



**Xebec Adsorption Inc.**

**Management Discussion and Analysis  
For the three and twelve-month periods ended December 31, 2011**

**March 30, 2012**

Additional information relating to the Company can be found on SEDAR at [www.sedar.com](http://www.sedar.com).

## **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 three and twelve-month periods ended December 31, 2011. This discussion should be read in conjunction with the information contained in the Company's consolidated financial statements and related notes for the year ended December 31, 2011 and 2010. Additional information, including our annual information form (AIF), can be found on SEDAR at [www.sedar.com](http://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.

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 March 30, 2012, the date on which the Board of Directors approved the consolidated financial statements and Management's Report for the year ended December 31, 2011. 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 2011 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 described in detail in Xebec's Annual Information Form for the year ended December 31, 2011 under the heading "Risk Factors" which is available on SEDAR at [www.sedar.com](http://www.sedar.com) and on Xebec's website at [www.xebecinc.com](http://www.xebecinc.com).

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.

## DESCRIPTION OF THE BUSINESS

### CORPORATE OVERVIEW

Xebec Adsorption Inc. (“Xebec” or “the Company”) is a Canadian global provider specialized in the design, engineering and manufacturing of innovative gas solutions and services in the process of transforming raw gases into marketable sources of clean energy. As such, Xebec’s strategy is focused on establishing leadership positions in 3 key market and business segments where demand for biogas upgrading, natural gas purification and hydrogen purification is growing. Headquartered in Montreal (QC), Xebec also operates two manufacturing facilities in Montreal and Shanghai, Sales and services facilities in Vancouver (BC) as well as a sales and distribution network in North America, and Asia. Xebec ([www.xebecinc.com](http://www.xebecinc.com)) trades on the Toronto Stock Exchange (“TSX”) under the symbol XBC.

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



\* The higher utilization rate of farmland as an energy resource could increase the share of manure, agricultural crops and by-products to 85%, leaving organic waste a 10% and WWTF's a 5% share

Source: Biomass Magazine, Global Water Intelligence, American Biogas Council, Frost And Sullivan, European Biomass Association, Eurostat, Iowa State University

Xebec’s head office is in Blainville, Quebec in a 41,753 square foot manufacturing facility in which 49 people are currently employed. The Blainville operation houses corporate finance, sales for natural gas and biogas purification products, aftermarket support, global supply chain, operational engineering, manufacturing of gas separation and purification equipment and service and maintenance support.

As part of the Intellectual Property Transaction disclosed hereafter in the Recent Development section, Xebec has transferred 9 employees and the ownership of its technology center and test laboratory located in Burnaby and Surrey, as well as equipment located in British Columbia.

Xebec has maintained the employment of 3 employees comprised of engineer, technician and selling staff dedicated to sales and service support for Canadian and US west coast customers.

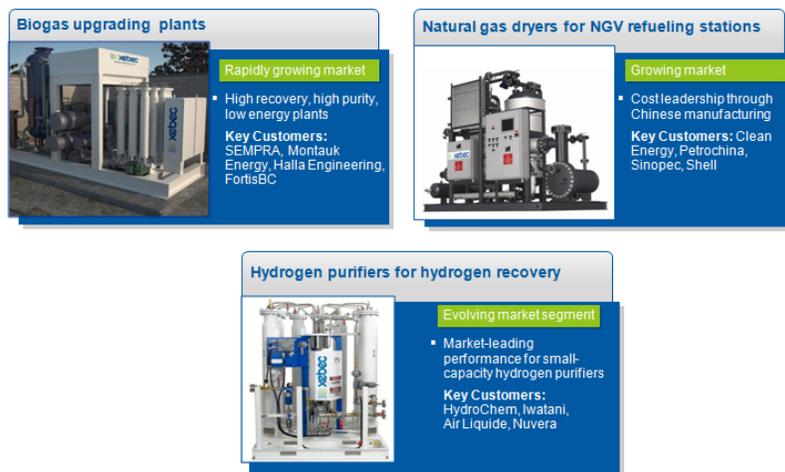
Xebec's Asian 20,451 square foot manufacturing facility is located in the Song Jiang district of Shanghai, China. This facility employs 29 people and is responsible for product engineering and assembly using components manufactured in the greater Shanghai industrial area. The facility also provides shared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

Xebec opened in the first quarter of 2009 along with Angstrom a regional sales office in Singapore. Xebec Singapore is responsible for sales of Xebec's products, marketing, technical and after-sales support for primarily the South East Asian markets. Xebec Singapore currently employs 4 people.

## MARKETS

Xebec mainly targets 3 key market and business segments focused on gaseous fuels used for transportation:

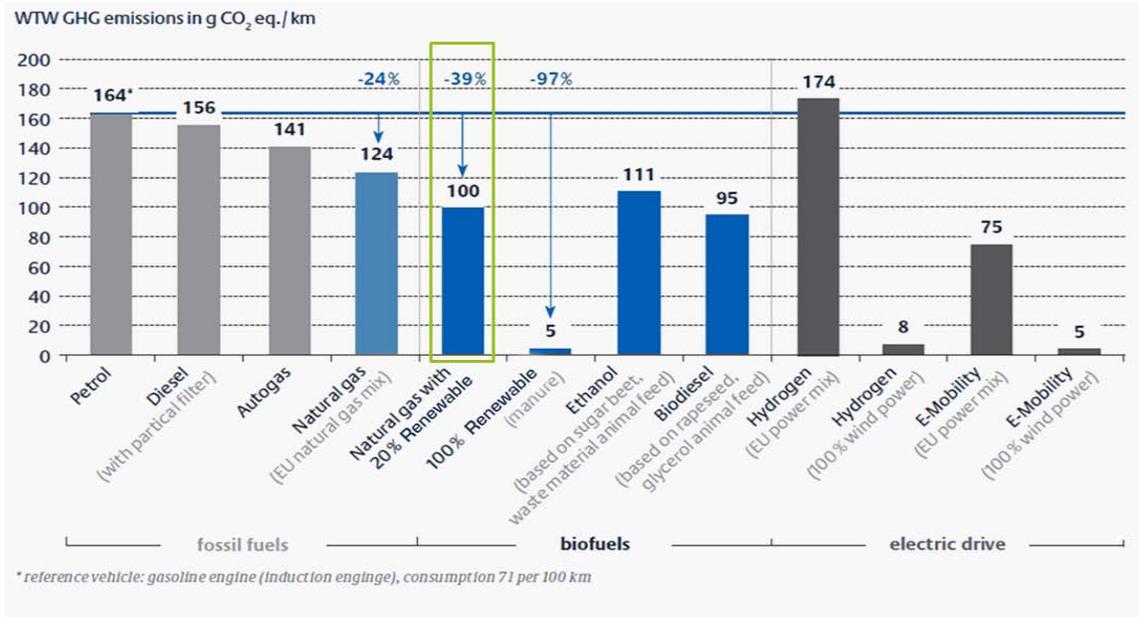
- 1- Biogas upgrading plants
- 2- Natural gas dehydration for NGV refueling stations
- 3- Hydrogen pressure swing adsorption ("PSA ") for hydrogen recovery



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

- The abundance and low cost of Natural Gas;
- The rising price of oil and need for greater energy independence and security;
- Climate Changes and the urgent need to reduce greenhouse gas emission (GHG);
- The growing government commitments to renewable energy; and
- Technological advancements

These market drivers are anticipated to fuel demand for renewable gas. GHG reduction targets make renewable gas a good solution for a lower carbon emissions economy in transportation, therefore creating new business opportunities for Xebec.



## COMPETITION

Xebec faces competition within its target markets primarily from other manufacturers of biogas purification, natural 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, Acricon Technologies Inc., Cirmac International BV, Lackeby Water Group (PURAC), Guild Associates Inc, MT-Biomethan GMBH, Carbotech AC GmbH, Haase Energietechnik AG, Ros Roca Group, Flotech/Greenlane, Yit Vatten Och Misjoteknik, Air Liquide, MalmBerg Water AB and A.R.C. Technologies Corp.

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

**H2X Solutions:** In the hydrogen purification market, Xebec's competition includes Air Liquide, HydroChem, Linde and Air Products.

## STRATEGY AND OBJECTIVES

Xebec seeks to become a leader in the development, manufacture and supply of integrated biogas upgrading plants to either pipeline or vehicle-fuel grade renewable natural gas. Biogas is a methane-containing renewable energy source created primarily by the decomposition of organic waste.

Xebec's continues to manage its cost structure and working capital, while increasing its revenue. Xebec intends to actively pursue and implement the following measures:

1. Standardize product offering with strong focus on smaller to medium gas flows, where Xebec's solutions offer inherent size and cost benefits;
2. Xebec has monetized some its intellectual property portfolio and created additional liquidity to complete its restructuring plan implemented during its 2011 fiscal year;
3. Enforce and implement tight cost control measures on all general and administrative costs;
4. Maintain regional sales, service and support infrastructure for Xebec's key markets to strengthen Xebec's sales abilities and support products and systems in the market place;
5. Execution and operational excellence, allowing Xebec to deliver products and solutions at the best price, on time and on budget while meeting or exceeding targeted gross margins;
6. Leverage key relationships with leading channel partners and project developers to penetrate target markets;
7. Continue to proactively address and manage its liquidity and working capital requirements. Xebec's delivery cycle for biogas plants can be 8 to 12 months. The management and funding of working capital is key to the success of the Company, and has been recently addressed.

## RECENT DEVELOPMENTS

On March 22, 2012, the Company sold to Air Products and Chemicals Inc. ("Air products") its intellectual property ("IP") portfolio, including the patents and patent applications relating to its gas separation technology. In this transaction, the Company has also transferred ownership of its research & development facilities in Burnaby and Surrey, as well as other equipment located in British Columbia. Pursuant to this transaction, the Company has received aggregate gross proceeds of CAD\$8,600,000, and net proceeds of approximately CAD\$8,350,000. The transaction is also subject to payments for the achievement of certain conditions to be met within the next 24 months. The Company also entered into a license agreement with Air Products allowing the Company to continue to sell its systems, in the biogas, hydrogen, natural gas and associated gas purification markets

On March 22<sup>nd</sup>, 2012, the Company signed a settlement agreement with Industry Canada for the Government royalty program obligation under TPC (Technology Partnership Canada) with regards to its *Fast Cycle Pressure Swing Adsorption and Gas Management systems* and *Pulsar Pressure Swing Adsorption project*. Under this settlement, the Company paid \$250,000 at the execution of the agreement with Air Products and will reimburse the remaining balance of \$1,000,000 spread over four equal annual payments of \$250,000. Furthermore, the Company has to pay up to \$750,000 in contingent payments based on cumulative funds generated from the license or sale by the Company of its intellectual property.

On January 25, 2012, Xebec announced a \$2.2 million order for a second order of a Biogas upgrading plant in South Korea.

On January 10, 2012, Xebec announced a \$0.5 million order new contracts in the Asian natural gas infrastructure market.

On December 21, 2011, Xebec announced a \$2.3 million order for natural gas upgrading system in India.

On July 21, 2011, Xebec has accepted an offer to purchase its building in Blainville. The closing occurred on September 30, 2011. This transaction is accounted for as a sale and leaseback transaction; the purchaser is leasing back the Blainville location to Xebec for fifteen years.

On July 1, 2011, The Company acquired an additional 16 percent of the outstanding shares of Xebec Adsorption South East Asia PTE. Ltd. The Company converted into equity its loan that it had previously made to the joint venture. The Company acquired control of the joint venture.

## CURRENT BACKLOG

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

### Current backlog as of

Product line:	March 30, 2012	November 11, 2011	August 11, 2011	June 13, 2011
In millions of \$				
Natural Gas Dryers	0,8	2,0	1,5	2,2
Gas Purification	9,6	3,0	6,8	5,1
Others	0,7	2,1	3,1	3,3
<b>Consolidated Backlog</b>	<b>11,1</b>	<b>7,1</b>	<b>11,4</b>	<b>10,6</b>

Major projects included in the current backlog:

#### North America:

Name	Type	Location	Commissioning
Fortis BC	Biogas upgrading plant	British Columbia, Canada	H1-2012

#### Europe:

Name	Type	Location	Commissioning
Biogas project developer	Waste Biogas to CNG	Austria	H1-2012
Biogas project developer	Waste Biogas to Biomethane	Austria	H1-2012

#### Asia

Name	Type	Location	Commissioning
Grasim Industries limited	PSA System	India	H2-2012
Potlatch Inc.	Biogas upgrading plant	South Korea	H1-2013
Halla Energy	Biogas upgrading plant	South Korea	H1-2012
Heilongjiang Loonggas	Biogas upgrading plant	China	H2-2012

## OVERALL PERFORMANCE

Third quarter results of the twelve-month period ended December 31, 2011 were restated to reflect the gain on the disposition of the building and the acquisition of Xebec Adsorption South East Asia PTE. Ltd. (see note 34 to the Annual Financial statements)

Revenues for the three-month period ended December 31, 2011 were \$2.7 million, compared to \$3.4 million for the corresponding period of the previous year. For the twelve-month period ended December 31, 2011, revenues were \$14.2 million, compared to \$13.5 million for the same period last year. The Company recovered from a difficult fiscal year in 2010 by increasing revenues and margins while reducing costs and achieving a positive EDITDA for the year 2011. Significant working capital deficiencies throughout the year have hindered the Company results by slowing down the delivery of its projects and products.

The Company incurred a net loss of \$2.0 million for the three-month period ended December 31, 2011, compared to net loss of \$3.9 million for the same period last year. Net loss for the twelve-month period ended December 31, 2011 was \$1.5 million compared to \$13.2 million for the same period in 2010.

In the short and medium term, the future for renewable energy remains very positive. Green energy initiatives are on the agendas of municipal, provincial and federal governments worldwide. Corporations and consumers are increasingly looking for green energy solutions to protect the environment and reduce their carbon footprint. Management believes that Xebec, with its complementary product lines, strong customer relationships, global footprint and low-cost opportunities in manufacturing and supply chain, is well positioned to respond to this growing demand.

The Company's immediate efforts are primarily focused on maintaining its market and technological leading position, addressing and managing its liquidity and working capital requirements and on improving its liquidity position over the next months. Xebec is well positioned to capture market share in the expanding biogas upgrading market.

While some of the target markets were soft in the latter part of 2011, there are signs of increased activity across all business segments, especially the interest for renewable energy projects in the U.S., Canada and Asia

## SELECTED ANNUAL INFORMATION

In millions of \$	Three months ended December 31,		% of Change	Twelve months ended		% of Change
	2011	2010		2011	2010	
Revenues	2,7	3,4	-20,6%	14,2	13,5	5,4%
Gross margin (%)	3,7%	-13,6%		29,6%	0,6%	
EBITDA	(1,6)	(3,8)		0,1	(12,0)	
Net loss	(2,0)	(3,9)	-48,7%	(1,5)	(13,2)	-88,6%
Net loss per share - basic and diluted (\$/share)	(0,02)	(0,11)		(0,04)	(0,43)	
Total assets (as of December 31)	10,3	15,2		10,3	15,2	
Total long-term financial liabilities (as of December 31)	1,3	2,9		1,3	2,9	

## FINANCIAL HIGHLIGHTS OF THE FOURTH QUARTER 2011

- Revenues of \$2.7 million in the fourth quarter of 2011, a 20.6% decrease compared to \$3.4 million in the fourth quarter of 2010.
  - Net loss of \$2.0 million in the fourth quarter of 2011 compared to a net loss of \$3.9 million in the fourth quarter of 2010
  - Loss per share of \$0,02 in the fourth quarter of 2011 compared to a loss per share of \$0.11 in the fourth quarter of 2010
- Order backlog \$11.1 million as at March 30 2012 a 1.83% increase compared to \$10.9 million as at March 31, 2011.

## RESULTS OF OPERATIONS

### Revenues

In millions of \$	Three months ended December 31,		Twelve months ended December 31	
	2011	2010	2011	2010
United States of America	1,2	1,4	8,4	5,6
Canada	0,8	0,5	1,8	2,1
Republic of China	0,4	0,3	1,2	1,3
Indonesia	0,8	0,1	0,8	-
Singapore	(0,5)	0,1	0,6	0,5
South Korea		0,4	0,3	1,5
Austria			0,2	1,5
Other		0,6	0,9	1,0
Total	2,7	3,4	14,2	13,5

## Product Line

In millions of \$	Three months ended		Twelve months ended	
	December 31,		December 31	
	2011	2010	2011	2010
Gas purification	0,4	1,7	4,9	4,4
Natural gas dryers	1,8	1,1	4,5	5,5
Compressed gas filtration	0,4	0,5	1,6	3,1
Engineering services	0,2	-	1,6	0,1
Licensing	-	-	1,5	-
Air dryers	(0,1)	0,1	0,1	0,4
<b>Total</b>	<b>2,7</b>	<b>3,4</b>	<b>14,2</b>	<b>13,5</b>

For the fourth quarter of 2011, the total revenues amounted to \$2.7 million, compared to \$3.4 million for the fourth quarter of 2010. The Natural Gas Dryer revenues increased during the fourth quarter due to the delivery of two important orders during this quarter. The increase in revenue for Natural Gas Dryer is off-set by lower revenues from Gas purification due to the deficiency in working capital and limited capacity to buy components on a timely basis.

For the twelve-months of 2011, the total revenues amounted to \$14.2 million compared to \$13.5 million for the same period last year. The Natural Gas Dryer revenues were impacted by the withdrawal from specific the Middle East markets. Aftermarket & Field Services were impacted by our working capital situation. The Air Dryer revenues decreased due the Company's decision to no longer pursue the sales of this product line. The Gas Purification revenues increased as a result of the company new focus to biogas upgrading solutions. The Engineering Services and Licensing revenues increased due to the Nuvera research contract.

## Net loss

Net loss for the three-month period ended December 31, 2011 was \$2.0 million, or \$0.02 per share, compared to net loss of \$3.9 million, or \$0.11 per share, for the same period in 2010, reflecting primarily a \$0.5 million increase in gross margins. Net loss for the twelve-month period ended December 31, 2011 was \$1.5 million or \$0.04 per share, compared to a net loss of \$13.2 million or \$0.43 per share for the same period in 2010, mainly as a result of a \$4.1 million improvement in gross margins and a \$3.9 million decrease in selling and administrative costs resulted from cost cutting achievements and an improved control over expenses, a 2.0 million decrease in research and development costs and a \$2.3 million gain on disposition of property plant and equipment which resulted from the sale of the building during third quarter of 2011.

## Gross Profit

In millions of \$	Three months ended		Twelve months ended	
	December 31,		December 31	
	2011	2010	2011	2010
Revenues	2,7	3,4	14,2	13,5
Cost of Goods Sold	2,6	3,8	10,0	13,4
Gross Profit*	0,1	(0,4)	4,2	0,1
Gross Margin (%)	3,7%	-13,6%	29,6%	0,6%

For the fourth quarter of 2011, the gross margin amounted to \$0.1 million compared to (\$0.4) million for the same period in 2010. This is mainly due to an increase in gross margin for Natural Gas Dryers due to an increase in sale. The increase in Natural Gas dryers is partially offset by a

decrease in gross margin for Gas purification due to slower projects progression due to the deficiency in working capital.

For the twelve months of 2011, the gross margin was \$4.2 million compared to \$0.1 million for the same period in 2010. This is mainly due to the execution of the Nuvera License and a better sales effort and working efficiencies for Gas purification and engineering services which are partially offset by a decrease in gross margin for compressed gas filtration.

The Natural Gas Dryer gross margin increased in percentage compared to 2010 due to a lower sales volume in conjunction with the Company's decision to no longer pursue new activities in specific Middle Eastern countries.

The Compressed gas filtration gross margin decreased compared to 2010 due to lower sales volumes which are directly correlated to the working capital situation of the company.

The Air Dryer gross margin decreased compared to 2010 due to the business decision to no longer pursue the sales of ADX in North America leaving sales volume only in Asia.

The Gas Purification gross margin increased compared to 2010 due to the integration in 2011 of the Biogas systems and revenue recognition methodology on long-term contracts. Better cost controls were introduced from the acquired experience of recent completed projects.

The Engineering Services gross margin increased compared to 2010 due to higher activities in this sector in 2011.

#### **EBITDA**

In millions of \$	Three months ended December 31,		Twelve months ended December 31	
	2011	2010	2011	2010
Net Loss	<b>(2,0)</b>	(3,9)	<b>(1,5)</b>	(13,2)
Depreciation of property	<b>0,1</b>	0,3	<b>0,4</b>	0,6
Amortization of intangible assets	<b>0,1</b>	0,3	<b>0,5</b>	0,6
Share-based compensation expense	<b>0,1</b>	-	<b>0,2</b>	-
Finance cost net	<b>0,1</b>	(0,5)	<b>0,5</b>	-
EBITDA (loss)	<b>(1,6)</b>	(3,8)	<b>0,1</b>	(12,0)

We report on our EBITDA (Income from operations before depreciation and amortization and special charges). 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 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 EBITDA reached \$(1,6) million in the fourth quarter of 2011 compared to \$(3,8) million for the same period last year. The significant improvement in the EBITDA is the result of a better gross margins and lower overhead expenses due to a restructuring and the implementation of cost control measures.

For the year ended December 31, 2011, the EBITDA reached \$0,1 million, compared to \$(12,0) million for the same period last year. The significant improvement is due to mainly to an increase in license revenues, increased margins, better cost control measures, the gain on disposition of the building and for the aforementioned reasons.

### ***Selling and Administrative***

Selling and administrative expenses were \$2.0 million in the fourth quarter of 2011 compared to \$3.1 million for the same period last year. For the twelve-month period ended December 31, 2011, selling and administrative expenses were \$6.8 million compared to \$10.7 million for the corresponding period in 2010.

The decrease in expense is the results of the company's restructuring and the implementation of cost control measures and the reduction of travelling, salaries expenses and professional fees.

### ***Research and Development***

Research and development expenses, net of research and tax credits were \$0.1 million in the fourth quarter of 2011, compared to \$0.8 million for the same period in 2010. For the twelve-month period ended December 31, 2011, research and development expenses net of research tax credits were \$0.6 million compared to \$2.6 million for the twelve-month period ended December 31, 2010.

The decrease is due a decrease in the activity of research and development in 2010. Most employees who were working on research and development in 2010 were assigned to production project in 2011.

### ***Financial***

Financial expenses net increased for the three-month period ended December 31, 2011 to \$68,208, from finance income net \$451,803 for the same period in 2010. For the twelve-month period ended December 31, 2011, financial expenses were \$508,467, compared to finance income net \$2,032 for the same period last year. The increase in financial expense is due to the gain on revaluation of the Technology Partnerships Canada program (See "Contingent Off-Balance-Sheet Financing Arrangements" below for more details) included in financial income in 2010.

### ***Foreign Exchange Loss***

In the fourth quarter of 2011, the Company had a foreign exchange gain of \$15,534 compared to a foreign exchange gain of \$156,727 for the fourth quarter of 2010. For the twelve-month period ended December 31, 2011, the foreign exchange gain was \$107,050 compared to a foreign exchange gain of \$130,807 for the same period of 2010. The foreign exchange gain remained stable due to the low fluctuation of the currency during 2010 and 2011.

## **SUMMARY OF QUARTERLY RESULTS**

In millions of \$ (except per share data)	IFRS				IFRS			
	2011				2010			
	Q4	Q3*	Q2	Q1	Q4	Q3	Q2	Q1
Revenues	2,7	2,9	4,5	4,1	3,4	4,0	4,1	2,0
Net income (loss)	(2,0)	1,7	(1,0)	(0,2)	(3,9)	(3,1)	(2,8)	(3,4)
Earnings (loss) per share basic and diluted	(0,02)	0,02	(0,03)	(0,01)	(0,11)	(0,11)	(0,10)	(0,11)

\*restated

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

## LIQUIDITY AND CAPITAL RESOURCES

The Company's cash flows from operating, investing and financing activities, as reflected in the consolidated statements of cash flows, are summarized in the following table:

in millions of \$	Three months ended			Twelve months ended		
	December 31,			December 31,		
Cash flow from (used in)	2011	2010	Change	2011	2010	Change
Operating activities	(0,1)	1,0	(1,1)	(3,2)	(6,1)	2,9
Investing activities	0,6	-	0,6	3,1	(0,5)	3,6
Financing activities	-	2,7	(2,7)	(1,7)	3,3	(5,0)

The recent sale and license back transaction of the Company's intellectual property portfolio together with the proceeds received from that transaction, provides the Company with the sufficient funding to support its operations for at least the next fiscal year, .

### ***Operating activities***

In the fourth quarter of 2011, the operating activities used \$0.1 million of cash, compared to generated \$1.0 million for the same period of 2010. The decrease of \$1.1 million is mainly explained by the increase of net loss during fourth quarter. For the twelve-month period ended December 31, 2011, operating activities used \$3.2 million of cash, compared to \$6.1 million for the same period last year. The increase for the twelve month period in cash flow operating activities reflects mainly the impact of our cost cutting controls, increase in gross margin.

### ***Investing activities***

Investing activities generated \$0.6 million of cash in the fourth quarter of 2011, compared to nil used for the corresponding fourth quarter of 2010.

For the twelve-month period ended December 31, 2011, investing activities generated \$3.1 million, while in the same corresponding period of 2010 the investing activities used \$0.5 million. For the twelve-month period ended December 31, 2011, this mostly reflects the result of the sale of the building in Blainville.

### ***Financing activities***

In the fourth quarter of 2011, the financing activities generated nil of cash, compared \$2.7 million for the same period of 2010. For the twelve-month period ended December 31, 2011, financing activities used \$1.7 million, while in the same period of 2010 the financing activities generated \$3.3 million in cash. The mortgage related to the building in Blainville has been reimbursed in September due to the sale of it.

### ***Financial Position***

As of December 31, 2011, the Company had \$0.4 million of cash on hand, \$0.5 million outstanding in short-term bank loans, and \$1.3 million of long-term debt outstanding, of which \$0.3 million is due within one year.

As at December 31, 2011, the Company had credit facilities in the amount of \$1,300,000 with the Royal Bank of Canada which bore interest at the Company's bank's prime rate plus 2.50% per annum and which were limited by certain margin requirements concerning accounts receivable. The Company had also a revolving demand facility by way of letters of credit and letters of

guarantee amounting to \$750,000. However, as at December 31, 2011, the Company was not allowed to draw on these facilities.

In addition, the Company had access to credit facilities in the amount of \$500,000 with Royal bank of Canada which were guaranteed by Export Development of Canada and bore interest at the Company's bank's prime rate plus 2.5% per annum and were limited by certain requirements concerning pre shipment costs. These credit facilities were fully used as at December 31, 2011.

The bank loan is secured by a first ranking hypothec of \$4,000,000 on all movable property of the Company.

The credit facilities with the Royal Bank of Canada matured on October 31, 2010 and have been verbally extended under certain conditions on an "as needed" basis. The agreement with Export Development of Canada has been extended under the same terms and conditions until April 30, 2012.

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

In millions of \$	Payments Due by Period				
	Total	Less than 1 year	1-3 years	4-5 years	After 5 years
Long Term Debt	0,4	0,1	0,2	0,1	-
Operating Leases	5,2	0,7	0,8	0,6	3,1
<b>Total Contractual Obligations</b>	<b>5,6</b>	<b>0,8</b>	<b>1,0</b>	<b>0,7</b>	<b>3,1</b>

Except for the sale leaseback of its current building, there have been no material changes in the contractual obligations of the Company since its MD&A for the three and nine-month period ended September 30, 2011 issued on November 11, 2011.

## OUTSTANDING SHARE DATA

The authorized share capital of the Company consists of an unlimited number of common shares and an unlimited number of preferred shares. No preferred shares are issued.

As at December 31, 2011 and March 30, 2012, Xebec had 39,363,867 common shares issued.

### ***Share Purchase Warrants Outstanding***

As at December 31, 2011, 10,658,136 Share Purchase Warrants were outstanding of which, 10,091,886 Share Purchase Warrants entitle the holder to acquire one Common Share at a price of \$0.45 per share until November 2nd 2015, 566,250 Share Purchase Warrants entitle the holder to acquire one Common Share at a price of \$0.40 per share until May 2<sup>nd</sup>, 2012.

The 10,091,886 warrants are subject to an accelerated expiry if, at any time after December 31, 2010, the published closing trade price of the Common Shares on the TSX is equal or superior to \$0.75 for any 20 consecutive trading days, in which event Xebec may give the holder a written notice that the warrants will expire at 5:00 p.m. (Toronto Time) on the 30<sup>th</sup> day from the receipt of such notice.

### ***Stock Options Outstanding***

Upon the reverse takeover, the Company assumed QuestAir's omnibus plan (the "Plan"), which 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, common shares approved for issuance under all stock-based compensation arrangements are limited to the greater of 591,560 or 10% of the common shares issued and outstanding. As at December 31, 2011, the maximum number of common shares available for issuance under all stock-based compensation arrangements is 3,936,386.

Under the terms of the 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 December 31, 2011, the Company had 3,426,123 options outstanding under the plan with a weighted average exercise price of \$0.26.

## SUBSEQUENT EVENTS

On March 22, 2012, the Company sold to Air Products and Chemicals Inc. ("Air products") its intellectual property ("IP") portfolio, including the patents and patent applications relating to its gas separation technology. In this transaction, the Company has also transferred ownership of its research & development facilities in Burnaby and Surrey, as well as other equipment located in British Columbia. Pursuant to this transaction, the Company has received aggregate gross proceeds of CAD\$8,600,000, and net proceeds of approximately CAD\$8,350,000. The transaction is also subject to payments for the achievement of certain conditions to be met within the next 24 months. The Company also entered into a license agreement with Air Products allowing the Company to continue to sell its systems, in the biogas, hydrogen, natural gas and associated gas purification markets

On March 22<sup>nd</sup>, 2012, the Company signed a settlement agreement with Industry Canada for the Government royalty program obligation under TPC (Technology Partnership Canada) with regards to its *Fast Cycle Pressure Swing Adsorption and Gas Management systems* and *Pulsar Pressure Swing Adsorption project*. Under this settlement, the Company paid \$250,000 at the execution of the agreement with Air Products and will reimburse the remaining balance of

\$1,000,000 spread over four equal annual payments of \$250,000. Furthermore, the Company has to pay up to \$750,000 in contingent payments based on cumulative funds generated from the license or sale by the Company of its intellectual property.

## **FINANCIAL AND OTHER INSTRUMENTS**

### ***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 \$194,273 (2010 – \$341,286) 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 \$138,348 in 2011 (2010 – \$8,501). As at December 31, 2010, the Company's three largest trade debtors accounted for 28% (11%, 9% and 8%) of the total accounts receivable balance (2010 – 24% (9%, 9% and 6%)).

### ***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 debt, both short-term and long-term, for which the interest rates charged fluctuate based on the bank prime rate. The short-term bank loan as at December 31, 2011 is \$500,000 (2010 - \$500,000) and the long-term debt that is subject to the variability of the interest rate fluctuation is \$ nil (2011 - \$1,657,713).

If the interest rate on the bank debt had been 50 basis points higher (lower), related to the bank loan as at December 31, 2011, net loss would have been \$2,500 (2010 – \$10,800) higher (lower).

## **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.

### ***Goodwill***

The Company tests annually whether goodwill has suffered any impairment. The recoverable amounts of CGUs have been determined based on value-in-use calculations. These calculations require the use of estimates.

No impairment charge was recorded during the year.

## ***Inventories***

Inventories must be valued at the lower of cost or net realizable value. A write-down 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 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 sales.

## **Impairment of long-lived assets**

Long-lived assets or cash generating units are reviewed for impairment upon the occurrence of events or changes in circumstances indicating that the carrying value of the assets may not be recoverable, as measured by comparing their carrying amounts to the recoverable amount, which is the higher of fair value less cost to sell, and estimated discounted future cash flows generated by their use and eventual disposal. Impairment, if any, is measured as the excess of the carrying amount of the asset or cash generating unit over its recoverable amount.

## **Recognition of future income tax assets**

A deferred tax asset shall be recognized for all deductible temporary differences and unused tax losses to the extent that it is probable that taxable profit will be available against which the deductible temporary difference and unused tax losses can be utilized. Therefore, the Company has to estimate the amount of future taxable profits expected to be available. Such estimates are made by tax jurisdiction on an undiscounted basis. Management exercises judgment to determine the extent to which realization of future taxable benefits is probable, considering factors such as the number of years to include in the forecast year and the history of taxable profits.

## **Government royalty program obligations**

Government royalty program obligations are recognized when the contributions, which can come from different government agencies, are received and the Company has a contractual obligation to repay the contributions. As repayments are determined based on a percentage of specified revenues over a contractually defined royalty year, these obligations are measured as the net present value of expected future royalties payable. The key estimate used in the initial recognition of these obligations are the projected annual revenues and the discount rate. Subsequent to initial recognition, the government royalty program obligations are re-measured when the projections of expected future royalties payable initially used to measure the obligations are revised, using the original discount rate.

**Related party transactions**

The following table presents a summary of the related party transactions during the year:

	<b>2011</b>	<b>2010</b>
	\$	\$
Marketing and professional services expenses paid to companies controlled by members of the immediate family of an officer	46,355	85,085
Sales to joint venture before the acquisition	74,372	81,307
Loan from a Company director	23,562	-
Accrued interest on a loan from a Company director	315	-
	<u>144,604</u>	<u>166,392</u>

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

**Adoption of International Financial Reporting Standards (“IFRS”)**

In 2010, the CICA Handbook was revised to incorporate International Financial Reporting Standards (“IFRS”) as issued by the International Accounting Standard Board (“IASB”), and requires publicly accountable enterprises to apply such standards effective for years beginning on or after January 1, 2011. Accordingly, the consolidated financial statements issued as of March 30, 2012 are the Company's first annual consolidated financial statements prepared in accordance with IFRS as issued by the IASB.

The Company's consolidated financial statements were previously prepared in accordance with Canadian generally accepted accounting principles (“Previous GAAP”). Previous GAAP differs in some areas from IFRS. In preparing these financial statements, management has amended certain accounting, measurement and consolidation methods previously applied in the Previous GAAP financial statements to comply with IFRS. Subject to certain transition elections and exceptions disclosed in note 30 of the consolidated financial statements, the Company has consistently applied the accounting policies used in the preparation of its opening IFRS statement of financial position at January 1, 2010 throughout all periods presented, as if these policies had always been in effect. Note 4 of the consolidated financial statements discloses the impact of the transition to IFRS on the Company's reported financial position, financial performance and cash flows, including the nature and effect of significant changes in accounting policies.

The Board of Directors approved the aforementioned statements for issue on March 30, 2012.

**Accounting standards issued but not yet applied**

Unless otherwise noted, the following revised standards and amendments are effective to the Company for annual periods beginning on or after January 1, 2013 with earlier application permitted. The Company has not yet assessed the impact of these standards and amendments or determined whether it will early adopt them.

(i) IFRS 9, Financial Instruments, was issued in November 2009 and is mandatory for accounting periods beginning after January 1, 2015 and it addresses classification and measurement of financial assets. It replaces the multiple category and measurement models in IAS 39 for debt instruments with a new mixed measurement model having only two categories: amortized cost and fair value through profit or loss. IFRS 9 also replaces the models for measuring equity instruments. Such instruments are either recognized at fair value through profit or loss or at fair value through other comprehensive income. Where equity instruments are measured at fair value

through other comprehensive income, dividends are recognized in profit or loss to the extent that they do not clearly represent a return of investment; however, other gains and losses (including impairments) associated with such instruments remain in accumulated comprehensive income indefinitely.

Requirements for financial liabilities were added to IFRS 9 in October 2010 and they largely carried forward existing requirements in IAS 39, Financial Instruments – Recognition and Measurement, except that fair value changes due to credit risk for liabilities designated at fair value through profit and loss are generally recorded in other comprehensive income. IFRS 9 is applicable to the Company for the year beginning on January 1, 2015, with earlier application permitted.

(ii) IFRS 10, Consolidated Financial Statements, requires an entity to consolidate an investee when it has power over the investee, is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Under existing IFRS, consolidation is required when an entity has the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities. IFRS 10 replaces SIC-12, Consolidation—Special Purpose Entities and parts of IAS 27, Consolidated and Separate Financial Statements.

(iii) IFRS 11, Joint Arrangements, requires a venturer to classify its interest in a joint arrangement as a joint venture or joint operation. Joint ventures will be accounted for using the equity method of accounting whereas for a joint operation the venturer will recognize its share of the assets, liabilities, revenue and expenses of the joint operation. Under existing IFRS, entities have the choice to proportionately consolidate or equity account for interests in joint ventures. IFRS 11 supersedes IAS 31, Interests in Joint Ventures, and SIC-13, Jointly Controlled Entities—Non-monetary Contributions by Venturers.

(iv) IFRS 12, Disclosure of Interests in Other Entities, establishes disclosure requirements for interests in other entities, such as subsidiaries, joint arrangements, associates, and unconsolidated structured entities. The standard carries forward existing disclosures and also introduces significant additional disclosure that address the nature of, and risks associated with, an entity's interests in other entities.

(v) IFRS 13, Fair Value Measurement, is a comprehensive standard for fair value measurement and disclosure for use across all IFRS standards. The new standard clarifies that fair value is the price that would be received to sell an asset, or paid to transfer a liability in an orderly transaction between market participants, at the measurement date. Under existing IFRS, guidance on measuring and disclosing fair value is dispersed among the specific standards requiring fair value measurements and does not always reflect a clear measurement basis or consistent disclosures.

(vi) IAS 1, Presentation of Financial Statements, has been amended to require entities to separate items presented in OCI into two groups, based on whether or not items may be recycled in the future. Entities that choose to present OCI items before tax will be required to show the amount of tax related to the two groups separately.

## **DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROL OVER FINANCIAL REPORTING**

### ***Disclosure Controls and Procedures***

Our management is responsible for establishing and maintaining disclosure controls and procedures (“DC&P”) designed to provide reasonable assurance that the information we are required to disclose in our annual filings, interim filings and other reports (the “reports”) filed or submitted under the applicable securities legislation is recorded, processed, summarized and reported within the time periods specified in the applicable securities legislation. DC&P include, without limitation, controls and procedures designed to ensure that the information required to be disclosed by an issuer in the reports filed or submitted under the applicable securities legislation is accumulated and communicated to the issuer’s management, including its Chief Executive Officer and Chief Financial Officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

As at December 31, 2011, an evaluation was carried out, under the supervision of and with the participation of our management, including the President and Chief Executive Officer and the Chief Financial Officer, of the design and effectiveness of our disclosure controls and procedures as defined under NI 52-109. This evaluation was based on the framework set forth in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

Upon such review, the Chief Executive Officer and the Chief Financial Officer determined that there were material weaknesses in the design of our DC&P. However, the DC&P deficiencies we identified did not result in adjustments to our annual or any interim consolidated financial statements for fiscal 2011 and 2010. We have identified the following material weaknesses:

#### ***Entity Level Controls***

We did not maintain a completely effective control environment as defined in accordance with COSO control framework. Specifically, we do not have comprehensive procedure manuals to clearly communicate management’s and employees’ roles and responsibilities in our internal control over financial reporting. To mitigate the risk, management relies heavily on manual procedures and detection controls, management meetings, quarterly reviews of financial statements by our subsidiaries and by the Audit Committee. These manual procedures were performed during the interim and annual periods ended December 31, 2011 and 2010.

#### ***Internal Control over Financial Reporting***

Our internal control over financial reporting (“ICFR”) includes, among others, those policies and procedures that: (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with IFRS, and that our receipts and expenditures are being made only in accordance with authorization of our management; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

We carried out an evaluation of our ICFR, under the supervision of and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer as to the material weaknesses relating to the design of our ICFR as of December 31, 2011. This evaluation was based on the Internal Control-Integrated Framework issued by the COSO. The evaluation considered the procedures designed to ensure that information required to be disclosed by the Company in reports filed or submitted under the applicable securities legislation is recorded, processed, summarized and reported in the time periods specified in the rules and forms of the applicable securities legislation and communicated to our management as appropriate to allow

discussions regarding required disclosure. Upon such review, our Chief Executive Officer and Chief Financial Officer have determined that there existed material weaknesses in the design of our ICFR. The ICFR weaknesses we identified did not result in adjustments to our interim and annual consolidated financial statements for fiscal 2011 and 2010, except for the restatement of our third quarter 2011. Following our assessment, we identified the following material weaknesses:

#### *Information Technology General Controls*

We did not adequately maintain effective control over access to our accounting system within our accounting department. In addition, the backup tapes were not periodically tested to ensure their accuracy and there is no information technology strategic plan and no business continuity plan. There is also no periodic review performed on the security logs for failed logins. We are actually in the process of implementing controls over program development and program changes.

The potential ability for someone to improperly access and change accounting records is mitigated by the fact that management relies heavily on manual procedures and detection controls, and quarterly reviews of financial statements by management and by the Audit Committee.

#### *Segregation of Duties*

We have deficient controls within our accounting department over segregation of duties inherent to the department's size. Specifically, as a result of the limited number of personnel in the accounting department, certain financial personnel had incompatible duties that allowed for the creation, review and processing of certain financial data without independent review and authorization. To mitigate the risk, our management relies heavily on manual procedures and detection controls, regular management meetings, as well as reviews of our financial statements by subsidiaries and by the Audit Committee. These manual procedures were performed for the periods ended December 31, 2011 and 2010.

#### ***Remediation of Material Weaknesses in Internal Control over Financial Reporting and Disclosure Controls***

We have initiated the following actions to address the material weaknesses in our DC&P and ICFR identified as of December 31, 2011.

#### *Entity Level Controls*

Our Management has taken an active role in responding to the deficiencies identified, including overseeing management's implementation of the remedial measures described below.

#### *Information Technology General Controls*

We will implement enhanced information technology policies and procedures specifically with regard to inventory controls and to the system's change management, program development, access over end-of-period process spreadsheets, IT operations and related monitoring. We will implement new procedures that will overcome the accounting system inventory controls and access deficiencies. We will also develop and implement a global information technology strategic plan and a business continuity plan.

#### *Inadequate Segregation of Duties*

We will continue to use appropriate measures to restrict or independently monitor systems access and properly assign job roles and responsibilities to employees to ensure the proper segregation of duties where feasible. As the Company grows, we will expand the number of individuals involved in the accounting function.

We realize that some of the above weaknesses are inherent to a company of our size. Nevertheless, we believe in and are committed to establishing rigorous DC&P and ICFF. It will take time to put in place the rigorous controls and procedures desired by our management and Board of Directors. We cannot at this time estimate how long it will take to complete the steps identified above. Our management will continue to evaluate the effectiveness of our overall control environment and will continue to refine existing controls as they, in conjunction with our Audit Committee, Chief Executive Officer and Chief Financial Officer, think necessary. Again, the control deficiencies which we identified did not result in adjustments to our interim and annual consolidated financial statements for fiscal 2011 or any previous periods, except for the restatement of our third quarter 2011.

Other than the remediation efforts discussed above and the implementation of the Company's ICFR, there have been no changes in our ICFR that occurred since the beginning of the interim period ended December 31, 2011 that have materially affected or are reasonably likely to materially affect our ICFR. Our management, including our Chief Executive Officer and our Chief Financial Officer, has discussed these issues and remediation efforts with our Audit Committee.

We will provide updates on the remediation plan in our quarterly and annual management's reports.

It should be noted that while our management believes that current disclosure and internal controls and procedures provide a reasonable level of assurance, it cannot be expected that existing disclosure controls and procedures or internal financial controls will prevent all human errors and circumvention or overriding of the controls and procedures. A control system, no matter how well conceived or operated, can provide only reasonable assurance, not absolute, that the objectives of the control system are met.

## **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 and Annual Information Form for fiscal 2011. The Company is pursuing an ongoing risk review and management process.