



A world powered
by clean energy

Xebec Adsorption Inc.

**Management's Discussion and Analysis
for the three-month period ended June 30, 2016**

August 29th, 2016

Additional information relating to the Company can be found on SEDAR at www.sedar.com.

1. ABOUT THIS MANAGEMENT DISCUSSION AND ANALYSIS

The following Management's Discussion and Analysis ("MD&A") provides a review of the results of operations, financial conditions and cash flows of Xebec for the three-month period ended June 30, 2016. This discussion should be read in conjunction with the information contained in the Company's unaudited consolidated financial statements and related notes for the second quarter of 2016, as well as with the audited consolidated financial statements and related notes for the year ended December 31, 2015. Additional information can be found on SEDAR at www.sedar.com.

The financial information presented herein has been prepared on the basis of International Financial Reporting Standards (IFRS) for financial statements and is expressed in Canadian dollars unless otherwise stated.

In this MD&A, unless otherwise indicated or required by the context, "Xebec", "the Company", "we", "us", "our", "our Company", "the Group" and "our Group" designate, as the case may be, Xebec Adsorption Inc. or Xebec Adsorption Inc. and its subsidiaries. The Company's other subsidiaries are designated as follows: "Xebec SEA" for Xebec Adsorption South East Asia PTE. Ltd., "Xebec USA" for Xebec Adsorption USA, inc. and "Xebec Shanghai" for Xebec Adsorption (Shanghai) Co. Ltd. Also, the fiscal year ending December 31, 2015 and those ended December 31 of prior years are sometimes designated by the terms "fiscal 2015", "fiscal 2014" and so on.

The information contained in this MD&A and certain other sections of this report also includes some figures that are not performance measures consistent with IFRS, such as earnings (loss) before amortization, financial expenses, other items and income taxes ("EBITDA"). The Company uses EBITDA because this measure enables management to assess the Company's operational performance. This measure is a widely accepted financial indicator of a company's ability to repay and assume its debt. Investors should not regard it as an alternative to operating revenues or cash flows, or a measure of liquidity. As this measure is not established in accordance with IFRS, it might not be comparable to those of other companies.

The information contained in this Management's Report accounts for any major event occurring up to August 29th, 2016, the date on which the Board of Directors approved the consolidated financial statements and Management's Report for the period ended June 30, 2016. It presents the Company's status and business context as they were, to management's best knowledge, at the time this report was written.

FORWARD-LOOKING STATEMENTS

This Management Discussion and Analysis ("MD&A") contains forward-looking statements, including statements regarding the future success of the Company's business, technology, and market opportunities. Forward-looking statements typically contain words such as "believes", "expects", "anticipates", "continues", "could", "indicates", "plans", "will", "intends", "may", "projects", "schedules", "would" or similar expressions suggesting future outcomes or events, although not all forward-looking statements contain these identifying words. Examples of such statements include, but are not limited to, statements concerning: (i) actions expected to be undertaken to achieve the Company's strategic goals; (ii) the key market drivers impacting the Company's success; (iii) intentions with respect to future biogas development work; (iv) expectations regarding business activities and orders that may be received in fiscal 2016 and beyond; (v) trends in, and the development of, the Company's target markets; (vi) the Company's market opportunities; (vii) the benefits of the Company's products, (viii) the intention to enter into agreements with partners; (ix) future outsourcing; (x) expectations regarding competitors; (xi) the expected impact of the described risks and uncertainties; (xii) intentions with respect to the payment of dividends; (xiii) the management of the Company's liquidity risks in light of the prevailing economic conditions; (xiv) the Company's cost reduction plan; and (xv) the search for additional financing over the next months. These statements are neither promises nor guarantees, but involve known and unknown risks and uncertainties that may cause the

Company's actual results, level of activity or performance to be materially different from any future results, levels of activity or performance expressed in or implied by these forward-looking statements. These risks include, generally, risks related to revenue growth, operating results, industry and products, technology, competition, the economy and other factors. Although the forward-looking statements contained herein are based upon what management believes to be current and reasonable assumptions, the Company cannot assure readers that actual results will be consistent with these forward-looking statements. Examples of such assumptions include, but are not limited to: (i) trends in certain market segments and the economic climate generally; (ii) the pace and outcome of technological development; (iii) the identity and expected actions of competitors and customers; and (iv) the value of the Canadian dollar. The forward-looking statements contained herein are made as of the date of this MD&A and are expressly qualified in their entirety by this cautionary statement. Except to the extent required by law, the Company undertakes no obligation to publicly update or revise any forward-looking statements contained herein.

Compliance with International Financial Reporting Standards

Unless otherwise indicated, the financial information presented below, including tabular amounts, is expressed in Canadian dollars and prepared in accordance with International Financial Reporting Standards ("IFRS"). The information contained in this MD&A and certain other sections of this report also includes some figures that are not performance measures consistent with IFRS, such as earnings before amortization, financial expenses, other items and income taxes ("EBITDA"). The Company uses EBITDA because this measure enables management to assess the Company's operational performance. This measure is a widely accepted financial indicator of a company's ability to repay and assume its debt. Investors should not regard it as an alternative to operating revenues or cash flows, or a measure of liquidity. As this measure is not established in accordance with IFRS, it might not be comparable to those of other companies.

2. DESCRIPTION OF THE BUSINESS

CORPORATE OVERVIEW

General

Xebec is a provider of gas purification and filtration solutions for the natural gas, field gas, biogas, nitrogen, oxygen, helium, and hydrogen markets. Xebec designs, engineers and manufactures innovative products that transform raw gases into marketable sources of clean energy. Xebec is focused on establishing positions in 3 key markets, namely gas purification, gas generation and filtration. Headquartered in Blainville (QC), Xebec operates two manufacturing facilities in Blainville, and Shanghai, People's Republic of China, as well as a sales and distribution network in North America, and Asia. Xebec (www.xebecinc.com) shares trade on the Toronto Venture Exchange ("TSXV") under the symbol XBC-V. On February 25th 2014, Xebec opened a sales office in Houston, Texas (USA), in order to better serve sales opportunities in the United States and South America.



Xebec's products and services are an essential part of a growing industry of transforming raw gases into marketable sources of clean energy.

Xebec's head office is in Blainville, Quebec in a 41,753 square foot manufacturing facility in which 52 people are currently employed. The Blainville operation houses corporate finance, sales and application support, filtration and aftermarket, global supply chain, operational engineering, manufacturing and service and maintenance support.

Xebec's Asian 20,451 square foot manufacturing facility is located in the Song Jiang district of Shanghai, Peoples Republic of China ("China"). This facility employs 29 people and is responsible for sales, product engineering and assembly using components manufactured in the greater Shanghai industrial area. The facility also provides shared services including supply chain and engineering support to Xebec's head office. Xebec Shanghai is also responsible for sales of Xebec's products, marketing, technical and after-sales support for the Asian and South East Asian markets.

Xebec USA is located in Houston, Texas. The primary role of Xebec USA is to handle sales from the United States and South America. In addition Xebec USA takes a leadership role within the group in the development of Xebec's next generation gas separation membrane technology. This facility currently employs two employees.

Xebec opened in the first quarter of 2009 along with Angstrom, a regional sales office in Singapore. This office has been closed and wound up on September 28, 2015. Since January 1st 2013, Xebec sells Xebec's products in South East Asia through Bireme PTE Limited, a reseller owned by a former director of Xebec Singapore. Bireme provides local support and service to the South East Asian customer base including customers in Thailand, Malaysia, Indonesia, the Philippines, Vietnam, Brunei, Sri Lanka, Bangladesh and Pakistan. Bireme is primarily supplied by Xebec Shanghai.

Technology and Application

Overview

Almost all industrial gases, whether they are inert, flammable, acid, reactive, or oxidizing, can be purified or dried using what is commonly known as adsorption technology. Adsorption technology is used to remove targeted impurities or separate bulk mixtures. This technology is used in many industrial gas treatment processes including biogas separation and purification, hydrogen recovery, air separation, and oxygen enrichment for medical applications as well as drying applications for air, natural gas, carbon monoxide, carbon dioxide, sulfur dioxide, acetylene, propylene, propane, and syngas.

Adsorption Technology

Adsorption is a process that occurs when a gas or liquid (solute) accumulates on the surface of a solid or a liquid (adsorbent) forming a film of molecules or atoms (adsorbate). This process differs from the absorption process, in which a substance diffuses into a liquid or a solid to form a solution. Xebec designs, develops, builds, sells, and services engineered adsorption and filtration products for industrial air and gas purification and separation applications employing the principles of Pressure Swing Adsorption ("PSA") and Temperature Swing Adsorption ("TSA").

Adsorbents are a class of materials that have the property whereby gas molecules adhere to their surface. Because some molecules will adhere preferentially over others, by selecting the right adsorbent material it is possible to selectively remove an impurity from a gas stream. To maximize capacity, adsorbents are made with an extremely high porosity, with the result that for a small quantity of adsorbent material, there is a very high surface area available for the impurities to be adsorbed. Once an adsorbent is laden with adsorbed molecules, it can be regenerated for re-use in two ways. The first method is to reduce the pressure from normal operating conditions of 80 pounds per square inch to 160 pounds per square inch down to between 0 and 1 pound per square inch, at which point most of the adsorbed molecules are released. The second method is to regenerate using heat. By raising the adsorbent to temperatures of 200°C or higher, the adsorbed molecules are driven off. The adsorbent must then be cooled down to be ready for the next cycle.

The adsorbents and zeolites used by Xebec differ from conventional adsorbents in that their pore sizes are smaller and more orderly structured. This means that some molecules are physically

too large to enter the pore, so that the selectivity for adsorption is determined by which molecules can actually enter the zeolite pore. In this way they act just like a sieve, therefore their common name - molecular sieve. One important property of adsorbents is their ability to remove impurities at very low concentrations. This means they can be used to purify a gas to a very high degree of purification. Certain adsorbents have larger pore sizes and are both used for removal of bulk quantities of impurities since they have a high loading capacity needed when impurity concentrations are high.

The purification of a gas implies the removal of a trace impurity or contaminant. The drying of air can be classified in this category since water molecules, considered as the contaminant in drying applications, are selectively adsorbed onto an adsorbent material as air passes over it. The impure moist air passes through the adsorbent material and the purified dry air is then released. Once the adsorbent material is saturated with water molecules, the adsorbed water can be released by changing the conditions under which it originally adhered to the adsorbent material. This regenerates the adsorbent so it can be used again. The principles of adsorption are not limited to the extraction of water, extending to many more types of gas purification. For instance, if the appropriate adsorbent material is used and other conditions are favorable, it is possible to selectively remove the carbon dioxide from air, to separate nitrogen from oxygen, or to dry any other gas such as natural gas.

Pressure Swing Adsorption (PSA)

Pressure swing adsorption is a widely used technology for the purification of gases. This regeneration process is accomplished by reducing the pressure. At the moderate pressures found in compressed air systems, such as 100 pounds per square inch, an adsorbent can support a certain amount of moisture. When that pressure is dropped to ambient air pressure, the adsorbent can only support a smaller amount of moisture. By swinging the pressure from high to low, it is possible to adsorb large quantities of moisture at the higher pressure, and then release that moisture at the low pressure. This technique is called pressure swing adsorption. By alternating between two adsorbent filled vessels, one vessel being on line and removing moisture at high pressure, and the other off line releasing the trapped moisture at low pressure, it is possible to thoroughly dry a gas.

Temperature Swing Adsorption (TSA)

Another method uses temperature in order to regenerate the adsorbent. At low temperatures, adsorbents can retain significant amounts of water. At temperatures above 200°C, however, adsorbents hold almost no water. By swinging the temperature from low to high, it is possible to adsorb large quantities of moisture at a low temperature, such as 40°C, and release it at the high temperature.

Conventional PSA Technology

Conventional PSA systems used today in industry are made up of four to sixteen large vessels, connected by a complex network of piping and valves to switch the gas flows between the vessels. Despite their widespread use in industry, Xebec believes that conventional PSA systems suffer from a number of inherent disadvantages. These PSA systems typically operate at slow cycle speeds of 0.05 to 0.5 cycles/minute since faster cycle speeds would cause the adsorbent beads to float or fluidize in the vessel, causing the beads to wear and ultimately fail. To meet customer demands for capacity, conventional PSA systems must utilize large vessels to compensate for the slow cycle speeds, leading to higher costs and a large equipment footprint. The use of large vessels also means that these PSA systems are typically erected in the field, increasing installation costs. The network of piping and valves used in large scale PSA systems, with the associated instrumentation and process control equipment, also adds cost to the overall system.

Xebec's Fast Cycle PSA Technology

Xebec's licensed rotary valve technology replaces the complex and bulky network of piping and valves used in conventional PSA systems with two compact, integrated valves. These rotary valves are included in Xebec's advanced purification and separation products, and they speed up (or intensify) the rate at which gas can be flowed into a PSA system that uses adsorbent beads in the separation process. In turn, the process intensification allows the PSA to be reduced in size, requiring smaller vessels (compared to conventional PSAs) to purify a particular volume of product gas. In addition, Xebec has a license to structured adsorbent material, which avoids the fluidization limitation of beaded adsorbents. Xebec's licensed structured adsorbent and rotary valve technologies are integrated into some of its advanced hydrogen and biogas purification products, which operate at significantly higher cycle speeds (up to 50 cycles/minute) than conventional PSA systems. This results in a direct reduction in the amount of adsorbent material, the size of equipment and the amount of energy required to purify a given volume of feed gas.

Membrane Technology

Xebec's membrane solution is another proven technology for biogas purification. When the product stream must be delivered at higher pressures (typically higher than 250 psig) or for smaller feed flow rates, Xebec offers high-performance, hollow fiber polymer membranes. When pressurized gas feed enters the membrane modules, CO₂ has a much stronger preference to diffuse and permeate through the polymer-based membrane than CH₄ molecules. As a result, the product stream, which is rich in CH₄, is retained in the pressurized side and can be sent directly to the natural gas grid.

Based on the desired degree of product purity and methane recovery, Xebec employs a two- or three-stage membrane system for gas upgrading. These advanced membrane separation techniques are superior to market competitors in several ways:

- The high methane recovery rate (up to 99.8%) generates very small amounts of CH₄ (between 0.5- 1%) in the exhaust stream
- The flexible membrane technology has the ability to produce product gas streams with different methane contents
- Apart from the high purity product gas, a portion of the recycle stream, which contains about 40% CH₄, can be withdrawn and used as a heating and electricity resource within the plant
- The flow rate of the recycle stream from the multi-stage membrane system is about 30-60% less than that of other available membrane systems. This leads to enormous energy savings in the compressor section of the unit.

Hybrid System (Combination of Membrane and PSA)

Xebec has been designing advanced Helium (He) recovery systems for several years, but has just recently developed a hybrid helium purification and conditioning system that will take low helium concentrations from a gas well, typically 0.6 to 2.5% of helium, and purify the gas stream to 99.999% (5 nines) pure helium, while achieving recovery rates of up to 95+%. After the helium purification step, the product helium gas can be liquefied or compressed for further monetization. Due to the fast cycle PSA technology of Xebec and the utilization of high performance membranes, these helium purification systems have a relatively small footprint and can be deployed in remote areas.

The hybrid system benefits from positive aspects of both PSA and Membrane systems. As an example, the membrane system is only preferred over a PSA system when the operating pressure is higher than 250 psig; however, the hybrid system is able to operate in wide ranges of pressure (100-400 psig).

Filtration Technology

Xebec has been designing and manufacturing air and gas filters for decades. In 2014 Xebec launched a dedicated filter line for natural gas filtration. The high-grade, cast aluminum filter housings (XL and XM series) are chromatinized for corrosion protection and finished with an impact and abrasion-proof powder coating on the outer side. High pressure carbon steel housings (XH series) are manufactured by means of iron phosphate passivation and have a nickel-coated finish. This multi-layer surface protection ensures high resistance and a long service life.

Xebec's gas filters can perform the following separations:

Water Separation - Large, heavy amounts of liquid droplets or particles from a compressed gas flow are separated by means of gravitational forces, centrifugal forces, inertial effects, etc. The differential pressure is constant and a high separation efficiency is guaranteed over the whole specified flow rate range.

Dry Type Filtration - Solid contaminants are separated from the compressed gas system. The solids contact the fibres of the filter media where they remain. A coarse and a fine coarse media filter protect the fine filter media, increasing the service life. The differential pressure (dry) increases with an increasing amount of contaminant. The elements can be operated from inside to out or vice versa. The preferred direction of flow is toward the finer filter fibres, i.e. from out-to-in.

Wet Type Filtration - Liquid contaminants from the compressed gas flow are separated using a fine multi-layer filter media in combination with a drainage media (coalescing filter). The liquid contaminants contact the fibres of the fine filter media, move along the fibres due to the compressed gas flow and form larger droplets when they are merged (coalescing effect). The droplets are absorbed by the drainage media, discharged to the filter element bottom due to gravitational forces, and drop off the filter element. Theoretically, the differential pressure (wet) is constant. However, it rises as the filter element is continuously loaded with liquid and solid contaminants. The direction of flow is toward the drainage media, i.e. from in-to-out.

Oil Vapour Adsorption - Compressed gas flow is separated by means of absorption to activated carbon. The CNG becomes virtually oil-free which cannot condense into a liquid any more. There is often a filter media downstream of the activated carbon in order to eliminate activated carbon abrasion particles (abrasion-free activated carbon filter). The differential pressure (dry) is constant. The direction of flow is always toward the media, i.e. from in-to-out. Liquid oil or water would dramatically reduce the retention capacity of the activated carbon for oil vapour and should, therefore, be separated in advance using appropriate grade filters.

Products

Xebec designs, develops, builds, sells, and services a range of adsorption and membrane gas purification systems for biogas purification (BGX Solutions®), natural gas dehydration and conditioning units for natural gas vehicle refueling stations and for natural gas upgrading (NGX Solutions®), hydrogen purification (PSA) systems (H2X Solutions®), helium purification (SGX Solutions®), field gas (associated gas) purification systems (AGX Solutions®), and gas generators and systems for nitrogen (N2X Solutions™) and oxygen (O2X Solutions™).

In addition Xebec designs, develops, builds, sells, and services a range of compressed air and gas filtration products under its FSX Solution® brand, covering four ranges of filter lines from XL (pressure rating up to 290 psig / 20 bar), XM (pressure rating up to 725 psig / 50 bar), XH (pressure rating up to 6000 psig / 420 bar) and XT/XZ fabricated gas filters (pressure rating up to 260 psig / 18 bar), as well as custom designed fabricated filters.

MARKETS

Xebec mainly targets four key market and business segments:

- 1) Natural gas dehydration and conditioning for NGV refueling stations
- 2) Biogas upgrading plants
- 3) Hydrogen purification
- 4) Associated gas and Helium purification

Natural gas dryers for NGV refueling stations



Growing market

- Cost leadership through Chinese manufacturing

Key Customers: Clean Energy, Petrochina, Sinopec, Shell

Biogas upgrading plants



Rapidly growing market

- High recovery, high purity, low energy plants

Key Customers: SEMPRA, Montauk Energy, Halla Engineering, Terasen Gas

Hydrogen purifiers for hydrogen recovery



Evolving market segment

- Market-leading performance for small-capacity hydrogen purifiers
- Syngas purification

Key Customers: HydroChem, Air Liquide, Linde, Iwatani

Associated Gas (Oil & Gas industry)



Evolving market segment

- Market-leading performance for associated gas purification

Key Customer: Venocco, Warren

Xebec's current strategy is based on a number of key market drivers and global macro trends driving the demand for Natural Gas, Hydrogen, Helium and Renewable Gas as a low carbon and cleaner energy source, amongst them are:

- The abundance and low cost of natural gas
- Introduction of hydrogen cars and the expanding hydrogen economy
- Climate changes and the urgent need to reduce greenhouse gas emissions (GHG)
- Gas flaring reduction targets
- Growing government commitments to renewable energy
- Diesel displacement in favor of natural gas
- Technological advancements

These market drivers are anticipated to fuel an increasing demand for gas purification, filtration and conditioning solutions. The low cost of natural gas and biogas drives the demand for solutions aimed at displacing diesel and other crude oil derivatives for applications in transportation and for applications on oil rigs, therefore creating additional business opportunities for Xebec.

The continued growth in the NGV segment and the continued build-out of natural gas vehicle refueling infrastructure offer increasing growth opportunities in this segment.

The introduction of hydrogen fuel cell electric vehicles (FCEV) in different parts of the world and the associated growth in hydrogen production requires an increase in hydrogen purification.

The scarcity of helium opens up additional helium purification opportunities at stranded wells. In addition there is an increase in the re-use of helium and its associated recycling and purification.

COMPETITION

Xebec faces competition within its target markets primarily from other manufacturers of biogas purification, natural gas, associated gas and hydrogen purification equipment. The natural gas and biogas purification and separation market has not yet seen considerable consolidation, unlike other industrial or renewable industries. Most competitors of Xebec today are small to medium companies working in niche segments of the natural gas and biogas business.

BGX Solutions®: In the emerging biogas purification market, Xebec expects to compete with manufacturers of competing technologies including membrane separation, amine and water wash systems, as well as advanced and conventional adsorption based systems for the purification of biogas. These competitors include, Acion Technologies Inc. [USA], Cirmac International BV [The Netherlands], Läckeby Water Group (PURAC) [Sweden], Guild Associates Inc [USA], Carbotech GmbH [Germany], Haase Energietechnik AG [Germany], Ros Roca Group [Spain], Pressure Technologies/Greenlane [UK], Yit Vatten Och Misjoteknik [Sweden], Air Liquide [France], MalmBerg Water AB [Sweden] and A.R.C. Technologies Corp [USA].

NGX Solutions®: In the natural gas dryer market, Xebec competes with a number of companies who manufacture gas dryers. These companies include SPX Corp. [USA], Parker Hannifin Corporation [USA], Aircel Corp. [USA], PSB Industries Inc. [USA], Xi'An Unionfilter Purification Equipment Co. Ltd. [Republic of China] and Tecno Project Industriale s.r.l. [Italy].

H2X Solutions®: In the hydrogen purification market, Xebec's competition includes Air Liquide, HydroChem, Linde, PanAmerica, UOP (a division of Honeywell) and Air Products.

AGX Solutions®: In the associated gas market, Xebec's competition includes mainly membrane providers like Cameron, UOP, Fujifilm, UBE, Generon, MTR, Air Liquide and Prosep.

STRATEGY AND OBJECTIVES

Xebec specializes in the design and manufacture of cost-effective, environmentally responsible, purification, separation, dehydration, and filtration equipment for gases and compressed air. Xebec's main product segments are: Biogas Plants for the purification of biogas from agricultural digesters, landfill sites and waste water treatment plants, Natural Gas Dryers for NGV refueling stations, Associated Gas Purification Systems including Helium and Hydrogen Purification Systems for fuel cell and industrial applications.

Xebec's short term focus is on returning its operation to sustainable profitability and positive cash-flow, while growing its revenue. Xebec intends to actively pursue and implement the following measures:

1. Grow the recurring revenue segments, namely aftermarket and filtration.
2. Continue to grow the NGX business segment in North America and Asia
3. Deliver products and solutions at the best price, on time and on budget while meeting or exceeding targeted gross margins;
4. Leverage key relationships with leading channel partners and project developers to penetrate target markets;
5. Improve balance sheet strength.

RECENT DEVELOPMENTS

On August 1, 2016 Xebec Europe was incorporated in Italy to facilitate future European projects.

On April 1, 2016, Xebec entered into a guarantee facility of \$750,000 with TD Bank. In addition, on February 24, 2016, Xebec increased its demand operating facility with TD Bank from \$500,000 to \$750,000 which bore interest at TD Bank's prime rate plus 2.5% per annum. Both facilities are guaranteed by Export Development Canada.

On January 12, 2016, Xebec announced that it has launched a line of containerized onsite generation systems for medical oxygen, nitrogen (instrument air) and vacuum, as well as medical air, fully compliant with all Canadian and US regulations.

On December 10, 2015 Xebec announced that it is delivering its first hybrid (Membrane/PSA) upgrading system to a major palm oil mill plantation operator in Malaysia.

On September 21, 2015, Xebec announced that Xebec Adsorption (Shanghai) Co. Ltd. ("Xebec Shanghai"), a subsidiary of Xebec Adsorption Inc., received an investment of \$3.42 million (RMB 16.4 million) by Shanghai Chengyi New Energy Venture Capital Co. Ltd., an investment subsidiary of Shanghai based Shenergy Group (28.26%), Shanghai Zhiyi Enterprise Management Consulting Co. Ltd. (0.10%) and specific employees (1.64%) for a total of 30% share ownership.

Pursuant to this agreement, Xebec has the obligation to repurchase the Minority Shareholders' interest in Xebec Shanghai for a consideration of no less than the initial investment and annualized return of 10% if a) the achievement of specific financial targets are not met in any given year prior to December 31, 2020; b) should the Minority Shareholders not divest by December 31, 2020 and should the Minority Shareholders exercise their put option with respect to a) or b) as mentioned above. According to this obligation, Xebec recorded the proceeds from this transaction as a financial liability in its consolidated financial statements.

Shenergy Group is a state-owned enterprise (SOE); an energy firm solely funded and supervised by the State-Owned Assets Supervision and Administration Commission (SASAC) of the Shanghai Municipal Government.

It is comprised of nine holding companies including Shenergy Company Limited and Shanghai Gas (Group) Co. Ltd., as well as 15 shareholding companies engaged in the simultaneous development and integration of power & gas infrastructure, as well as industry, real-estate, and finance.

Shenergy Group has a strong commitment to clean energy with existing wind and solar investments. With the investment in Xebec Shanghai, it will now have exposure to renewable natural gas technology and projects, expanding its focus and solidifying its position in clean energy, contributing positively to a "Green Life" in China.

Xebec Shanghai is well positioned to participate in the conversion of large amounts of biogas and landfill gas into low carbon renewable natural gas which can be utilized in a number of different applications.

On May 18, 2015, Xebec received access to a new credit line facility totaling \$500,000 with the TD bank.

On April 22, 2015, Xebec announced that Dr. Prabhu Rao joined the Company's Board of Directors. Xebec also announced that Mr. Jean Bedard has resigned on December 17, 2014 from the Board of Directors.

On March 10, 2015, Xebec announced that, effective immediately, it will be integrating high efficiency membranes into its gas purification and separation solutions.

CURRENT BACKLOG

The order backlog is calculated considering contracts received and considered as firm orders.

Current backlog as of August 29, 2016

Product Line:	August 29, 2016	May 30, 2016	April 28, 2016	November 6, 2015
In millions of \$				
Purification	4,8	4,3	4,2	4,8
Filtration	1,0	1,4	2,4	1,0
Generation	-	-	-	-
Consolidated Backlog	5,8	5,7	6,6	5,8

3. SELECTED CONSOLIDATED QUARTERLY INFORMATION

Three month periods ended June 30, 2016 and 2015

In thousands of \$, except net loss per share	Three months ended June 30,		Six months ended June 30,	
	2016	2015	2016	2015
Revenues	2 072	2 205	4 525	5 301
Gross margin	25,7%	10,9%	19,7%	17,4%
EBITDA	(788)	(1 068)	(1 683)	(1 025)
Net loss	(986)	(1 162)	(2 043)	(1 216)
Net income (loss) per share - basic (\$/share)	(0,02)	(0,03)	(0,05)	(0,03)
Net income (loss) per share - diluted (\$/share)	(0,02)	(0,03)	(0,05)	(0,03)

In thousands of \$	June 30	December 31
	2016	2015
Current assets	5 402	6 573
Non-current assets	488	563
	5 890	7 136
Current liabilities	7 119	5 895
Non-current liabilities	3 592	4 204
Shareholders' equity	(4 821)	(2 963)
	5 890	7 136

4. OPERATING RESULTS

Analysis of Consolidated Operating Results for the Second Quarter of 2016 Compared with the Second Quarter of 2015

Consolidated revenues by product line (unaudited)

	Three months ended June 30,		Six months ended June 30,	
In thousands of \$	2016	2015	2016	2015
Purification	717	1 255	1 898	3 357
Filtration	1 355	950	2 627	1 944
Total	2 072	2 205	4 525	5 301

Consolidated revenues for the second quarter of 2016 amounted to \$2.1 million, compared to \$2.2 million for the second quarter of 2015. This decrease is mainly explained by lower sales in the purification segment offset by higher sales in filtration.

Gross profit margin (unaudited)

	Three months ended June 30,		Six months ended June 30,	
In thousands of \$	2016	2015	2016	2015
Revenues	2 072	2 205	4 525	5 301
Cost of Goods Sold	1 540	1 964	3 634	4 381
Gross Profit*	532	241	891	920
Gross Profit Margin (%)	25,7%	10,9%	19,7%	17,4%

* Gross Profit is a non-IFRS financial measure.

The gross profit margin for the second quarter of 2016 stood at 25.7%, increasing by **14.8pts** compared to 10.9% for the second quarter of 2015.

Selling and administrative expenses for the second quarter of 2016 increased slightly by \$0.1 million to \$1.4 million from \$1.3 million due to slightly higher staffing levels.

Research and development expenses, net of research and tax credits for the second quarter were within historical levels at \$0.04 million with no significant change.

For the second quarter of 2016, foreign exchange transactions showed a slight loss (\$0.08 million) compared to a foreign exchange gain of \$0.1 million in Q2 2015. This reflects mainly a slight depreciation of the US dollar and the Chinese RMB against CAD dollar during this period.

EBITDA (unaudited)

In thousands of \$	Three months ended June 30,		Six months ended June 30,	
	2016	2015	2016	2015
Net income (loss)	(986)	(1 162)	(2 043)	(1 216)
Income Tax	-	-	-	9
Depreciation of property	24	28	48	56
Amortization of intangible assets	19	38	37	77
Impairment of intangible assets and Goodwill	-	-	-	-
Finance cost net	155	28	275	49
EBITDA	(788)	(1 068)	(1 683)	(1 025)

* EBITDA is a non-IFRS financial measure.

EBITDA is not a performance measure defined under IFRS and is not considered an alternative to income from operations or net (loss) earnings in the context of measuring a company's performance. EBITDA does not have a standardized meaning and is therefore not likely to be comparable with similar measures used by other publicly traded companies.

The negative EBITDA for the second quarter of 2016 amounted to \$(0.8) million compared to a negative EBITDA of \$(1.1) million in the second quarter of 2015. This improvement is mainly due to a higher margin product mix in Q2.

Net financial expenses for the second quarter of 2016 increased by \$0.1 million, compared to the first quarter of 2015 due to accretion interest from the obligation arising from shares issued by a subsidiary and higher use of our lending facilities.

Net income (loss)

Net loss for the second quarter of 2016 totaled \$(1.0) million, or \$(0.02) per share, compared to a net loss of \$(1.2) million, or \$(0.03) per share for the same period in 2015. This lower loss is mainly attributable to an improved overall gross margin.

Principal Quarterly Financial Information

(unaudited)

In thousands of \$, except net earnings (loss) per share	2016		2015				2014	
	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
Revenues	2 072	2 453	4 001	2 049	2 205	3 096	3 895	4 325
Net income (loss)	(986)	(1 057)	(979)	(992)	(1 162)	(54)	424	370
Earnings (loss) per share								
Basic	(0,02)	(0,03)	(0,02)	(0,03)	(0,03)	(0,00)	0,01	0,01
Diluted	(0,02)	(0,03)	(0,02)	(0,03)	(0,03)	(0,00)	0,01	0,01

Given the nature of Xebec's business, there are no apparent seasonal or other discernible trends at this time.

5. FINANCIAL POSITION

Analysis of principal cash flows for the first quarter 2016 (unaudited)

Cash flow from (used in)	Three months ended			Six months ended		
	June 30,			June 30,		
in thousands of \$	2016	2015	Change	2016	2015	Change
Operating activities	(33)	(421)	388	(1 304)	(727)	(577)
Investing activities	(21)	(9)	(12)	(21)	(22)	1
Financing activities	80	405	(325)	350	391	(41)

Operating activities in the second quarter of 2016 used \$0.03 million of cash, compared to **\$0.4 million of cash used for the same period in 2015**. Compared to 2015, the improvement in use of cash is mostly due to a lower net loss for the period.

Investing activities had no significant cash outflow in the second quarter of 2016 or 2015.

Financing activities for the first quarter of 2016 resulted in a cash inflow of \$0.08 million due entirely to the increased utilization of the credit line.

As at June 30, 2016, the Company had \$1.6 million of cash on hand, \$0.7 million of bank debt and \$3.6 million of long-term debt outstanding, none of which is due within one year.

Balance sheet analysis as at June 30, 2016

Summary Balance Sheet

	June 30	December 31
In thousands of \$	2016	2015
Current assets	5 402	6 573
Non-current assets	488	563
	5 890	7 136
Current liabilities	7 119	5 895
Non-current liabilities	3 592	4 204
Shareholders' equity	(4 821)	(2 963)
	5 890	7 136

The decrease in the company's assets between June 30, 2016 and December 31, 2015 represents \$1.2 million. This is mainly reflected by the decrease in cash and cash equivalents of \$1.2 million.

The increase in liabilities of \$0.6 million is mainly reflected through a net increase in trade payables and a higher use of the bank line of credit.

As at June 30, 2016, total assets amounted to \$5.9 million, a decrease of \$1.2 million from December 31, 2015. Working capital deficit stood at \$1.7 million.

Shareholders' equity totalled \$(4.8) million as at June 30, 2016, down by \$1.9 million from December 31, 2015. The change is mainly due to the net loss of \$2.0 million for the first six months of 2016.

Indebtedness

	June 30	December 31
In thousands of \$	2016	2015
Bank loans	725	375
Short term debt	758	243
Long-term debt	3 457	4 072
Total indebtedness	4 940	4 690

Total debt (bank loans, short term and long-term debt) amounted to \$4.9 million as at June 30, 2016, up by \$0.2 million from December 31, 2015. This increase is mostly due to the greater use of the line of credit.

Credit Facilities

As at June 30, 2016, the Company had access to credit facilities in the amount of \$750,000 with the TD Bank which were guaranteed by Export Development of Canada and bore interest at the TD Bank's prime rate plus 2.5% per annum. This credit facility was used up to \$725,000 as at June 30, 2016.

The bank loan is secured by a first ranking hypothec of \$2,000,000 on all movable property of the Company.

Capital Stock Information

The authorized share capital of the Company consists of an unlimited number of common shares and an unlimited number of preferred shares.

As at June 30, 2016, Xebec had 39,363,867 common shares issued.

Share Purchase Warrants Outstanding

As at June 30, 2016, no Warrants were outstanding.

Stock Options Outstanding

The Company plan (the "2013 Plan") allows for the issuance of stock options, stock appreciation rights, restricted stock, restricted stock units, performance awards and other stock-based awards. Under the Plan, the maximum number of common shares available for issuance under all stock-based compensation arrangements is 5,904,580.

As at June 30, 2016, the maximum number of common shares available for issuance under all stock-based compensation arrangements is 5,904,580.

Under the terms of the 2013 Plan, stock options are granted with an exercise price not less than the volume weighted average trading price of the common shares on the TSX for the five trading days prior to the date of grant. Stock options generally vest quarterly over four years and are exercisable for seven years from the date of grant.

As at June 30, 2016, the Company had 5,885,387 options outstanding under the 2013 Plan with a weighted average exercise price of \$0.14.

Contractual Commitments

The following table is a summary of the contractual obligations including payments due for the next five years and thereafter:

in millions of \$	Payments Due by Period			
	1 year	2 -5 years	Beyond 5 years	Total
Operating leases	0.5	1.3	1.8	3.6
Software licenses agreements	-	0.1	-	0.1
Total contractual obligations	0.5	1.4	1.8	3.7

There have been no significant changes in the contractual obligations of the Company since its MD&A for the three and twelve-month periods ended March 31, 2016 issued on May 30, 2016.

6. FINANCIAL AND OTHER INSTRUMENTS

Liquidity Risk

The Company has realized an operating loss of \$830,797, had cash outflows from operating activities of \$843,527 for the period ended June 30, 2016 and finished the period with cash and cash equivalents amounting to \$1,583,525, a working capital deficit of \$1,717,069 and had access to credit facilities totaling \$750,000 of which \$725,000 has been used. During the year, management undertook various initiatives and developed a plan to manage its operating and liquidity risks in light of prevailing economic conditions. Management is also currently seeking alternative financings for its operations. The Company has prepared a revised budget and forecast for 2016 for which management believes the assumptions are reasonable. Achieving budgeted results is dependent on improving the volume of revenues in Canada, United States and China, delivering on sales and contracts schedules, meeting expected overall operating margin levels and controlling general and administrative costs. .

The Company is thus faced with uncertainties that may have an impact on future operating results and liquidity. These uncertainties include reduced spending in biogas projects reflecting the weakness of the market, fluctuations in foreign currency rates and achieving the Company's business plan goals as mentioned in the previous paragraph, which includes the development of a new business segment. While management believes it has developed planned courses of action to mitigate operating and liquidity risks, there is no assurance that management will be able to achieve its business plan and maintain the necessary liquidity level, including accessing liquidities from China, if events or conditions develop that are not consistent with management's expectations, key budget assumptions for 2016 and planned courses of action. Therefore, the Company may require additional external funding and there is no assurance that it would be successful. It is possible that future changes in capital markets conditions could result in such funding not being available when required or at acceptable costs. The Company is unable to predict the possible effects, if any, of such uncertainties and the potential adjustments to the carrying values of assets and liabilities that could be needed should the Company have insufficient liquidity. Such adjustments could be material.

Credit Risk

Credit risk is the risk of an unexpected loss if a customer or third party fails to meet its contractual obligations. The Company's primary credit risk is its cash and outstanding trade accounts receivable. The carrying amount of its outstanding trade accounts receivable represents the Company's estimate of its maximum credit exposure. The Company regularly monitors its credit risk exposure and takes steps such as employing credit-approval procedures, establishing credit limits, using credit assessments and monitoring practices to mitigate the likelihood of these exposures from resulting in an actual loss. An allowance for doubtful accounts amounting to \$412,833 (2015 – \$412,833) was established, based on prior experience and an assessment of current financial conditions of customers as well as the general economic environment. In the case where an allowance for doubtful accounts provision is recorded and a receivable balance is considered uncollectible, it is written off against the allowances for doubtful accounts. Bad debt expense amounted to nil for the second quarter in 2016 (corresponding period 2015 - nil). As at June 30, 2016, the Company's three largest trade debtors accounted for 28% (12%, 9% and 7%) of the total accounts receivable balance (2015 – 36% (16%, 11% and 9%).

Currency Risk

Some assets and liabilities are exposed to foreign exchange fluctuations. The Company does not use financial instruments to reduce this risk.

Interest Rate Risk

Interest rate risk is the risk that the fair value or future cash flows of financial instruments will fluctuate as market interest rates change. The Company does not use financial instruments to reduce this risk.

The Company is exposed to interest rate risk on its bank loan, for which the interest rates charged fluctuate based on the bank prime rate. As at June 30, 2016, the short term bank loan that carries variable interest amounted to \$725,000 (as at December 31, 2015 – \$375,000). If the interest rate on the bank loan had been 50 basis points higher, the net loss would have been \$856 higher. In the corresponding period of 2015 there would have been no impact as the bank loan was nil.

7. CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The Company makes estimates and assumptions concerning the future that will, by definition, seldom equal actual results. The following are the estimates and judgments applied by management that most significantly affect the Company's consolidated financial statements. These estimates and judgments have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

Inventories

Inventories must be valued at the lower of cost or net realizable value. A writedown of the inventory will occur when its estimated market value less applicable variable selling expenses is below its carrying amount. Materials and other supplies held for use in the production of inventories are not written down below cost if the finished products in which they will be incorporated are expected to be sold at or above cost. This estimation process involves significant management judgment and is based on the Company's assessment of market conditions for its products determined by historical usage, estimated future demand and, in some cases, the specific risk of loss on specifically identified inventory. Any change in the assumptions used in assessing this valuation will impact the carrying amount of the inventory and have a corresponding impact on cost of goods sold.

Percentage of completion and revenues from long-term production-type contracts

Revenues recognized on long-term production-type contracts reflect management's best assessment, by taking into consideration all information available at the reporting date, of the result on each ongoing contract and its estimated costs. The management assesses the profitability of the contract by applying important judgments regarding milestones marked, actual work performed and estimated costs to complete. Actual results could differ because of these unforeseen changes in the ongoing contracts' models.

Related party transactions

The following table presents a summary of the related party transactions during the period (*unaudited*):

In thousands of \$	Three months ended June 30,		Six months ended June 30	
	2016	2015	2016	2015
Marketing and professional services expenses paid to companies controlled by members of the immediate family of an officer	28	28	56	55
Sales to entities controlled by a subsidiary manager	-	205	-	843
Total	28	233	56	898

These transactions are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties.

Accounting standards issued but not yet applied

A number of new accounting standards, amendments to accounting standards and interpretations are effective for annual periods beginning on or after January 1, 2016 and have not been applied in preparing the condensed consolidated interim financial statements for the three month ended June 30, 2016. The standards applicable to the Company are as follows and will be adopted on their respective effective dates:

Revenue recognition

On May 28, 2014, the IASB issued IFRS 15, "Revenue from Contracts with Customers" ("IFRS 15") replacing International Accounting Standard 11, "Construction Contracts" ("IAS 11"), IAS 18, "Revenue" ("IAS 18"), and several revenue revenue recognition framework that applies to contracts with customers. The standard requires an entity to recognize revenue to reflect the transfer of goods and services for the amount it expects to receive, when control is transferred to the purchaser. Disclosure requirements have also been expanded.

-related interpretati

The new standard is effective for annual periods beginning on or after January 1, 2017, with earlier adoption permitted. The standard may be applied retrospectively or using a modified retrospective approach. The Company is currently evaluating the impact of adopting IFRS 15 on the consolidated financial statements.

Financial instruments

On July 24, 2014, the IASB issued the final version of IFRS 9, "Financial Instruments" ("IFRS 9") to replace IAS 39, "Financial Instruments: Recognition and Measurement" ("IAS 39").

IFRS 9 introduces a single approach to determine whether a financial asset is measured at amortized cost or fair value and replaces the multiple rules in IAS 39. The approach is based on how an entity manages its financial instruments in the context of its business model and the contractual cash flow characteristics of the financial assets. For financial liabilities, IFRS 9 retains

most of the IAS 39 requirements; however, where the fair value option is applied to financial liabilities, the change in fair value resulting from an entity's own credit risk is recorded in OCI rather than net earnings, unless this creates an accounting mismatch. In addition, a new expected credit loss model for calculating impairment on financial assets replaces the incurred loss impairment model used in IAS 39. The new model will result in more timely recognition of expected credit losses. IFRS 9 also includes a simplified hedge accounting model, aligning hedge accounting more closely with risk management. The Company does not currently apply hedge accounting.

IFRS 9 is effective for years beginning on or after January 1, 2018. Early adoption is permitted if IFRS 9 is adopted in its entirety at the beginning of a fiscal period. The Company is currently evaluating the impact of adopting IFRS 9 on the consolidated financial statements.

RISKS AND UNCERTAINTIES

An investment in our securities involves a high degree of risk and should be considered speculative due to the nature of our business and the businesses of our subsidiaries and their current respective stage of development. Before making any decision to purchase or to sell any of our securities, you should carefully consider the complete statement of the risk factors and uncertainties described in the Management's Report for fiscal 2015. The Company is pursuing an ongoing risk review and management process.