX products are suitable for use in the development of waterborne PSAs. ECOSTIX is derived by chemically reacting ECOMER with an acrylic monomer to make a sugar-based vinyl copolymer which functions as a PSA. These waterborne PSAs have unique properties that will allow them to address specific end-use needs such as wash-off labels for recyclable packaging and fruit labeling, repulpable tapes, paper labels and postage stamps which do not interfere in paper recycling, high temperature resistant labels for automotive ("under the hood") applications and biodegradation for adhesion to materials that are compostable such as bio-based plastic films as well as paper.

Future Products

We are continuing to expand the functionality and application of our current product families of ECOSPHERE BIOLATEX polymers, ECOMER and ECOSTIX. Processes and formulations will be refined further to tailor our products for specific customer performance requirements and additional grades will be developed to expand the applications. Under the scope of new bio-based technology platforms being considered, we believe that we will have product family extensions through the introduction of new modified starches as feedstock materials in our proprietary extrusion manufacturing process.

Within the biopolymer nanosphere technology platform, new ECOSPHERE BIOLATEX polymers product extensions will be developed to further penetrate the paper industry in order to satisfy additional customer needs in both paper coating, as well as in the 'wet end' of the paper manufacturing process. In addition, we intend that our new rapid prototyping facility at our Center of Innovation will be deployed in the development of a number of new application-specific ECOSPHERE BIOLATEX polymer grades for new business development opportunities that are being actively pursued.

Within the bio-based sugar macromer technology platform, the scale-up of the ECOMER monomer will enable us to further develop a myriad of new copolymer products, in a similar manner as the development of the ECOSTIX product, as this bio-based monomer can be copolymerized with a wide range of other commonly-available monomer types. In addition, we intend to evaluate the option of producing and selling the ECOMER monomer to a wide number of other chemical companies who could use this product as a bio-based feedstock in the development of new biopolymers that they could bring to the market. We believe that an important ECOMER product extension would be to incorporate more bio-based components into the synthetic pathway during the manufacture of ECOMER, which would ultimately result in higher bio-based content offerings of ECOMER.

Research and Development

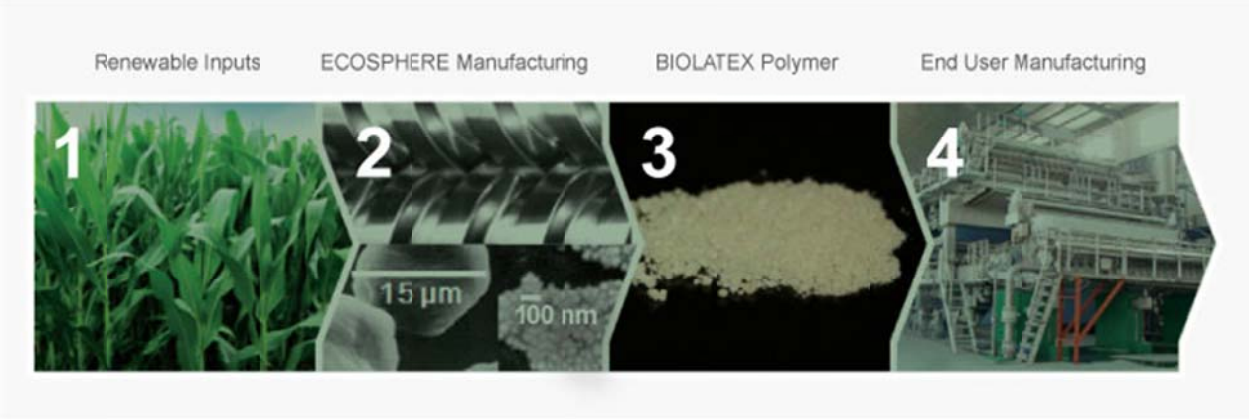
We are engaging in research and development at our Center of Innovation to expand the potential applicability of ECOMER and ECOSTIX. Such research and development efforts will occur through 2015 and will focus on the scale up of ECOMER and ECOSTIX in order to achieve commercialization. To achieve this, the additional steps required are the establishment of a pilot production facility, application development work, customer validation and commercial scale-up.

Technology

Our technology platforms are used to produce monomer and polymer products. A monomer is a small molecule that may bind chemically to other monomers through a process referred to as polymerization. A polymer is the resulting large molecule composed of repeating monomers that encompass a large class of natural and synthetic materials with a wide variety of properties. Our two existing technology platforms consist of: (i) our biopolymer nanosphere technology based on biopolymer nanoparticles that is currently the platform for the ECOSPHERE BIOLATEX polymers; and (ii) our bio-based sugar macromer technology that is currently the platform for the ECOMER and ECOSTIX products.

Biopolymer Nanosphere Technology

As illustrated below, ECOSPHERE BIOLATEX polymers are manufactured from starch derived from corn, potato, tapioca, or other natural feedstocks, mixed with other ingredients and subjected to our continuous extrusion process that ultimately produces crosslinked biopolymer nanoparticles. The process results in a dry powder that is then shipped to customers, including coated paper and paperboard manufacturers. Dry shipment eliminates the need to ship the binder as an aqueous 50% solid latex dispersion typical of SB and Styrene Acrylate ("**SA**") latex emulsions, thereby significantly reducing transportation costs and the associated carbon footprint.



Starch, which occurs naturally in various plant forms, consists of microscopic granules that the plant uses for energy storage. Dissolving starch requires the use of water, heat and caustic chemicals resulting in a thick starch liquid or paste with limited use in industrial applications. In contrast, our process removes the native granular structure and reduces the particle size diameter by a factor of 300 to 600 resulting in a nanoparticle that is $1/1000^{th}$ the width of a human hair.

The fundamental design of the biopolymer nanoparticle latex is similar to that of synthetic latexes, although the process for producing them is completely different. While synthetic latex is produced through a chemical process that takes petroleum-based monomers and links them together to form polymers (polymerization), the ECOSPHERE BIOLATEX nanoparticles are produced with our patent-protected process by converting starch into a liquid paste that is then transformed into crosslinked biopolymer nanoparticles. The resulting dry ECOSPHERE BIOLATEX polymer is a powder in which each particle is a cluster of millions of individual nanoparticles. The individual nanoparticles are released when they are dispersed into water.

Bio-based Sugar Macromer Technology

The technology for producing the sugar-based polymer resins involves: (i) the synthesis of a sugar macromer, and (ii) an emulsion copolymerization process.

The bio-based sugar macromer technology platform uses glucose (dextrose) derived from cornstarch as the feedstock for the synthesis of a sugar-based building block, referred to as 'sugar macromer'. The macromer resin contains two polymerizable groups that facilitate incorporation of the sugar units into the backbone of the

copolymer. The sugar macromer is copolymerized with conventional vinyl monomers, such as vinyl acetate, acrylates or styrene in a water-based emulsion polymerization process to create new waterborne sugar-acrylic adhesives and resins.

The copolymer structure can be varied to provide a wide range of pressure sensitive and non-pressure sensitive sugar-vinyl copolymers ranging in glass transition temperature and chemical functionality. As an example, ECOMER is formed by a chemical reaction of sugar, maleic anhydride and alcohol:

SUGAR + MALEIC ANHYDRIDE + ALCOHOL ➔ ECOMER (MALEATED ALKYLPOLYGLYCOSIDE)

These sugar macromers, referred to as ECOMER, provide new performance attributes and provide a viable path to a new generation of renewable bio-synthetic hybrid polymer systems that would be suitable in a wide variety of industrial applications. The sugar macromer is a resinous solid in its pure form that flows at temperatures of 45 to 55 degrees Celsius. It can be dissolved in other vinyl comonomers such as butyl acrylate or methyl methacrylate to provide a low-viscosity fluid. Sugar macromers are considered "Generally Recognized As Safe" by the U.S. Food and Drug Administration and contain no volatile organic compounds ("**VOCs**"), which make them safer to use than petrochemical monomers.

Feedstock Flexibility

Our products are derived from renewable crop sources and our processes provide flexibility in the feedstocks that we can use. Feedstock sources include starches, such as corn, potatoes, tapioca and dextrose from cornstarch and other natural feedstocks, such as plasticizers, proteins and oils. Natural feedstocks can be used in our technology platform interchangeably, without alteration to our equipment or processes. Our ability to readily substitute the feedstock source from multiple suppliers based on local and global supply/demand balance allows us significant flexibility. Our current primary starch-based feedstock is corn due to its existing infrastructure, accessible commodity markets and strong agricultural base. As our operations expand into Asia, we expect that tapioca will be a key source of feedstock in local operations due to the availability and cost. Another benefit is that we can procure renewable crops from a wide range of supply sources, which allow us to optimize economics and performance. Consequently, this will allow our technology to be deployed worldwide and will enable us to offer our customers protection from the raw material cost volatility historically associated with petroleum-based products. We believe our technology will not impact the food versus fuel debate given that the production of 22 billion pounds of our ECOSPHERE BIOLATEX polymers, representing the entire emulsion polymer market, would represent less than 2% of global corn and other starch feedstock production.

Customers

We have entered into strategic relationships with global industry leaders in multiple industries to accelerate the execution of our strategy and we have penetrated the top manufacturers in the coated paper and paperboard industry. Manufacturers representing greater than 60% of the global coated paper and paperboard market are either evaluating or commercial with our ECOSPHERE BIOLATEX binders.

Commercial Operations

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 representing greater than 60% of 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.

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 four of the global top 20 manufacturers in the coated paper and paperboard industry and an additional ten of the global top 20 manufacturers are currently in the process of evaluating the our products. Given our past record of successfully converting a high number of evaluations into commercial clients, we expect that the conversion of current and future product evaluations into recurring commercial sales will be a continuous source of growth for us.

Competition

Our products provide a low-cost, direct alternative to petroleum-based inputs in a variety of industries. We expect that our bio-based products will compete with both the traditional, largely petroleum-based products that are currently being used in target markets and with the alternatives to these existing products that new companies are seeking to produce.

Petrochemical Manufacturers

Petroleum-based manufacturers are subject to the volatility of petroleum prices, and as a result, their margins and their customers are experiencing increasing cost pressures from petroleum price escalation and instability. While we will be competing with suppliers of petroleum-based latex, including BASF AG, The Dow Chemical Company, Styron LLC, Air Products, Omnova Solutions, Wacker Chemie AG and Celanese Corporation, who combined hold more than a 30% share of the global market, our technology platform is largely independent from crude oil pricing pressures, allowing us and our customers to rely on more stable pricing. Furthermore, with minimal adoption costs for customers, equal or superior product characteristics and environmental advantages, we believe that we will be able to capture and develop a diversified market position with a sustainable competitive advantage.

Bio-based Chemicals and Polymers

The bio-based chemicals industry is continually growing. Many companies, such as Gevo Inc., Amyris Inc. and Metabolix Inc., are innovating to provide eco-friendly alternatives to petroleum-based chemical production. Although several companies engage in the manufacturing of bio-based products, to our knowledge, we believe that none are engaged in the production of polymers for our target industries. We face no direct in-kind competition in the production of bio-latex binders.

We may face competition from companies such as Archer Daniels Midland Company, Cargill, Incorporated, Corn Products International, Inc., Tate & Lyle, Roquette and AVEBE U.A. who provide starch-based product alternatives. However, our unique technology platforms deliver products that do not exhibit conventional starch-like qualities and we generally do not compete directly against starch companies. Our technology platforms target different manufacturers and different grades and we believe that our products offer superior performance and quality.

Competitive Strengths

Our key competitive strengths are:

- ***Disruptive technology with application to multiple large markets.*** Our technology leverages “green” chemistry to produce innovative substitutes for petroleum-based chemicals. Our bio-based products are tailored to broadly substitute for petroleum-based chemicals in many diverse applications throughout the polymers market. In addition to achieving commercialization in the paper, paperboard and personal care

industries, we expect that the building-block nature of our bio-based material will allow for continuous development into even more diverse markets and industries in the future, including insulation for building and construction, including fiberglass and mineral wool insulation; binders for mining and mineral industries, including pelletization and flotation agents; and various other industries. We expect that this ability to access multiple markets with multiple products should allow us to optimize the overall mix of products and mitigate our exposure to any one end market. See "Description of the Business — Technology" and "Description of Business — Industry Background".

- ***Drop in solution aligned with existing industrial and chemical infrastructure.*** Our products are designed to be direct substitutions for petroleum-based products with no significant additional capital or adjustment necessary to equipment required by customers. This allows our products to be easily adopted by manufacturers across multiple markets currently dominated by petroleum-based products.

- ***Commercially-proven with large, blue-chip customers.*** We are currently operating on a commercial basis in the coated paper and paperboard industry.

- ***Low cost provider with equal or superior quality.*** Our products currently generate cost savings for our customers by reducing their input costs and price volatility versus traditional petroleum-based formulations. In addition, the paper mill has the opportunity to save on process energy costs and raw material costs. Furthermore, our products are designed to perform comparably to, or better than, currently available petroleum-based products. For example, ECOSPHERE BIOLATEX binders can provide superior machine run-ability and superior paper properties over traditional SB latex. See "Description of the Business — Products".

- ***Low capex approach and highly capital efficient business model.*** Our business model requires low capital expenditures for us to meet customer demand. We have flexible manufacturing operations that can rapidly adapt to changing market conditions and increasing demand. We are able to design and commission a single production line in a nine month period. Compared to manufacturers of petroleum-based chemicals, we are able to expand production capacity with lower capital expenditures at our facilities. The cost of each additional 80 million pound line for ECOSPHERE BIOLATEX polymers is estimated to be under $10 million. In contrast, a petroleum-based producer would incur greater expenditures in order to increase its capacity by the same amount.

- ***Feedstock flexibility and low volatility cost structure.*** Our technology allows flexibility among the multiple renewable starch-based feedstocks that can be used without varying product composition and largely without alteration to standard equipment, allowing us to expand our geographic footprint and choose the optimal input from a wide range of renewable resources, based on local and global supply and demand. This flexibility insulates us from petroleum pricing volatility and mitigates exposure to changing prices of any particular commodity in any specific region. Changes in the price of starch-based products, such as corn, are less significant and have less impact on the cost of our bio-based products than changing oil prices have on the cost of petroleum based chemicals. This provides cost stability over competitors using petroleum-based inputs that we can pass on to customers. See "Description of the Business — Feedstock Flexibility".

- ***Sustainable and renewable alternative to petroleum-based products.*** Our technology platforms provide a sustainable advantage over competitors by offering "greener" products than standard petroleum-based chemicals with a significantly smaller carbon footprint. Our products are derived from renewable resources, enabling our customers to reduce the environmental impact of their products, and in some cases, increase the loyalty consumers have for these products. Products derived from natural-based feedstocks produce significantly less carbon dioxide as a consequence of production as compared with products derived from petroleum-based chemicals. See "Description of the Business — Environmental and Regulatory Overview."

- ***Highly experienced management team.*** The current management team offers an exceptional combination of technical, scientific, product development and managerial expertise and a very strong corporate track

record in the areas of business and financial management, sales and marketing, manufacturing and technology. Our key management personnel have, on average, over 20 years of experience in our target industries. See “Description of the Business — Employees”.

Intellectual Property

Our success depends in part upon our ability to obtain and maintain intellectual property protection for our products and technologies, and to operate without infringing the proprietary rights of others. With respect to the former, our policy is to protect our proprietary position through filing for patent protection for key components of our technology. Further measures include the filing for trade-mark protection on product names in the United States. We also maintain confidential know-how/trade secrets through the use of confidentiality agreements. We seek to avoid infringing the proprietary rights of others by searching patents and publications, as appropriate, in our product areas and technologies in order to be aware of any developments that may affect our business and, to the extent any such developments are identified, by evaluating and taking appropriate courses of action.

We pursue a conscientious intellectual property development, evaluation and registration program intended to advance, identify and protect our intellectual capital. Our technology platforms and our manufacturing processes are the result of more than 15 years of research and development activities and proven field experience. We have established an intellectual property estate that is supported by composition-of-matter, process and application based patents. We have a broad patent portfolio including patents and patent applications in the United States and other jurisdictions. Additionally, we have registered several trade-marks including, among others, ECOSPHERE, ECOMER, ECOSTIX and BIOLATEX polymers, which support brand awareness for our unique product offerings.

We further protect our proprietary information by requiring consultants, contractors and other advisors to enter nondisclosure and assignment of invention agreements upon commencement of their engagements. Furthermore, we protect our proprietary information by entering into written agreements of confidentiality with outside parties that are exposed to confidential information. Where appropriate, we also employ material transfer agreements that govern the use, intellectual property rights and transfer of materials when delivering them to third parties.

Facilities

Our international headquarters is located in the Center of Innovation in Burlington, Ontario. The Center of Innovation was established in 2011 and provides us with a state-of-the-art research and development facility for ongoing product and process development. The facility houses test equipment, labs and a pilot production line. The Center of Innovation was supported in part by the Sustainable Development Technology Canada Fund and Ontario’s Innovation and Demonstration Fund. The lease for the Center of Innovation expires in October 2020, with a ten year renewal option.

The benefits of the new Center of Innovation include: flexibility for research and development into existing and new application areas; rapid prototyping for new product development and process improvements; the ability to manufacture trial quantities for customer evaluations; and single step up to commercial scale production. All of these features combined will enable us to shorten typical new product development cycle times with our target customers.

In North America, we produce our product on a manufacturing line with PolyOne Corporation, located in Dyersburg, TN. The current line has a capacity of 35 million pounds per year. An additional production line is currently being commissioned to increase the North American annualized capacity to 115 million pounds.

In Europe, we manufacture our product on two manufacturing lines with Rodenburg Biopolymers BV, located in Oosterhout, The Netherlands. The first line, which has a capacity of 40 million pound per year, was commissioned in the first quarter of 2011. The second line, which has a capacity of 80 million pounds per year, was commissioned during the fourth quarter of 2011.

Both facilities are ISO 9001 certified. The combined annual capacity of the two plants is 155 million pounds, increasing to 235 million pounds during 2012.

Employees

As of the date hereof, we have approximately 42 employees and independent contractors, of which six are in the United States, twenty-nine are in Canada, four are in Europe, two are in Asia, and one is in Brazil.

In addition to our employees and independent contractors, we have sales agents in China, Japan, South Korea, Thailand and Indonesia, which allows us to target international expansion and address customer demands on a global scale.

Specialized Skill

Our key management personnel have an average of over 20 years experience in our target industries. Our business is complex and requires a management team and employee workforce that is knowledgeable in how we operate. We require personnel with technical skills and understanding of our technology and anticipated products. The market for qualified personnel is competitive due to the limited number of people with the necessary skills. See "Risk Factors – Reliance on Key Personnel".

Cycles

Our operations do not demonstrate substantial seasonality.

Environmental and Regulatory Overview

We apply "green chemistry" to transform renewable resources into high-performance bio-based products. Our products provide an improved environmental footprint when compared to the petroleum-based products they replace. Some of the green chemistry principles we follow include:

- Waste prevention leaving no waste to treat or clean up.
- Use of processes and substances with no toxicity to humans or the environment.
- Use of renewable feedstock resources rather than depleting non-renewable resources.
- Avoid creation of chemical derivatives.
- Use of safe solvents and reaction conditions in all processes.
- Degradation of products into innocuous materials after use.

ECOSPHERE BIOLATEX binders contain no toxic monomers or VOCs, they are sustainable and biodegradable and much more readily recyclable than their petrochemical counterparts. Our ECOSPHERE BIOLATEX polymer is a biopolymer derived from the fundamental re-engineering of renewable resources such as starch (biogenic carbon) into biopolymer nanoparticles using a continuous manufacturing process.

Total emissions associated with production of synthetic SB latex are estimated at 6.5 kilograms carbon dioxide per kilogram of SB latex, including both embedded carbon of fossil-fuel origin (released to the atmosphere when the product decomposes) and emissions associated with manufacturing and transporting the product. This can be compared to emissions of 2.1 kilograms carbon dioxide per kilogram of our ECOSPHERE BIOLATEX binder.

Compliance and Regulatory

Our operations are subject to a variety of federal, state, local and international laws and regulations in the countries in which we conduct business. Currently, we operate in the United States, Canada and The Netherlands. The legal and regulatory regimes of these countries govern the research, development, sale and marketing of emulsion polymers. Specifically, the bio-based chemical industry calls for compliance with laws that govern taxes, labour standards, occupational health and safety matters, the use of toxic and chemical substances and waste management, among others. These laws and regulations can impose expensive fees and violation of these laws could result in significant fines, civil sanctions or costs from environmental remediation.

Permits, registrations or other authorizations may also be required to maintain operations and carry out our future research and development activities. These permits, registrations or other authorizations will be subject to revocation, modification and renewal. As a condition to granting the permits necessary for operating our facilities, regulators could make demands that increase our construction and operating costs. Permit conditions could also restrict or limit the extent of our operations. We cannot guarantee that we will be able to obtain or comply with the terms of all necessary permits required to conduct business.

Future developments, including the commercial production of additional products, more stringent environmental regulation, the implementation of new laws and regulations or the discovery of unknown environmental conditions may require significant expenditures that could have a material adverse effect on our business, result of operations or financial condition.

Industry Background

Our products can broadly substitute for petroleum-based products across a wide range of industries and markets. Much like a microchip powering many different brands of computers, our bio-based products offer our customers a “drop-in” alternative with equal or superior quality to standard petroleum-based synthetic chemicals.

The immediately addressable target market for our products is emulsion polymers, where our products can be designed to serve our major end-use markets. In addition to emulsion polymers, our goal is to expand our product line into a number of non-emulsion polymer markets currently dominated by petroleum-based products.

Emulsion polymers market

Petroleum-based emulsion polymers are waterborne dispersions of polymer particles used throughout the industrial economy as ingredients in a variety of applications such as water-based paints, coatings, binders and adhesives. Emulsion polymers, also called latexes, are finding increasing acceptance and are preferred over solvent-based products in these applications as a result of their lower cost, versatility and relatively more eco-friendly characteristics due to the lower level of VOCs, relative to solvent-based polymers.

End-use markets for emulsion polymers include: paper and paperboard, paints, adhesives, textiles and carpet backing, amongst others. In these markets, our bio-based products offer an alternative to current petroleum-based synthetic chemicals including SB, SA and PolyVinylAcetate (“**PVAc**” or “**Acetate**”).

The following outlines the various emulsion polymer markets that we have identified and are targeting:

- ***Paints and coatings.*** Emulsion polymers in this industry are used as latex (or water-based) paints, particularly exterior and interior architectural paints, but are increasingly being used in industrial, maintenance and specialty coatings.

- ***Paper and paperboard coatings.*** The coatings market for emulsion polymers also includes paper coatings used to produce low to high end glossy and matte paper used in the graphic arts, advertising and packaging industries at approximately 500 mills globally.

- ***Adhesives.*** Emulsion polymers are widely used as general purpose adhesives in packaging applications such as corrugated boxes, folded cartons and paper bags. Emulsion polymers also serve as the base for PSAs used for tapes and labels as well as consumer-oriented adhesives such as white glue and wood glue.

- ***Carpet.*** In addition to general purpose adhesives, emulsion polymers are widely used as carpet backing in the manufacturing of tufted, broadloom carpeting and certain types of rugs and specialty floor coverings.

- ***Other.*** Textiles, used in the processing and finishing of fabrics and finished goods, are the largest other market for emulsion polymers. Sealants, caulks, printing inks and toners are also significant segments along with roofing shingles and dust palliatives.

Non-emulsion polymer markets

In addition to the immediately addressable segments within the emulsion polymers market, our goal is to be commercial in several other global markets presently served by standard petroleum-based chemicals and polymers that do not use emulsion latex systems. Combined, these global markets cover a broad range of industries (both consumer and industrial) and include the following:

- Surfactant applications used in a broad range of commercial and industrial markets;

- Personal care products, such as cosmetics, facial creams and gels;

- Agricultural products for weed protection and seed coatings;

- Binders for mining and mineral industries, including pelletization and flotation agents; and

- Insulation for building and construction, including fiberglass and mineral wool insulation.

Need for alternatives to the petroleum-based chemicals market

Historically, the abundance of petroleum has made it a convenient and inexpensive source to be used as a building block for many chemicals, plastics and consumer products. Recently, however, changes in the economics of petroleum production and consumer preferences have created challenges for the current infrastructure, such as (i) an increased demand for petroleum but a limited supply; (ii) volatility of petroleum prices; (iii) supply chain uncertainty and inconsistency; (iv) changing customer sentiment; and (v) increases in environmental regulation.

Bio-based alternatives can be used to overcome these challenges and change the petroleum-based chemicals market. There have been many attempts to offer manufacturers a viable alternative to petroleum-based chemicals, however, these initial approaches have experienced limited success. We believe that our technology platform has overcome many of the hurdles others have faced in trying to displace the petroleum-based chemicals market such as: (i) high cost; (ii) high capital intensity; (iii) imperfect substitutes; (iv) feedstock dependence; and (v) dependence on government support.

Our products have equal or superior performance and cost advantages compared to currently available petroleum-based products.

RISK FACTORS

You should carefully consider the risks described below, which are qualified in their entirety by reference to, and must be read in conjunction with, the detailed information appearing elsewhere in this annual information form, and all other information contained in this annual information form. The risks and uncertainties described below are those we currently believe to be material, but they are not the only ones we face. If any of the following risks, or any other risks and uncertainties that we have not yet identified or that we currently consider not to be

material, actually occur or become material risks, our business, prospects, financial condition, results of operations and cash flows and consequently the price of the Common Shares could be materially and adversely affected.

Protection of Intellectual Property.

Our commercial success will depend substantially on our ability to protect and defend our intellectual property. We are pursuing or possess patents and patent applications in North America, South America, Europe and Asia. We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our intellectual property is covered by valid and enforceable patents or is effectively maintained as confidential know-how/trade secrets.

The industries in which we operate can be subject to expensive litigation regarding patents and other intellectual property rights. As a result, we may be required to defend against claims of intellectual property infringement which may adversely affect our financial condition and operating results.

Our existing and future patents may not be sufficiently broad to prevent others from developing competing products. We operate in domestic and foreign markets, and, as such, have intellectual property rights in, and are subject to the different intellectual property laws of, each jurisdiction. As a result, the validity and enforceability of our patents cannot be predicted with certainty and our patents may be found to be invalid or unenforceable or our patent applications may not be accepted. Moreover, we cannot be certain whether:

- we were the first to make the inventions covered by each of our issued patents and pending patent applications;
- we were the first to file patent applications for these inventions;
- others will independently develop similar or alternative products or duplicate any of our products;
- our patents are of the proper scope;
- we are aware of all of the prior art concerning our patents and patent applications;
- any patents issued to, or acquired by, us will provide us with competitive advantages, or will be challenged by third parties;
- we will develop additional proprietary products or technologies that are patentable; or
- the patents of others will have an adverse effect on our business.

We do not know whether any of our patent applications will result in the issuance of any patents. Even if patents are issued, they may not be sufficient to protect our intellectual property. The patents we own and those that may be issued in the future may be challenged, re-examined, opposed, invalidated, rendered unenforceable, or circumvented, or determined to be overbroad, and the rights granted under our issued patents may not provide us with adequate proprietary protection or competitive advantages. Many of our patents were acquired from third parties and we cannot be certain that these patents are valid, enforceable or of a proper scope or that there will be no issue with respect to the transfer of these patents and patent applications to us (including with respect to the right of a third party to obtain a license to some of the intellectual property that was acquired by us from third parties). Moreover, third parties could implement our inventions in jurisdictions where we do not have patent protection or in jurisdictions where they could obtain a compulsory license to our technology where patented. Such third parties may then try to import products made using our intellectual property into our markets. Additional uncertainty may result from potential passage of patent reform legislation or from court decisions. Accordingly, we cannot ensure that any of our pending patent applications will result in issued patents, or even if issued, predict the breadth, validity and enforceability of the claims in our and other companies' patents.

Unauthorized parties may attempt to copy or otherwise obtain and use our products or technology. Monitoring unauthorized use of our intellectual property is difficult, and we cannot be certain that the steps we will have taken will prevent unauthorized use of our technology, particularly in certain foreign countries where the local laws may not protect our proprietary rights as fully as in Canada or the United States. If competitors are able to use our technology, our ability to compete effectively could be harmed. Moreover, others may independently develop and obtain patents for technologies that are similar to, or superior to, our technologies. If that happens, we may need to license these technologies, and we may not be able to obtain licenses on reasonable terms, if at all, which could have a material adverse effect on our business.

Customer Dependence and Demand.

We depend on a small number of customers for a substantial portion of our revenue. In 2011, two customers accounted for approximately 49% of our consolidated revenues. The loss of, or a significant reduction in business by, any one of these customers could materially reduce our revenue.

Customer requirements often require tailored formulations and we may not be successful in the development of additional commercial formulations of ECOSPHERE BIOLATEX binders. While ECOSPHERE BIOLATEX binders can be produced in a large number of different formulations (varying performance attributes, such as coating structure, flexibility, moisture resistance or colour) such formulation development is a time-consuming and expensive activity. Constraints on resources may require us to focus on our specific formulations and to forgo other opportunities.

Availability and Price of Raw Materials.

Substantially all of our products are manufactured from commodity-based raw materials, primarily corn. The price and availability of corn and other bio-based material may be influenced by general economic, market, environmental and regulatory factors. These factors include weather conditions, farming decisions, government policies and subsidies with respect to agriculture and international trade and global demand and supply. The significance and relative impact of these factors on the price of renewable crop sources are difficult to predict. At certain levels, prices may make these products uneconomical to use and produce, as we may be unable to pass the full amount of corn and other bio-based material cost increases on to our customers. A decrease in the availability of corn and other bio-based material or an increase in the price may have a material adverse effect on our financial condition and operating results.

Expansion of Production Facilities.

We may not be able to develop manufacturing capacity sufficient to meet demand in an economical manner or at all.

We plan to expand production with the introduction of one new production line in 2012. The expansion project is subject to customary risks and uncertainties common among large capital projects which could result in the project not being completed on schedule, as budgeted or at all. When the new production line is put into production, we could experience operating difficulties or delays. The project may not achieve our planned production, quality or cost projections. Cost overruns, equipment breakdowns, damage during shipment of equipment, failure to perform to design specifications or delays in the generation and sales of our products, including contracted amounts, could have a material adverse effect on our results of operations and financial performance.

Financial Results.

Our revenues and results of operations could vary significantly from quarter to quarter due to a variety of factors, many of which are outside of our control. As a result, comparing our results of operations on a period-to-period basis may not be meaningful. Factors that could cause our quarterly results of operations to fluctuate include:

- achievement, or failure to achieve, technology or product development milestones needed to allow us to enter identified markets on a cost effective basis;
- delays or greater than anticipated expenses associated with the completion of new production facilities, and the time to complete scale-up of production following completion of a new production facility;
- disruptions in the production process at any facility where we produce our products;
- the timing, size and mix of sales to customers for our products;
- increases in price or decreases in availability of our bio-based material;
- the unavailability of contract manufacturing capacity altogether or at anticipated cost;
- fluctuations in foreign currency exchange rates;
- fluctuations in the price of and demand for corn and other bio-based materials as well as petroleum-based products for which our products are alternatives;
- the effects of competitive pricing pressures, including decreases in average selling prices of our products;
- unanticipated expenses associated with changes in governmental regulations and environmental, health and safety requirements;
- reductions or changes to existing chemical regulations and policies;
- departure of executives or other key management employees;
- our ability to use our net operating loss carry forwards to offset future taxable income;
- business interruptions such as earthquakes and other natural disasters;
- our ability to integrate businesses that we may acquire;
- risks associated with the international aspects of our business; and
- changes in general economic, industry and market conditions, both domestically and in our foreign markets.

Due to these factors and others the results of any quarterly or annual period may not meet our expectations or the expectations of our investors and may not be meaningful indications of our future performance.

Competition.

The bio-based chemicals industry continues to flourish with innovative companies providing eco-friendly alternatives to petroleum-based chemical production. Several companies are engaged in the manufacturing of bio-based chemicals and polymers for the purposes of producing industrial products. However, to the best of our knowledge none are engaged in the production of bio-based latex polymers used for paper coatings. Nevertheless, we face competition from numerous global petrochemical companies that manufacture SB/SA latex paper coatings. Our competitive position is influenced by a large number of factors including:

- the emergence of new bio-based latex companies;

- our ability to attract and maintain long-term customer relationships;
- the quality of our products and customer service;
- foreign currency fluctuations;
- our ability to reduce manufacturing costs by achieving high operating efficiencies and production rates;
- the availability, quality and cost of raw materials and labour; and
- the cost of energy.

There is no assurance that we will be able to compete effectively with our competitors in the long-term.

Global Markets and Economic Conditions.

Volatility and disruption in the global capital and credit markets since 2008 have led to a tightening of business credit and liquidity, a contraction of consumer credit, business failures, higher unemployment, and declines in consumer confidence and spending in Canada, the United States and internationally. If global economic and financial market conditions deteriorate or remain weak for an extended period of time, the following factors could have a material adverse effect on our business, operating results, and financial condition:

- Slower consumer spending may result in reduced demand for our products, reduced orders from customers for our products, order cancellations, lower revenues, increased inventories, and lower gross profit margins.
- We may be unable to access financing in the credit and capital markets at reasonable rates in the event we find it desirable to do so.
- The failure of financial institution counterparties to honor their obligations to us under credit and derivative instruments could jeopardize our ability to rely on and benefit from those instruments. Our ability to replace those instruments on the same or similar terms may be limited under poor market conditions.
- We conduct transactions in various currencies, which increases our exposure to fluctuations in foreign currency exchange rates relative to the U.S. dollar. Continued volatility in the markets and exchange rates for foreign currencies and contracts in foreign currencies could have a significant impact on our reported financial results and condition.
- Continued volatility in the markets and prices for commodities and raw materials we use in our products and in our supply chain could have a material adverse effect on our costs, gross profit margins, and profitability.
- If our customers experience declining revenues or difficulty obtaining financing in the capital and credit markets to purchase our products, this could result in reduced orders for our products, order cancellations, inability of our customers to timely meet their payment obligations to us, extended payment terms, higher accounts receivable, reduced cash flows, greater expense associated with collection efforts, and increased bad debt expense.
- If our customers experience severe financial difficulty, some may become insolvent and cease business operations, which could reduce the availability of our products.

- If contract manufacturers of our products or other participants in our supply chain experience difficulty obtaining financing in the capital and credit markets to purchase raw materials or to finance general working capital needs, it may result in delays or non-delivery of shipments of our products.

Markets and Marketing Risk.

A key component of our business strategy is to market our products to manufacturers. We believe that consumer and customer demand for environmentally sensitive and cost effective products will drive demand for our products. To gain additional market share and successfully market our products to additional manufacturers, we must effectively demonstrate the commercial advantages of using our products over traditional petroleum-based products and our ability to produce our products reliably on a commercial scale at a sufficiently low cost. If the markets for bio-based materials, and our products in particular, do not develop as we currently anticipate, or if we are unable to penetrate these markets successfully, our financial condition and results of operations could be materially and adversely affected. If we fail to successfully market our products to manufacturers or consumer demand for environmentally sensitive products fails to develop, our business, financial condition and results of operations will be materially adversely affected.

Market acceptance of ECOSPHERE BIOLATEX binders and our future products will depend on numerous factors, many of which are outside of our control, including among others: ability to produce products that offer functionality comparable or superior to existing or new petroleum-based products; pricing of our products compared to competitive products, including petroleum-based latex; the strategic reaction of companies that market competitive products; and general market conditions. Obtaining market acceptance in the chemicals industry is complicated by the fact that many potential chemicals industry customers have invested substantial amounts of time and money in developing petroleum-based production channels. These potential customers generally have well-developed manufacturing processes and arrangements with suppliers of chemical components, and may display substantial resistance to changing these processes. Pre-existing contractual commitments, unwillingness to invest in new infrastructure, distrust of new production methods and lengthy relationships with current suppliers may all slow market acceptance of our products.

In addition, our growth strategy is dependent in part on our ability to successfully develop and obtain new customers for our products. Notwithstanding the fact that 10 of the global top 20 manufacturers in the coated paper and paperboard industry are in the process of evaluating our products, the development of new customers may take longer than expected and may adversely impact our overall growth strategy.

Confidential Know-how/Trade Secret Protection.

We rely, in part, on confidential know-how/trade secret protection to protect our confidential and proprietary information and processes. However, confidential know-how/trade secrets are difficult to protect and non-disclosure agreements with consultants and others may not adequately prevent disclosure of trade secrets and other proprietary information. We have taken measures to protect our trade secrets and proprietary information, but these measures may not be effective. We require employees and consultants to execute non-disclosure agreements upon the commencement of a consulting arrangement with us. We believe that all of our employees and consultants having had access to material, technological and confidential information have executed such agreements. These agreements generally require that all confidential information developed by the individual or made known to the individual by us during the course of the individual's relationship with us be kept confidential and not disclosed to third parties. Nevertheless, these agreements may not be enforceable or may be breached our proprietary information may be disclosed, third parties could reverse engineer our products and others may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our confidential know-how/trade secrets.

Company Growth.

We have experienced, and may continue to experience, expansion of our business as we continue to make efforts to develop and bring our products to our target markets. Our growth has placed, and may continue to place,

significant demands on our management and our operational and financial infrastructure. In particular, continued growth could strain our ability to:

- develop and improve our operational, financial and management controls;
- enhance our reporting systems and procedures;
- recruit, train and retain highly skilled personnel;
- develop and maintain our relationships with existing and potential business partners;
- maintain our quality standards; and
- maintain customer satisfaction.

Managing our growth will require significant expenditures and allocation of valuable management resources. If we fail to achieve the necessary level of efficiency in our organization as we grow, it could have a material adverse effect on our business, results of operations and financial condition.

Foreign Operations.

We believe that the current political and regulatory environments in which we operate, currently being Canada, the United States and The Netherlands, are sufficiently supportive of our business. However, there are risks that conditions will change in an adverse manner. These risks include, but are not limited to, laws or policies affecting mandates or incentives to promote the use of biomaterials, environmental issues, land use, air emissions, water use, zoning, workplace safety, restrictions imposed on the chemical industry such as restrictions on production, substantial changes in product quality standards, restrictions on feedstock supply, price controls and export controls. Any changes in biomaterials used in the production of our products, financial incentives, investment regulations, policies or a shift in political attitudes are beyond our control and may adversely affect our business, financial condition and results of operations.

As we expand globally, our operations are exposed to various levels of political, economic and other risks and uncertainties associated with operating in a foreign jurisdiction. These risks and uncertainties vary from country to country and include, but are not limited to, currency exchange rates, labour unrest, renegotiation or nullification of existing agreements, licenses, permits and contracts, changes in taxation policies, restrictions on foreign exchange, changing political conditions, currency controls and governmental regulations that favour or require the awarding of contracts to local contractors or require foreign contractors to employ citizens of, or purchase supplies from, a particular jurisdiction. Changes, if any, in operational or investment policies or shifts in political attitude may adversely affect our operations or profitability. Operations may be affected in varying degrees by government regulations with respect to, but not limited to, restrictions on production, price controls, export controls, currency remittance, income taxes, foreign investment, environmental legislation, land and water use. The occurrence of these various factors and uncertainties cannot be accurately predicted and could have an adverse effect on our results of operations or prospects.

Reliance on Key Personnel.

Our business is complex, involves global operations and requires a management team and employee workforce that is knowledgeable in how we operate. The loss of any key member of our management or key technical and operational employees, or the failure to attract or retain such employees could prevent us from developing and commercializing our products for our target markets and executing our business strategy. We may not be able to attract or retain qualified employees in the future due to the intense competition for qualified personnel, or due to the availability of personnel with the qualifications or experience necessary for our business. If we are not able to attract and retain the necessary personnel to accomplish our business objectives, we may experience staffing constraints that will adversely affect our ability to meet the demands of our customers in a timely fashion or to support our internal research and development programs. Competition for such personnel from

numerous companies and academic and other research institutions may limit our ability to do so on acceptable terms.

As we expand our operations, we will need to hire additional qualified research and development and management personnel to succeed. The process of attracting, hiring, training and successfully integrating qualified personnel into our operations is a lengthy and expensive one. Our product and process development programs are dependent on our ability to attract and retain highly skilled technical and operational personnel. The market for qualified personnel is very competitive because of the limited number of people available with the necessary technical skills and understanding of our technology and anticipated products. Our failure to hire and retain qualified personnel could impair our ability to meet our research and development and business objectives and adversely affect our results of operations and financial condition.

Environmental Legal and Regulatory Compliance.

Our current and planned activities involve the use of a broad range of materials that are, or may be, considered hazardous under applicable laws and regulations. Accordingly, we are subject to a number of foreign, federal, state, and local laws and regulations relating to protection of the environment, the storage, use, disposal of, and exposure to, hazardous materials and wastes, and health and safety, including U.S. Food and Drug Administration regulations related to food contact materials. Compliance with these laws and regulations could be costly and could delay or even preclude commercialization of our products for certain applications. There can be no assurance that we will be able to meet the necessary regulatory requirements for commercialization of our products for any or all food contact applications in a timely manner or at an acceptable cost.

If we were to violate or become liable under environmental, health and safety laws, we could incur costs, fines and civil and criminal penalties, personal injury and third party property damage claims, or could be required to incur substantial investigation or remediation costs. Moreover, a failure to comply with environmental laws could result in fines and the revocation of environmental permits, which could prevent us, or our strategic partners, from conducting business. Liability under environmental laws can be joint and several and without regard to fault. There can be no assurance that violations of environmental health and safety laws will not occur in the future as a result of the inability to obtain permits, human error, equipment failure or other causes. Environmental laws could become more stringent over time, imposing greater compliance costs and increasing risks and penalties associated with violations, which could harm our business. Accordingly, violations of present and future environmental laws could restrict our ability to expand facilities, pursue certain technologies, and could require us to acquire costly equipment, or to incur potentially significant costs to comply with environmental regulations.

Our failure to comply with government regulations could subject us to civil and criminal penalties, require us to forfeit property rights and may affect the value of our assets or our ability to conduct business. Any such penalty may adversely affect our business activities, financial condition or results of operations. We cannot predict the extent to which future legislation and regulation could cause us to incur additional operating expenses, capital expenditures, or restrictions and delays in the development of our products and properties.

Enforcement of Intellectual Property Rights.

Enforcement of claims that a third party is using our proprietary rights without permission is expensive, time consuming and uncertain. Litigation would result in substantial costs, even if the eventual outcome is favourable to us, and would divert management's attention from our business objectives. In addition, an adverse outcome in litigation could result in a substantial loss of our proprietary rights and we could lose our ability to exclude others from practicing our technology or producing our products or using our intellectual property.

The laws of some foreign countries do not protect intellectual property rights to the same extent as do the laws of Canada and the United States. Many companies have encountered significant problems in protecting and defending intellectual property rights in certain foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favour the enforcement of patents and other intellectual property protection, particularly those relating to bioindustrial technologies. This could make it difficult for us to stop the infringement of our patents or misappropriation of our other intellectual property rights. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other

aspects of our business. Moreover, our efforts to protect our intellectual property rights in such countries may be inadequate.

Price of Petroleum.

We anticipate that our bio-based products will be marketed as economical alternatives to corresponding petroleum-based products and financial results will be influenced by the cost of ECOSPHERE BIOLATEX binders relative to petroleum-based latex. The cost of petroleum-based latex is in part based on the price of petroleum. ECOSPHERE BIOLATEX binders are primarily manufactured using cornstarch, an agricultural feedstock. If the price of corn or cornstarch were to dramatically increase or if the price of petroleum decreases, we may be unable to produce products that are cost-effective alternatives to petroleum-based products. Declining oil prices, or the perception of a future decline in oil prices, may adversely affect the prices we can obtain from our potential customers or prevent potential customers from entering into agreements with us to buy our products. During sustained periods of lower oil prices we may be unable to sell some of our products, which could materially and adversely affect our financial condition and operating results.

Equipment and Supplies.

We are dependent on various supplies and equipment to carry out our operations. The shortage of supplies, equipment and parts could have a material adverse effect on our ability to carry out our operations and therefore limit or increase the cost of our operations.

An increase in demand for services and equipment could cause operational costs to increase materially, could result in delays if services or equipment cannot be obtained in a timely manner due to inadequate availability, and could increase potential scheduling difficulties and costs due to the need to coordinate the availability of services or equipment. Any such material increase in costs could adversely affect our financial condition. The Company's manufacturing facilities are subject to the risk of equipment failure due to, among other things, deterioration of the assets from use or age, latent defect, and design or operation error. To the extent that a facility's equipment requires longer than forecasted down times for maintenance and repair, the Company's business, operating results, financial condition or prospects could be adversely affected.

Government Grants.

We have received various government grants, and we may seek to obtain government grants and subsidies in the future. We cannot be certain that we will be able to secure any such government grants or subsidies. Any of our existing grants or new grants that we may obtain may be terminated, modified or recovered by the granting governmental body under certain conditions.

We may also be subject to audits by government agencies as part of routine audits of our activities funded by our government grants. As part of an audit, these agencies may review our performance, cost structures and compliance with applicable laws, regulations and standards. Funds available under grants must be applied by us toward the research and development programs specified by the granting agencies, rather than for all of our programs generally. If any of our costs are found to be allocated improperly, the costs may not be reimbursed and any costs already reimbursed may have to be refunded. Accordingly, an audit could result in an adjustment to our revenues and results of operations.

Liquidity Risk.

Although we currently have no debt outstanding, we might incur debt in order to fund our business activities, which would reduce our financial flexibility and could have a material adverse effect on our business, financial condition or results of operation. Our ability to meet any debt obligations depends on future performance. General economic conditions, corn and other renewable crop source prices and financial, business and other factors affect our operations and future performance. Many of these factors are beyond our control. We cannot assure investors that we will be able to generate sufficient cash flow to pay the interest on any debt, or that future working capital, borrowings or equity financing will be available to pay or refinance such debt. Factors that will affect our

ability to raise cash through an offering of securities include financial market conditions, the value of our assets and performance at the time we need capital.

Availability of Additional Financing.

If our revenues decline and resources are insufficient to meet our capital requirements, we will be required to raise additional funds. There can be no assurance that debt or equity financing will be available or sufficient to meet these requirements or that such financing will be on terms that are favourable to us, if at all. If future financings involve the issuance of equity securities, our existing shareholders will suffer dilution. If we are able to raise debt financing, we may be subject to restrictive covenants that limit our ability to conduct our business. If we fail to raise sufficient funds or incur losses, our ability to fund our operations, take advantage of strategic opportunities, develop and commercialize products or technologies, or otherwise respond to competitive pressures could be significantly limited. If this happens, we may be forced to delay or terminate research and development programs, the expansion of the production lines or the commercialization of products resulting from our technologies, curtail or cease operations or obtain funds through collaborative and licensing arrangements that may require us to relinquish commercial rights, or grant licenses on terms that are not favorable to us. The inability to access sufficient capital could have a material adverse effect on our financial condition and results of operations. If adequate funds are not available, we will not be able to successfully execute our business plan or continue our business.

Acquisition of Intellectual Property.

Commercial success will depend in part on obtaining and maintaining patent, confidential know-how/trade secret and trade-mark protection of our technologies in the United States and other jurisdictions, as well as successfully enforcing this intellectual property and defending this intellectual property against third-party challenges. We may not be able to acquire additional intellectual property rights or, if acquired, we may not achieve material revenue from such intellectual property. We will be able to protect our acquired proprietary rights from unauthorized use by third parties only to the extent that our intellectual property is covered by valid and enforceable patents or is effectively maintained as confidential know-how/trade secrets. Furthermore, we may not be able to enter into strategic relationships with third parties to license or otherwise monetize our intellectual property and, even if we consummate such strategic relationships, we may not achieve material revenue or profit from such relationships. We face considerable competition from other companies, in acquiring intellectual property.

Intellectual Property Litigation.

Our commercial success depends on our ability to operate without infringing the patents and proprietary rights of other parties and without breaching any agreements we have entered into with regard to our technologies and product candidates. We cannot determine with certainty whether patents or patent applications of other parties may materially affect our ability to conduct our business. Further, because patent searching is not always precise, we cannot determine with certainty that any patent search performed by or for us is complete. Because patents can take several years to issue, there may currently be pending applications, unknown to us, that may result in issued patents that cover our technologies or product candidates. The existence of third-party patent applications and patents could significantly reduce the coverage of patents owned by us and limit our ability to obtain meaningful patent protection. If patents containing competitive or conflicting claims are issued to third parties and these claims are ultimately determined to be valid, we may be enjoined from pursing research, development, or commercialization of products, or be required to obtain licenses to these patents, or to develop or obtain alternative technology.

If a third-party asserts that we infringe upon its patents or other proprietary rights, we could face a number of issues that could seriously harm our competitive position, including:

- infringement and other intellectual property claims, which could be costly and time consuming to litigate, whether or not the claims have merit, and which could delay getting our products to market and divert management attention from our business;

- substantial damages for past infringement, which we may have to pay if a court determines that our products or technologies infringe a competitor's patent or other proprietary rights; and

- a court prohibiting us from selling or licensing our technologies or future products unless the holder licenses the patent or other proprietary rights to us, which it is not required to do.

The industries in which we operate are characterized by frequent and extensive litigation regarding patents and other intellectual property rights. Certain companies have employed intellectual property litigation as a way to gain a competitive advantage. If any of our competitors have filed patent applications or obtained patents that claim inventions also claimed by us, we may have to participate in interference proceedings declared by the relevant patent regulatory agency to determine priority of invention and, thus, the right to the patents for these inventions. These proceedings could result in substantial cost to us even if the outcome is favourable. Even if successful, an interference may result in loss of certain claims. Our involvement in litigation, interferences, opposition proceedings or other intellectual property proceedings inside and outside of Canada and the U.S., to defend our intellectual property rights or as a result of alleged infringement of the rights of others, may divert management time from focusing on business operations and could cause us to spend significant resources, all of which could harm our business and results of operations.

Litigation Risk.

From time to time, we may, in the ordinary course of business, be named as a defendant in lawsuits, claims and other legal proceedings. These actions may seek, among other things, compensation for alleged personal injury, worker's compensation, employment discrimination, breach of contract, property damages, civil penalties and other losses of injunctive or declaratory relief. In the event that such actions or indemnities are ultimately resolved unfavourably at amounts exceeding our accrued liability, or at material amounts, the outcome could materially and adversely affect our reputation, business and results of operations. In addition, payments of significant amounts, even if reserved, could adversely affect our liquidity position.

Changes in Government Policy.

Concerns associated with land and food crop usage are receiving legislative, industry and public attention. This could result in future legislation, regulation and/or administrative action that could adversely affect our business. Any inability to address these requirements and any regulatory or policy changes could have a material adverse effect on our business, financial condition and results of operations. Furthermore, the production of our products will depend on the availability of feedstock, especially corn. Agricultural production and trade flows are subject to government policies and regulations. Governmental policies affecting the agricultural industry, such as taxes, tariffs, duties, subsidies, incentives and import and export restrictions on agricultural commodities and commodity products, can influence the planting of certain crops, the location and size of crop production, whether unprocessed or processed commodity products are traded, the volume and types of imports and exports, and the availability and competitiveness of feedstocks as raw materials. Future government policies may adversely affect the supply of corn, restrict our ability to use corn to produce our products, and negatively impact our future revenues and results of operations.

Hedging Transactions.

We may in the future engage in hedging transactions to offset the effects of volatility in the price of our raw materials. Hedging activities may cause us to suffer losses, such as if we purchase a position in a declining market or sell a position in a rising market. Furthermore, hedging may expose us to the risk that the other party to a hedging contract defaults on its obligation. We may vary the hedging strategies we undertake, which could leave us more vulnerable to increases or decreases in the prices of raw materials, and may require us to take delivery of raw materials at unfavourable prices. Losses from hedging activities and changes in hedging strategy could have a material adverse effect on our operations and financial position.

In the future, we may engage in currency hedging to reduce the risk associated with currency fluctuations. Currency hedging involves risks and may require margin activities. Sudden fluctuations in currencies could result in margin calls that could have a material adverse effect on our operations and financial position.

Insurance.

The testing, manufacture, marketing, and sale of our products may involve product liability risks. Although we currently have product liability insurance covering claims up to US$5 million per occurrence and in the aggregate, we may not be able to maintain this product liability insurance at an acceptable cost, if at all. In addition, this insurance may not provide adequate coverage against potential losses. If claims or losses exceed our liability insurance coverage it could have a material adverse effect on our operations and financial position.

Reliance on Technology.

Our operations will depend on continuous improvements in technology to meet customer demands in respect of performance and cost, and to explore additional business opportunities. There can be no assurance that we will be successful in our efforts in this regard or that we will have the resources available to meet this demand. While we expect that our research and development experience will allow us to explore additional business opportunities, there is no guarantee that such business opportunities will be presented or realized.

Issuance of Additional Equity Securities.

We may issue equity securities in the future. In addition, outstanding options or warrants to purchase Common Shares may be exercised, resulting in the issuance of additional Common Shares. The issuance of additional equity securities, or a perception that such an issuance may occur, could have a negative impact on the trading price of the Common Shares.

As of March 29, 2011, assuming all Retained Interest Holders of EcoSynthetix U.S. exchange their shares of common stock of EcoSynthetix U.S. for Common Shares, an additional approximately 8,499,253 Common Shares will be issued by the Company in connection with the Put/Call Agreement, representing approximately 15% of the issued and outstanding Common Shares.

Ethical, Legal and Social Concerns.

Some of our processes involve the use of genetically engineered feedstock or genetic engineering technologies. Additionally, our feedstocks may be grown on land that could be used for food production, which subjects our feedstock sources to “food versus fuel” concerns. If we are not able to overcome our ethical, legal and social concerns relating to genetic engineering or “food versus fuel”, our products and processes may not be accepted. Any of the risks discussed below could result in increased expenses, delays or other impediments to our programs or the public acceptance and commercialization of products and processes dependent on our technologies or inventions. Our ability to develop and commercialize one or more of our technologies, products, or processes could be limited by the following factors:

- public attitudes about the safety and environmental hazards of, and ethical concerns over, genetic research and genetically engineered products and processes, which could influence public acceptance of our technologies, products and processes;

- public attitudes regarding, and potential changes to laws governing ownership of genetic material, which could harm our intellectual property rights with respect to our genetic material and discourage others from supporting, developing or commercializing our products, processes and technologies;

- public attitudes and ethical concerns surrounding production of feedstocks on land which could be used to grow food, which could influence public acceptance of our technologies, products and processes;

- governmental reaction to negative publicity concerning genetically engineered organisms, which could result in greater government regulation of genetic research and derivative products; and

- governmental reaction to negative publicity concerning feedstocks produced on land which could be used to grow food, which could result in greater government regulation of feedstock sources.

The subjects of genetically engineered organisms and food versus fuel have received negative publicity, which has aroused public debate. This adverse publicity could lead to greater regulation and trade restrictions on imports of genetically engineered products or feedstocks grown on land suitable for food production.

Business Interruptions.

We are vulnerable to natural disasters and other events that could disrupt our operations, such as riot, civil disturbances, war, terrorist acts, flood, infections in our laboratory or production facilities or those of our contract manufacturers and other events beyond our control. We do not have a detailed disaster recovery plan. In addition, we may not carry sufficient business interruption insurance to compensate us for losses that may occur. Any losses or damages we incur could have a material adverse effect on our cash flows and success as an overall business.

Volatile market price for Common Shares.

The market price for the Common Shares may be volatile and subject to wide fluctuations in response to numerous factors, many of which are beyond our control, including the following:

- actual or anticipated fluctuations in our quarterly results of operations;

- changes in estimates of our future results of operations by us or securities research analysts;

- changes in the economic performance or market valuations of other companies that investors deem comparable to us;

- addition or departure of our executive officers and other key personnel;

- release or other transfer restrictions on outstanding Common Shares;

- sales or perceived sales of additional Common Shares;

- significant acquisitions or business combinations, strategic partnerships, joint ventures or capital commitments by or involving us or our competitors; and

- news reports relating to trends, concerns or competitive developments, regulatory changes and other related issues in our industry or target markets.

Financial markets have recently experienced significant price and volume fluctuations that have particularly affected the market prices of equity securities of companies and that have, in many cases, been unrelated to the operating performance, underlying asset values or prospects of such companies. Accordingly, the market price of the Common Shares may decline even if our operating results, underlying asset values or prospects have not changed.

Additionally, these factors, as well as other related factors, may cause decreases in asset values that are deemed to be other than temporary, which may result in impairment losses. As well, certain institutional investors may base their investment decisions on consideration of our environmental, governance and social practices and performance against such institutions' respective investment guidelines and criteria, and failure to meet such criteria may result in a limited or no investment in the Common Shares by those institutions, which could adversely affect the trading price of the Common Shares. There can be no assurance that continuing fluctuations in price and volume

will not occur. If such increased levels of volatility and market turmoil continue, our business and financial condition could be adversely impacted and the trading price of the Common Shares may be adversely affected.

Retention of Earnings.

We currently intend to retain future earnings, if any, for future operations and expansion. Any decision to declare and pay dividends on our Common Shares in the future will be made at the discretion of our Board of Directors and will depend on, among other things, our financial results, cash requirements, contractual restrictions and other factors that our Board of Directors may deem relevant. In addition, our ability to pay dividends may be limited by covenants of any future indebtedness we incur. As a result, you may not receive any return on an investment in our Common Shares in the foreseeable future unless you sell our Common Shares for a price greater than that which you paid for it.

The Company is a Holding Company.

We are a holding company and a substantial portion of our assets are the capital stock of our subsidiaries. As a result, our investors are subject to the risks attributable to our subsidiaries. As a holding company, we conduct substantially all of our business through our subsidiaries, which generate substantially all of our revenues. Consequently, our cash flow and ability to complete current or desirable future enhancement opportunities are dependent on the earnings of our subsidiaries and the distribution of those earnings to us. The ability of these entities to pay dividends and other distributions will depend on their operating results and will be subject to applicable laws and regulations which require that solvency and capital standards be maintained by such companies and contractual restrictions contained in the instruments governing their debt. In the event of a bankruptcy, liquidation or reorganization of any of our subsidiaries, holders of indebtedness and trade creditors will generally be entitled to payment of their claims from the assets of those subsidiaries before any assets are made available for distribution to us. Upon completion of initial public offering, the Common Shares became junior to indebtedness and other liabilities (including trade payables) of our subsidiaries.

Interest Rate Risk.

We have limited exposure to fluctuations in interest rates. We do not use derivative instruments to reduce our exposure to interest rate risk.

Foreign Currency Exchange Risk.

A portion of our revenue and operating expenditures is in foreign currencies. We do not use derivative instruments to manage exposure to foreign currency exchange fluctuations.

Credit Risk.

Financial instruments that potentially subject us to concentrations of credit risk consist principally of cash and cash equivalents and accounts receivables. We place our temporary cash and cash equivalents with high credit quality financial institutions. Although cash balances may exceed the federally insured limits, they are subject to minimal risk.

DIVIDENDS

We currently intend to use earnings to finance the expansion of our business. Any future determination to pay dividends on Common Shares will be at the discretion of the Board of Directors and will depend on, among other things, our results of operations, current and anticipated cash requirements and surplus, financial condition, contractual restrictions, solvency tests imposed by corporate law and other factors that the Board of Directors may deem relevant.

DESCRIPTION OF CAPITAL STRUCTURE

The authorized share capital of the Company consists of an unlimited number of Common Shares. As of March 29, 2012, the total for issued and outstanding shares was 46,750,757, consisting of 44,233,807 Common Shares and 2,516,950 Common 144A Shares.

As of March 29, 2012, 1,214,179 Covered Shares were issued and outstanding. The Retained Interest Holders are entitled to sell their Covered Shares to the Company at any time prior to the Put Expiry Date in exchange for Common Shares of the Company on the basis of seven Common Shares for one Covered Share, subject to adjustment. In addition, the Company is entitled to purchase the Covered Shares at any time from the period commencing one year following the Put Expiry Date to the date that is two years following the Put Expiry Date in exchange for seven Common Shares for one Covered Share, subject to adjustment. See "General Development of the Business – History".

Holders of the Common Shares are entitled to receive notice of and attend all meetings of shareholders of the Company, except meetings at which only holders of another class or series of shares are entitled to attend, and shall be entitled to cast one vote per Common Share on all matters to be voted on at all such meetings. Holders of the Common Shares are entitled to receive on a pro rata basis such dividends if, as and when declared by the Board of Directors at its discretion and, unless otherwise provided by legislation, subject to the rights of the holders of any other class or series of shares ranking senior to the Common Shares. See "Dividend Policy".

In the event of any liquidation, dissolution or winding-up of the Company or other distribution of assets of the Company among holders of the Common Shares for the purpose of winding-up its affairs, the holders of Common Shares shall be entitled, subject to the rights of the holders of any other class or series of shares ranking senior to the Common Shares, to receive on a pro rata basis the remaining property or assets of the Company available for distribution, after the payment of debts and other liabilities. The Common Shares do not carry any pre-emptive, subscription, conversion or redemption rights, nor do they contain any sinking or purchase fund provisions.

TRADING PRICE AND VOLUME

Common Shares

The Common Shares are listed and posted for trading on the TSX under the symbol "ECO". The following table sets forth information relating to the trading of the Common Shares on the TSX for the months indicated.

Month	High (C$)	Low (C$)	Volume
August 2011[(1)]	9.24	7.50	4,914,363
September 2011	9.45	7.10	1,806,822
October 2011	7.94	6.90	287,568
November 2011	8.22	6.35	1,639,525
December 2011	7.00	4.50	348,033

(1) The Common Shares commenced trading on the TSX on August 4, 2011, the closing of the initial public offering.

The price of the Common Shares as quoted by the TSX at the close of business on December 30, 2011 was C$5.00 and on March 29, 2012 was C$5.58.

Warrants

During the period from August 4, 2011 to December 31, 2011, the Company did not issue any warrants. As of March 29, 2012 an aggregate of 202,958 warrants were outstanding. Each warrant entitles the holder to one Common Share at an exercise price of $0.81. In addition, as of March 29, 2011, an aggregate of 22,610 warrants exercisable for shares of common stock of EcoSynthetix U.S. were outstanding at an exercise price of $5.6392. On

exercise of such warrants, the shares of common stock of EcoSynthetix U.S. will be subject to the Put/Call Agreement.

Options

As of March 29, 2012, an aggregate of 5,830,690 options were outstanding. During the period from August 4, 2011 to December 31, 2011, an aggregate of 71,500 Common Shares were issued pursuant to the exercise of options.

DIRECTORS AND OFFICERS

The following table sets forth the name, province/state and country of residence, position held with the Company and principal occupation of each person who is a director and/or an executive officer of the Company.

Name, Province/State and Country of Residence	Position(s) with the Company	Since[1]	Principal Occupation
John van Leeuwen Burlington, Ontario	Chairman and Chief Executive Officer and Director	1996	Chairman and Chief Executive Officer of the Company
Dr. Steven Bloembergen Lansing, Michigan	Executive Vice President, Technology	1996	Executive Vice President, Technology of the Company
Robert Haire Oakville, Ontario	Chief Financial Officer and Corporate Secretary	2008	Chief Financial Officer of the Company
Edward van Egdom Dundas, Ontario	Vice President, Manufacturing	2001	Vice President, Manufacturing of the Company
Dr. Peter van Ballegooie Burlington, Ontario	Vice President, Marketing & Business Development	2011	Vice President, Marketing & Business Development of the Company
John E. Barker[2] [4] Burlington, Ontario	Director	2008	Board Director
David W. Colcleugh[2] [3][4] Mississauga, Ontario	Director	2008	Board Director
John Varghese[2] [3] Toronto, Ontario	Director	--	President and Chief Executive Officer of JV Venture Partners
Dr. Arthur Carty[3][4] Waterloo, Ontario	Director	--	Executive Director, Waterloo Institute for Nanotechnology

(1) This column reflects the date of appointment of such individual as a director of EcoSynthetix U.S. Messrs. Varghese and Carty were appointed as directors of EcoSynthetix on August 4, 2011.
(2) Member of the Audit Committee.
(3) Member of the Compensation Committee.
(4) Member of the Corporate Governance and Nominating Committee.

The principal occupations of each of the Company's directors and executive officers within the past five years are disclosed in the brief biographies set forth below.

John van Leeuwen, Chairman and Chief Executive Officer and Director

Mr. van Leeuwen co-founded EcoSynthetix U.S. in 1996, has served as its Chairman since its inception and has served as Chief Executive Officer of the company since 2004. In May 2011, Mr. van Leeuwen received the Canadian Innovator of the Year award on behalf of the company from PricewaterhouseCoopers. Prior to joining the company, from 1996 to 2004, Mr. van Leeuwen was Chief Executive Officer of Tech Inspirations Inc., a venture capital company with a focus on investments in computer software, internet and biotechnology companies. From 1990 to 1996, he was responsible for the start-up of the North American operations of the software company Baan Company N.V. and as part of that group's senior management team led it to a successful initial public offering on the NASDAQ in May 1995. In addition, he has significant management, technology & product marketing and chemical research & development experience acquired during his time with Strohn CIM Systems, Inc., Monsanto Chemical Company and Shell Chemicals. He holds a BASc. in Chemistry with honours from the University of Waterloo.

Dr. Steven Bloembergen, Ph.D., Executive Vice President Technology

Dr. Bloembergen co-founded EcoSynthetix U.S. which he started in 1996 in Lansing, Michigan and served on its Board of Directors from 1996 to 2011. His vision for the company involved the idea of imparting synthetic polymer design concepts to bio-based materials to develop and commercialize novel environmentally responsible materials that deliver superior performance at a competitive price position to the petroleum-based products they replace. In 2007, Dr. Bloembergen received a Nano50 Product Award at the NNEC Nanotech Conference for the Company's ECOSPHERE biopolymer nanoparticle technology that was cited as "the most near-term commercially viable nanotechnology". Dr. Bloembergen has served in numerous roles relating to biomaterials and polymers including roles with the TAPPI Technical Program Committee, the Nanotech Briefs Editorial Advisory Board, Esso Petroleum Canada, The Michigan Biotechnology Institute, Polysar Rubber Corporation and Xerox Research Center of Canada. He received a Ph.D. in Polymer Science and Engineering from the University of Waterloo in Ontario, Canada in 1986.

Robert Haire, CPA, CA, Chief Financial Officer and Corporate Secretary

Mr. Haire has served as the Chief Financial Officer of EcoSynthetix U.S. since April 2008. Prior to this role, Mr. Haire was Director of Tax with Husky Injection Molding Systems Ltd., a TSX listed company acquired by Onex Corporation in December 2007. Prior to this role, Mr. Haire was Treasurer and Director of Tax at GE Zenon ULC, formally Zenon Environmental Inc., a S&P TSX 300 company acquired by General Electric Company, where he worked for over five years. Mr. Haire holds a B.Comm from Ryerson University and is a member of the Canadian Institute of Chartered Accountants, the Chartered Accountants of Ontario and Certified Public Accountants of Illinois.

Edward van Egdom, Vice President, Manufacturing

Mr. van Egdom has held the position of Vice President, Manufacturing of EcoSynthetix since 2001. In this role he has global responsibility for the scale-up, commercialization and manufacturing efforts of the EcoSynthetix family of products, including the launch of the new Centre of Innovation facility in Burlington, ON. Prior to this role, Mr. van Egdom held the position of Vice President with Tech Inspirations Inc., a venture capital company with a focus on investments in computer software, internet and biotechnology companies. Previously he has also held various senior management level engineering and manufacturing roles with the Dana Corporation in both Canada and the United States. Mr. van Egdom holds a B.Eng in Mechanical Engineering from Ryerson University in Toronto, Ontario.

Dr. Peter van Ballegooie, Ph.D., Vice President, Marketing & Business Development

Dr. van Ballegooie joined EcoSynthetix U.S. in March 2011 to head the marketing and business development in new markets. Mr. van Ballegooie spent 21 years with Dow Europe S.A., DuPont Dow Elastomers LLC and E. I. du Pont deNemours and Company in product and market development for the automotive and construction industry. Dr. van Ballegooie has a Ph.D. in Chemical Engineering from the University of Waterloo and a MBA in Business Strategy & Marketing from Wilfrid Laurier University.

John E. Barker, Director

Mr. Barker is a finance professional with general management experience. Mr. Barker was Senior Vice President and Chief Financial Officer of Zenon Environmental Inc. from 2000 to 2005. He was responsible for managing the finance and information technology of over 35 subsidiary companies in 25 different countries. Most notably, he led teams that raised over $140 million between 2002 and 2004, and assisted in the sale of Zenon Environmental Inc. to General Electric Company. Mr. Barker currently serves as Chair of the Audit Committee of EcoSynthetix U.S. He also sits on the Board of Directors of Aeroquest International Limited a TSX listed company where he serves as the Chair of the Audit Committee and Titan Medical Inc. a TSX Venture Exchange company.

David W. Colcleugh, Ph.D., Director

Mr. Colcleugh earned a B.A., M.A. Sc. and Ph.D. in Chemical Engineering from the University of Toronto where he was recently appointed Leadership Development Professor. He joined DuPont Canada Inc ("**DuPont**") in 1963 as a Research Engineer. During his career with Du Pont, he held many senior management positions. Prior to being appointed Chair, President and Chief Executive Officer of DuPont Canada Inc. in 1997, a position held until retirement in 2003, he was the president of DuPont Asia Pacific. He currently sits on the Board of Directors of BIOX Corporation, KmX Membrane Technologies Corp. (a private company), Chemtrade Logistics Income Fund and was recently appointed as a Fellow of the Canadian Academy of Engineering.

John Varghese, Director

Mr. Varghese is currently President and Chief Executive Officer of JV Venture Partners, Chairman of Sprott Power ("SPZ.TO"), and Chairman of Direct Media Technologies Inc. Mr. Varghese has over 20 years professional experience ranging from venture capital and investment banking to senior management and board of director roles in various industries. He was Chief Executive Officer and a co-owner of VentureLink Innovation Fund Inc. from 2003 to 2011 and has held senior management roles within multinational corporations including Royal Bank Capital Corporation, Midland Walwyn Capital Inc. (Merrill Lynch Canada), Dell Computer Corporation, and Jim Pattison Industries Ltd. He is an active member of the venture capital industry, sitting on the Executive Committee and on the board of directors of the Canadian Venture Capital and Private Equity Association, where he chairs the Membership committee. He is also on the board of directors of Nano Ontario, a member of the Alberta Innovates nanoWorks Steering Committee, and on the executive committee of the Canadian Innovation Exchange. Mr. Varghese is a founding Board member of Bay Street Fore a Cau$e Inc., a not-for-profit corporation that supports numerous children's charities across Toronto. Mr. Varghese is a past member of University of Toronto's Business board of directors and a past board member of the University of Toronto Asset Management Corporation. Mr. Varghese obtained his Chartered Accountant designation in 1991. He graduated from the University of Western Ontario with an Economics degree in 1988.

Dr. Arthur Carty, Ph.D., Director

Dr. Carty is currently the Executive Director, Waterloo Institute for Nanotechnology. Prior to this appointment, Dr. Carty was the National Science Advisor to the Prime Minister and to the Government of Canada from 2004 to 2008 and the Adjunct Professor and Member, School of Graduate Studies and Research, University of Ottawa from 1995 to 2007. From 1994 to 2004, Dr. Carty served as the President of the National Research Council of Canada. Prior to this role, Dr. Carty spent two years at Memorial University and then 27 years at the University of Waterloo where he was successively professor of chemistry, director of the Guelph-Waterloo Center for Graduate Work in Chemistry, Chair for two terms and Dean of Research. Dr Carty has over 320 publications in peer reviewed journals and five patents to his credit. He is a former president of the Canadian Society for Chemistry, an honorary fellow of the Canadian Academy of Engineering and a fellow of the Royal Society of Canada and the Fields Institute. Amongst his many awards are the Alcan Award and the Montreal Medal of the Chemical Institute of Canada, the Queen Elizabeth II Golden Jubilee Medal and the Taiwan National Science Council Professional Medal. He has been accorded thirteen honorary degrees from foreign and Canadian universities. Dr Carty is an Officer of the Order of Canada and has also been honoured by France as Officier de l'Ordre national du Mérite. He has won numerous scholarships and awards, most recently being awarded the National Leader Award, Genome British Columbia in 2010 and the Honorary Fellow, Canadian Academy of Engineering in 2009. Currently, Dr. Carty is an Advisory Board member for the Institute for Diagnostic Imaging Research, a Board member of DBL Cleantech Capital Inc., the Chair of the Board of Innovative Materials Technologies, a Board member of Bilcare Limited (India), a member of the Advisory Board of the Center for Electron Microscopy, McMaster University, Brockhouse Institute for Materials Science and a Council member, Science and Technology in Society Forum (Japan). Dr. Carty holds a Bachelor of Science, Chemistry and a Ph.D. (Inorganic Chemistry) from the University of Nottingham.

Directors will be elected at each annual meeting of shareholders and serve as such until the next annual meeting or until their successors are elected or appointed.

As at December 31, 2011, the directors and executive officers, as a group, beneficially owned, directly or indirectly, or exercised control or direction over 1,200,355 Common Shares, representing less than one percent of

the total number of Common Shares outstanding before giving effect to the exercise of options to purchase Common Shares held by such directors and executive officers. The statement as to the number of Common Shares beneficially owned, directly or indirectly, or over which control or direction is exercised by the directors and executive officers as a group is based upon information furnished by the directors and executive officers.

Cease Trade Orders, Bankruptcies, Penalties and Sanctions

No director or executive officer of the Company is, or within ten years prior to the date hereof has been, a director, chief executive officer or chief financial officer of any company (including the Company) that, (i) was subject to a cease trade order, an order similar to a cease trade order or an order that denied the relevant company access to any exemption under securities legislation, that was in effect for a period of more than 30 consecutive days, that was issued while the director or executive officer was acting in the capacity as director, chief executive officer or chief financial officer; or (ii) was subject to a cease trade order, an order similar to a cease trade order or an order that denied the relevant company access to any exemption under securities legislation, that was in effect for a period of more than 30 consecutive days, that was issued after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer.

No director or executive officer of the Company, or a shareholder holding a sufficient number of securities of the Company to affect materially control of the Company, (i) is, or within ten years prior to the date hereof has been, a director or executive officer of any company (including the Company) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or (ii) has, within ten years prior to the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer or shareholder.

No director or executive officer of the Company, or a shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company, has been subject to (i) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or (ii) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision.

Conflicts of Interest

To the best of our knowledge there are no known existing or potential conflicts of interest among the Company and its directors, officers or other members of management as a result of their outside business interests except that certain of our directors and officers serve as directors and officers of other companies, and therefore it is possible that a conflict may arise between their duties to the Company and their duties as a director or officer of such other companies.

LEGAL PROCEEDINGS AND REGULATORY ACTIONS

We are from time to time involved in legal proceedings of a nature considered normal to our business. We believe that none of the litigation in which we and EcoSynthetix U.S. are currently involved, or have been involved since the beginning of the most recently completed financial year, individually or in the aggregate, is material to its consolidated financial condition or results of operations.

We are involved in two patent oppositions commenced in the European Patent Office regarding an intellectual property extension. The oppositions do not affect any material intellectual property owned by us. We believe we will be successful in defending our patent against these oppositions.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

None of (i) the directors or executive officers of the Company, (ii) any shareholder who beneficially owns or controls or directs, directly or indirectly, more than 10% of the Common Shares of the Company, or (iii) any associate or affiliate of the persons referred to in (i) and (ii), has or has had any material interest, direct or indirect, in any transaction within the three years before the date of this annual information form or in any proposed transaction that has materially affected or is reasonably expected to materially affect the Company or any of its subsidiaries.

TRANSFER AGENT AND REGISTRAR

The transfer agent and registrar for the Common Shares in Canada is CIBC Mellon Trust Company at its principal offices in Toronto, Ontario.

MATERIAL CONTRACTS

The following are the only material contracts, other than those contracts entered into in the ordinary course of business, which the Company has entered into since the beginning of the last financial year or entered into prior to such date but which contract is still in effect:

- the underwriting agreement dated July 27, 2011 between the Company and UBS Securities Canada Inc., Canaccord Genuity Corp., RBC Dominion Securities Inc., BMO Nesbitt Burns Inc., CIBC World Markets Inc., GMP Securities L.P. and Piper Jaffray & Co.;

- the share purchase agreement with certain existing holders of shares of common stock of EcoSynthetix U.S. pursuant to which the Company acquired their shares of common stock of EcoSynthetix U.S. in exchange for Common Shares; and

- the support agreement with EcoSynthetix U.S. pursuant to which EcoSynthetix U.S. filed articles of amendment providing for the acquisition of the remaining shares of common stock of EcoSynthetix U.S. by the Company.

Copies of the above Material Contracts may be inspected during ordinary business hours at the Company's principal executive offices located at 3365 Mainway, Burlington, Ontario, L7M 1A6, or may be viewed under our profile at *www.sedar.com*.

INTERESTS OF EXPERTS

PricewaterhouseCoopers LLP are the auditors to the Company at its principal office in Toronto, Ontario. PricewaterhouseCoopers LLP has advised the Company that they are independent in accordance with all relevant professional and regulatory standards.

AUDIT COMMITTEE

Charter of the Audit Committee

The Board of Directors has adopted a written charter (the "**Charter of the Audit Committee**") for the audit committee of the Company (the "**Audit Committee**"), which sets out the Audit Committee's responsibility in reviewing the financial statements of the Company and public disclosure documents containing financial information and reporting on such review to the Board of Directors, ensuring that adequate procedures are in place for the review of the Company's public disclosure documents that contain financial information, overseeing the work and review the independence of the external auditors and reviewing, evaluating and approving the internal control procedures that are implemented and maintained by management. A copy of the Charter of the Audit Committee is attached to this annual information form as Schedule "A".

Composition of the Audit Committee

The members of the Company's current Audit Committee are Messrs. Barker, Colcleugh, Carty and Varghese. Each of Messrs. Barker, Colcleugh, Carty and Varghese are independent and financially literate within the meaning of Multilateral Instrument 52-110 *Audit Committees* ("**MI 52-110**"). The meaning of independence under MI 52-110 is set out in Schedule "B" to the Audit Committee's charter.

The Audit Committee met two (2) times between August 4, 2011 and December 31, 2011. Each of Messrs. Barker, Colcleugh, Carty and Varghese were present at all meetings.

Relevant Education and Experience

Each of the Audit Committee members has an understanding of the accounting principles used to prepare financial statements and varied experience as to the general application of such accounting principles, as well as an understanding of the internal controls and procedures necessary for financial reporting. See "Directors and Officers — Biographies".

Pre-Approval Policies and Procedures

The Charter of the Audit Committee sets out procedures regarding the provision of non-audit services by the Company's external auditor. This policy encourages consideration of whether the provision of services other than audit services is compatible with maintaining the auditor's independence and requires Audit Committee pre-approval of permitted non-audit and non-audit-related services.

External Auditor Service Fees

Audit Fees

"Audit Fees" include fees necessary to perform the annual audit of the consolidated financial statements. The aggregate audit fees billed by the Company's independent registered chartered accountants for the financial year ended December 31, 2011 were $86,500 (for the financial year ended December 31, 2010 – $42,500).

Audit-Related Fees

"Audit-Related Fees" include fees for assurance and related services by the external auditor that are reasonably related to the performance of the audit or review of the Company's financial statements other than those included in Audit Fees. The aggregate audit-related fees billed by the Company's independent registered chartered accountants for the financial year ended December 31, 2011 were $602,625 (for the financial year ended December 31, 2010 – Nil).

Tax Fees

"Tax Fees" include fees for all tax services other than those included in "Audit Fees" and "Audit-Related Fees". This category includes fees for tax compliance, tax advice and tax planning. The aggregate tax fees billed by the Company's independent registered chartered accountants for the financial year ended December 31, 2011 were $731,454 (for the financial year ended December 31, 2010 – $10,500).

All Other Fees

"All Other Fees" include fees for products and services provided by the auditor other than those included above. The aggregate non-audit fees billed by the Company's independent registered chartered accountants for the financial year ended December 31, 2011 were nil (for the financial year ended December 31, 2010 – Nil).

Note that in connection with the initial public offering, the Company incurred all the fees represented for December 31, 2010 in fiscal 2011.

ADDITIONAL INFORMATION

Additional information relating to the Company can be found on SEDAR at *www.sedar.com* or on the Company's website at *www.ecosynthetix.com*. Additional information, including directors' and officers' remuneration and indebtedness, principal holders of the Company's securities and securities authorized for issuance under equity compensation plans is contained in the most recent management information circular of the Company which will be available on SEDAR at *www.sedar.com*. Additional financial information is provided in the Company's audited consolidated financial statements and management's discussion and analysis for the financial year ended December 31, 2011.

SCHEDULE "A"
ECOSYNTHETIX INC.

CHARTER OF THE AUDIT COMMITTEE
OF THE BOARD OF DIRECTORS

1. PURPOSE

The audit committee (the "**Committee**") is a committee of the board of directors (the "**Board**") of EcoSynthetix Inc. (the "**Corporation**"). The primary purpose of the Committee is to assist the Board in fulfilling its oversight responsibilities relating to financial accounting and reporting processes and internal controls for the Corporation.

2. COMPOSITION AND MEETINGS

The Committee shall be composed of three or more directors, as determined by the Board, each of whom shall be "independent directors" within the meaning of section 1.4 of National Instrument 52-110, Audit Committees, as may be amended from time to time.

The members of the Committee shall be appointed by the Board at the annual organizational meeting of the Board, and serve at the pleasure of the Board for one year or until their successors are duly appointed. Unless a chairman of the Committee (the "**Chair**") is appointed by the Board, the members of the Committee may designate a Chair by a majority vote of the full membership of the Committee. The position description and responsibilities of the Chair are set out in Schedule "A" attached hereto.

The Committee shall meet at least quarterly, at the discretion of the Chair or a majority of its members, as circumstances dictate or as may be required by applicable legal or stock exchange requirements. The Committee may ask members of management of the Corporation or others to attend meetings or to provide information as necessary.

Quorum for the transaction of business at any meeting of the Committee shall be a majority of the number of members of the Committee or such greater number as the Committee shall by resolution determine.

Meetings of the Committee shall be held from time to time as the Committee or the Chair shall determine upon 48 hours notice to each of its members. The notice period may be waived by unanimous resolution of the Committee.

The Committee shall keep minutes of its meetings which shall be submitted to the Board. The Committee may, from time to time, appoint any person who need not be a member, to act as a secretary at any meeting.

Any matters to be determined by the Committee shall be decided by a majority of votes cast at a meeting of the Committee called for such purpose. Actions of the Committee may be taken by an instrument or instruments in writing signed by all of the members of the Committee, and such actions shall be effective as though they had been decided by a majority of votes cast at a meeting of the Committee called for such purpose. The Committee shall report its determinations to the Board at the next scheduled meeting of the Board, or earlier as the Committee deems necessary. All decisions or recommendations of the Committee shall require the approval of the Board prior to implementation.

Each member of the Committee shall be "independent" and "financially literate". An "independent" director is a director who has no direct or indirect material relationship with the Corporation. A "material relationship" is a relationship which, in the view of the Board, could be reasonably expected to interfere with the exercise of the director's independent judgement or a relationship deemed to be a material relationship pursuant to Sections 1.4 and 1.5 of National Instrument 52-110 — Audit Committees, as set out in Schedule "B" attached hereto. A "financially literate" director is a director who has the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting

issues that are generally comparable to the breadth and complexity of the accounting issues that can be reasonably expected to be raised in the Corporation's financial statements.

The Committee and its membership shall meet all applicable legal, regulatory and listing requirements, including, without limitation, those of the Ontario Securities Commission ("**OSC**"), the Toronto Stock Exchange, the *Business Corporations Act* (Ontario) and all other applicable securities regulatory authorities.

3. RESPONSIBILITIES AND DUTIES

The responsibilities and duties of the Committee shall be the following:

Financial Accounting and Reporting Process and Internal Controls

a. the Committee shall review the annual audited and interim financial statements and related management's discussion and analysis and annual and interim earnings press releases before the Corporation publicly discloses this information to satisfy itself that the financial statements are presented in accordance with applicable accounting principles and report thereon and recommend to the Board whether or not same should be approved and filed with the appropriate regulatory authorities. With respect to the annual audited financial statements, the Committee shall discuss significant issues regarding accounting principles, practices, and judgments of management with management and the external auditors as and when the Committee deems it appropriate to do so. The Committee shall satisfy itself that the information contained in the annual audited financial statements is not erroneous, misleading or incomplete and that the audit function has been effectively carried out.

b. the Committee shall review any internal control reports prepared by management and the evaluation of such report by the external auditors, together with management's response.

c. the Committee shall be satisfied that adequate procedures are in place for the review of the Corporation's public disclosure of financial information extracted or derived from the Corporation's financial statements, management's discussion and analysis and annual and interim earnings press releases, and periodically assess the adequacy of these procedures.

d. the Committee shall review any press releases containing disclosure regarding financial information that are required to be reviewed by the Committee under any applicable laws or by this Charter before the Corporation publicly discloses this information.

e. the Committee shall meet no less than annually with the external auditors and the Chief Financial Officer or, in the absence of a Chief Financial Officer, with the officer of the Corporation in charge of financial matters, to review accounting practices, internal controls and such other matters as the Committee, Chief Financial Officer or, in the absence of a Chief Financial Officer, the officer of the Corporation in charge of financial matters, deem appropriate.

f. the Committee shall inquire of management and the external auditors about significant risks or exposures, both internal and external, to which the Corporation may be subject, and assess the steps management has taken to minimize such risks.

g. the Committee shall review the post-audit or management letter containing the recommendations of the external auditors and management's response and subsequent follow-up to any identified weaknesses.

h. the Committee shall ensure that there is an appropriate standard of corporate conduct including, if necessary, adopting and monitoring a corporate code of ethics for senior financial personnel and all employees.

i. the Committee shall follow procedures established as set out in Schedule "C" attached hereto, for:

   i. the receipt and treatment of complaints received by the Corporation regarding accounting, internal accounting controls or auditing matters; and

   ii. the confidential, anonymous submission by employees of the Corporation of concerns regarding questionable accounting or auditing matters.

j. the Committee shall provide oversight to related party transactions entered into by the Corporation.

k. the Committee shall establish the budget process, which shall include the setting of spending limits and authorizations, as well as periodic reports from the Chief Financial Officer comparing actual spending to the budget.

l. the Committee shall have the authority to adopt such policies and procedures as it deems appropriate to operate effectively.

External Auditors

a. the Committee shall recommend to the Board the external auditors to be nominated for the purpose of preparing or issuing an auditors' report or performing other audit, review or attestation services for the Corporation, shall set the compensation for the external auditors, provide oversight of the external auditors and shall ensure that the external auditors report directly to the Committee.

b. the Committee shall be directly responsible for overseeing the work of the external auditors, including the resolution of disagreements between management and the external auditors regarding financial reporting.

c. the pre-approval of the Committee shall be required as further set out in Schedule "D" prior to the undertaking of any non-audit services not prohibited by law to be provided by the external auditors in accordance with this Charter.

d. the Committee shall monitor and assess the relationship between management and the external auditors and monitor, support and assure the independence and objectivity of the external auditors.

e. the Committee shall review the external auditors' audit plan, including the scope, procedures and timing of the audit.

f. the Committee shall review the results of the annual audit with the external auditors, including matters related to the conduct of the audit.

g. the Committee shall obtain timely reports from the external auditors describing critical accounting policies and practices, alternative treatments of information within selected accounting principles that were discussed with management, their ramifications, and the external auditors' preferred treatment and material written communications between the Corporation and the external auditors review.

h. the Committee shall review fees paid by the Corporation to the external auditors and other professionals in respect of audit and non-audit services on an annual basis.

i. the Committee shall review and approve the Corporation's hiring policies regarding partners, employees and former partners and employees of the present and former external auditors of the Corporation.

j. the Committee shall monitor and assess the relationship between management and the external auditors and monitor and support the independence and objectivity of the external auditors.

Other Responsibilities

a. the Committee shall perform any other activities consistent with this Charter and governing law, as the Committee or the Board deems necessary or appropriate.

b. the Committee shall review and assess the adequacy of this Charter annually and submit any proposed revisions to the Board for approval.

4. REPORTING

The Committee is responsible for reviewing and submitting to the Board, as a whole, recommendations concerning the Corporation's financial affairs, code of ethics, whistleblower and corporate disclosure, confidentiality and insider trading policies.

5. AUTHORITY

The Committee shall have the authority to:

a. engage independent counsel and other advisors including accounting or other consultants or experts as it determines necessary to carry out its duties;

b. set and pay the compensation for advisors employed by the Committee;

c. communicate directly with the internal and external auditors;

d. access, on an unrestricted basis, the books and records of the Corporation; and

e. conduct any investigation appropriate to its responsibilities, and it may request the external auditors, as well as any officer of the Corporation, or outside counsel for the Corporation, to attend a meeting of the Committee or to meet with any members of, or advisors to, the Committee.

f. the Committee shall have the authority to engage the external auditors to perform a review of the interim financial statements.

Schedule "A"
ECOSYNTHETIX INC.
Position Description for the Chairman of the Audit Committee

I. Purpose

The Chairman of the Audit Committee of the Board shall be an independent director who is elected by the Board to act as the leader of the Committee in assisting the Board in fulfilling its financial reporting and control responsibilities to the shareholders of the Corporation.

II. Who may be Chairman

The Chairman will be selected from amongst the independent directors of the Corporation who have a sufficient level of financial sophistication and experience in dealing with financial issues to ensure the leadership and effectiveness of the Committee.

The Chairman will be selected annually at the first meeting of the Board following the annual general meeting of shareholders.

III. Responsibilities

The following are the primary responsibilities of the Chairman:

- chairing all meetings of the Committee in a manner that promotes meaningful discussion;
- ensuring adherence to the Committee's Charter and that the adequacy of the Committee's Charter is reviewed annually;
- providing leadership to the Committee to enhance the Committee's effectiveness, including:
    - providing the information to the Board relative to the Committee's issues and initiatives and reviewing and submitting to the Board an appraisal of the Corporation's independent auditors and internal auditing functions;
    - ensuring that the Committee works as a cohesive team with open communication, as well as ensuring open lines of communication among the independent auditors, financial and senior management and the Board of Directors for financial and control matters;
    - ensuring that the resources available to the Committee are adequate to support its work and to resolve issues in a timely manner;
    - ensuring that the Committee serves as an independent and objective party to monitor the Corporation's financial reporting process and internal control systems, as well as to monitor the relationship between the Corporation and the independent auditors to ensure independence;
    - ensuring that procedures are in place to assess the audit activities of the independent auditors and the internal audit functions;
    - ensuring that procedures are in place to review the Corporation's public disclosure of financial information and assess the adequacy of such procedures periodically, in consultation with the Disclosure Committee;
    - ensuring that clear hiring policies are put in place for partners and employees of the auditors; and

    - ensuring that procedures are in place for dealing with complaints received by the Corporation regarding accounting, internal controls and auditing matters, and for employees to submit confidential anonymous concerns regarding questionable accounting or auditing matters.

- managing the Committee, including:

    - adopting procedures to ensure that the Committee can conduct its work effectively and efficiently, including committee structure and composition, scheduling, and management of meetings;

    - preparing the agenda of the Committee meetings and ensuring pre-meeting material is distributed in a timely manner and is appropriate in terms of relevance, efficient format and detail;

    - ensuring meetings are appropriate in terms of frequency, length and content;

    - obtaining and reviewing with the Committee an annual report from the independent auditors, and arranging meetings with the auditors and financial management to review the scope of the proposed audit for the current year, its staffing and the audit procedures to be used;

    - overseeing the Committee's participation in the Corporation's accounting and financial reporting process and the audits of its financial statements;

    - ensuring that the auditors report directly to the Committee, as representatives of the Corporation's shareholders; and

    - annually reviewing with the Committee its own performance.

- Ensuring the establishment of a budget process, which shall include the setting of spending limits and authorizations and periodical reports from the Chief Financial Officer of actual spending as compared to the budget.

Schedule "B"
ECOSYNTHETIX INC.
National Instrument 52-110 *Audit Committees* ("NI 52-110")

Section 1.4 — Meaning of Independence

(1) An audit committee member is independent if he or she has no direct or indirect material relationship with the issuer.

(2) For the purposes of subsection (1), a "material relationship" is a relationship which could, in the view of the issuer's board of directors, be reasonably expected to interfere with the exercise of a member's independent judgment.

(3) Despite subsection (2), the following individuals are considered to have a material relationship with an issuer:

(a) an individual who is, or has been within the last three years, an employee or executive officer of the issuer;

(b) an individual whose immediate family member is, or has been within the last three years, an executive officer of the issuer;

(c) an individual who:

(i) is a partner of a firm that is the issuer's internal or external auditor,

(ii) is an employee of that firm, or

(iii) was within the last three years a partner or employee of that firm and personally worked on the issuer's audit within that time;

(d) an individual whose spouse, minor child or stepchild, or child or stepchild who shares a home with the individual:

(i) is a partner of a firm that is the issuer's internal or external auditor,

(ii) is an employee of that firm and participates in its audit, assurance or tax compliance (but not tax planning) practice, or

(iii) was within the last three years a partner or employee of that firm and personally worked on the issuer's audit within that time;

(e) an individual who, or whose immediate family member, is or has been within the last three years, an executive officer of an entity if any of the issuer's current executive officers serves or served at that same time on the entity's compensation committee; and

(f) an individual who received, or whose immediate family member who is employed as an executive officer of the issuer received, more than $75,000 in direct compensation from the issuer during any 12 month period within the last three years.

(4) Despite subsection (3), an individual will not be considered to have a material relationship with the issuer solely because

(a) he or she had a relationship identified in subsection (3) if that relationship ended before March 30, 2004; or

(b) he or she had a relationship identified in subsection (3) by virtue of subsection (8) if that relationship ended before June 30, 2005.

(5) For the purposes of clauses (3)(c) and (3)(d), a partner does not include a fixed income partner whose interest in the firm that is the internal or external auditor is limited to the receipt of fixed amounts of compensation (including deferred compensation) for prior service with that firm if the compensation is not contingent in any way on continued service.

(6) For the purposes of clause (3)(f), direct compensation does not include:

(a) remuneration for acting as a member of the board of directors or of any board committee of the issuer, and

(b) the receipt of fixed amounts of compensation under a retirement plan (including deferred compensation) for prior service with the issuer if the compensation is not contingent in any way on continued service.

(7) Despite subsection (3), an individual will not be considered to have a material relationship with the issuer solely because the individual or his or her immediate family member

(a) has previously acted as an interim chief executive officer of the issuer, or

(b) acts, or has previously acted, as a chair or vice-chair of the board of directors or of any board committee of the issuer on a part-time basis.

(8) For the purpose of section 1.4, an issuer includes a subsidiary entity of the issuer and a parent of the issuer.

Section 1.5 — Additional Independence Requirements for Audit Committee Members

(1) Despite any determination made under section 1.4 of NI 52-110, an individual who

(a) accepts, directly or indirectly, any consulting, advisory or other compensatory fee from the issuer or any subsidiary entity of the issuer, other than as remuneration for acting in his or her capacity as a member of the board of directors or any board committee, or as a part-time chair or vice-chair of the board or any board committee; or

(b) is an affiliated entity of the issuer or any of its subsidiary entities,

is considered to have a material relationship with the issuer.

(2) For the purposes of subsection (1), the indirect acceptance by an individual of any consulting, advisory or other compensatory fee includes acceptance of a fee by

(a) an individual's spouse, minor child or stepchild, or a child or stepchild who shares the individual's home; or

(b) an entity in which such individual is a partner, member, an officer such as a managing director occupying a comparable position or executive officer, or occupies a similar position (except limited partners, non-managing members and those occupying similar positions who, in each case, have no active role in providing services to the entity) and which provides accounting, consulting, legal, investment banking or financial advisory services to the issuer or any subsidiary entity of the issuer.

(3) For the purposes of subsection (1), compensatory fees do not include the receipt of fixed amounts of compensation under a retirement plan (including deferred compensation) for prior service with the issuer if the compensation is not contingent in any way on continued service.

Schedule "C"
ECOSYNTHETIX INC.
Procedures for Receipt of Complaints and Submissions
Relating to Accounting Matters

The Audit Committee has adopted the following procedures:

a) Management of the Corporation shall promptly forward to the Audit Committee any complaints that it has received regarding financial statement disclosures, accounting, internal accounting controls or auditing matters.

b) Any employee of the Corporation may submit, on a confidential or anonymous basis if the employee so desires, any concerns regarding financial statement disclosures, accounting, internal accounting controls, auditing matters or violations of the Corporation's Code of Business Conduct and Ethics. All such concerns shall be set forth in writing and forwarded in a sealed envelope to the Chairman of the Audit Committee labeled with a legend such as "To be opened by the Audit Committee only, being submitted pursuant to the Whistleblower Policy adopted by the Corporation." If an employee would like to discuss any matter with the Audit Committee, the employee should indicate this in the submission and include a telephone number at which he or she might be contacted if the Audit Committee deems it appropriate. If management receives any such envelope, it shall be forwarded promptly and unopened to the Chairman of the Audit Committee. The Chairman of the Audit Committee can be reached as follows:

PRIVATE AND CONFIDENTIAL
Attn: Chairman of the Audit Committee
EcoSynthetix Inc.
3365 Mainway
Burlington, Ontario L7M 1A6

c) Following the receipt of any complaints submitted hereunder, the Audit Committee will investigate each matter so reported and take corrective and disciplinary actions where appropriate, which may include, alone or in combination, a warning or letter of reprimand, demotion, loss of merit increase, bonus or stock options, suspension without pay or termination of employment. The Audit Committee shall notify the Board and, if appropriate, the Chief Executive Officer of such investigations.

d) During investigations, the Audit Committee shall endeavour to act in a prudent and reasonable manner, with minimal disruption to the business and affairs of the Corporation and with sensitivity to the personal circumstances of the individual being investigated.

e) In circumstances of impropriety alleged against the Board, as a whole or any member thereof, the Chief Executive Officer shall be responsible to investigate such allegations and the Chief Executive Officer shall report his or her findings to the Board.

f) The Audit Committee may enlist employees of the Corporation and/or outside legal, accounting or other advisors, as appropriate, to conduct any investigation of complaints regarding financial statement disclosures, accounting, internal accounting controls, auditing matters or violations of the Corporation's Code of Business Conduct and Ethics. In conducting any investigation, the Audit Committee shall use reasonable efforts to protect the confidentiality and anonymity of the complainant.

g) The Audit Committee shall retain as a part of the records of the Audit Committee any such complaints or concerns for a period of no less than seven (7) years.

Schedule "D"
ECOSYNTHETIX INC.
Procedures for Approval of Non-Audit Services

1. The Corporation's external auditors shall be prohibited from performing for the Corporation the following categories of non-audit services:

   (1) bookkeeping or other services related to the Corporation's accounting records or financial statements;

   (2) appraisal or valuation services, fairness opinion or contributions-in-kind reports;

   (3) actuarial services;

   (4) internal audit outsourcing services;

   (5) management functions;

   (6) human resources;

   (7) broker or dealer, investment adviser or investment banking services;

   (8) legal services; and

   (9) any other service that the Canadian Public Accountability Board or International Accounting Standards Board or other analogous board which may govern the Corporation's accounting standards, from time to time determines is impermissible.

2. In the event that the Corporation wishes to retain the services of the Corporation's external auditors for tax compliance, tax advice or tax planning, the Chief Financial Officer of the Corporation shall consult with the Chair of the Committee, who shall have the authority to approve or disapprove on behalf of the Committee, such non-audit services. All other non-audit services shall be approved or disapproved by the Committee as a whole.

3. The Chief Financial Officer of the Corporation shall maintain a record of non-audit services approved by the Chair of the Committee or the Committee for each fiscal year and provide a report to the Committee no less frequently than on a quarterly basis.