



**PHOTON CONTROL INC.**

**MANAGEMENT'S DISCUSSION AND ANALYSIS**

For the Six Months Ended June 30, 2014

---

PRECISION MEASUREMENT SOLUTIONS

This Management's Discussion and Analysis ("MD&A") of Photon Control Inc. ("Photon Control" or the "Company") is dated August 12, 2014. This MD&A should be read in conjunction with the unaudited interim consolidated financial statements and accompanying notes for the period ended June 30, 2014, and the audited consolidated financial statements and accompanying notes as at and for the years ended December 31, 2013 and 2012.

The CICA's Accounting Standards Board announced that Canadian publicly accountable enterprises will adopt IFRS as issued by the International Accounting Standards Board effective January 1, 2011. The accompanying consolidated financial statements for both the six months ended June 30, 2014 and for the same quarter in the prior year 2013 have been prepared to reflect the Company's adoption of IFRS, with the effective date being fiscal year beginning January 1, 2011.

### **Forward-Looking Statements**

This MD&A contains forward looking statements, including statements regarding the business and anticipated financial performance of the Company, which involve risks and uncertainties. Such statements include, but are not limited to, statements with respect to the Company's objectives, goals, liquidity, sources of capital, expectations of sales and continued development of technologies and products.

Risks and uncertainties may cause the Company's actual results to differ materially from those contemplated by the forward-looking statements. Factors that might cause or contribute to such differences include, among others, risks and uncertainties as to the following: the Company's ability to successfully complete new purchase orders along the timelines expected; the Company's need for funds to achieve its goals and the availability and cost of financing the Company; the continued and future demand for the Company's products; the Company's present reliance on four major customers for the majority of its sales; the Company's reliance on the financial health of the semiconductor industry; the Company's ability to continue and further enhance revenue diversification and open new market opportunities; the development of competing technologies and the possibility of increased competition; the effect of slow growth in the United States, its principal market, as well as in Canada and other economies generally and other economic trends and conditions in the markets that the Company and its customers serve; risks associated with technical difficulties or delays in product introductions, improvements, implementation, product pricing or other initiatives of the Company and its competitors; factors that may result in a reduction in capital expenditures and/or delayed buying decisions affecting demand for the Company's products; currency fluctuations particularly between the Canadian and United States dollars; and risks in pursuing additional development projects to support existing customers or pursue other business opportunities.

Forward-looking statements are based on the beliefs, opinions and expectations of the Company's management at the time they are made, and the Company may, but does not assume any obligation to, update its forward-looking statements if those beliefs, opinions or expectations, or other circumstances, should change except as may be required by applicable securities laws. Readers should not place undue reliance on forward-looking statements.

**BUSINESS OVERVIEW**

Photon Control Inc. ("Photon Control" or the "Company") designs, manufactures and distributes a wide range of optical sensors and instruments to measure temperature, pressure, position, and flow. These products are used by original equipment manufacturers (OEM) as well as end-users in the Semiconductor, Oil and Gas, Power, Life Science, and Manufacturing industries. Photon Control's products provide high accuracy and reliability in extreme conditions and are supported by a team of experts that offers onsite installation, training, and support. Photon Control also provides engineering services for customized optical measurement systems. Headquartered in an ISO 9001:2008 manufacturing facility in Burnaby, British Columbia, Canada, Photon Control is listed on the TSX Venture Exchange (the "TSX-V"), trading under the symbol "PHO".

Photon Control's approach to creating shareholder value has been to pursue OEM sales whether directly or through distributors and to investigate the market potential of products by working directly with customers in select industries to foresee their sectors' requirements. These collaborations often include commitments to conduct trials of the new products on industrial sites.

Photon Control's measurement and control instruments are intended for applications with high demands for precision, repeatable performance and reliability. The semiconductor manufacturers that are Photon Control customers set very high standards of supply chain management and Photon Control has satisfied these requirements. Photon Control supplies products to its 'Fortune 500' customer base through integrator contractors located in the USA, Europe, and Asia, and directly supplies products to three major capital equipment manufacturers located in Silicon Valley.

While focusing on manufacturing and distribution of high-quality products, Photon Control has a strong business relationship with Photon Control R&D Ltd., an engineering and research and development company, in order to enhance the effectiveness of its technical and customer support team, develop new technologies, and convert the Company's intellectual property (consisting of 20 issued and 5 pending patents) into commercial products.

Photon Control has a strong and highly skilled employee base and has successfully managed to recruit and retain qualified personnel through competitive employment terms relative to the local labour market. As at June 30, 2014, Photon Control staff included 33 full-time personnel and five contract employees, compared to 30 full-time personnel at the end of Q2 2013.

Photon Control's Board of Directors adopted a shareholder rights plan (the "Rights Plan") effective August 20, 2012, which was subsequently approved by Photon Control's shareholders and the TSX-V. The Rights Plan is designed to maximize shareholder value and protect shareholders' interests in the event of a take-over bid that may result in a change of control of Photon Control. The Rights Plan will expire at the termination of Photon Control's annual general meeting in 2015, unless extended upon reconfirmation by shareholders at that meeting.

**Normal Course Issuer Bid**

As announced in the Company's News Release dated May 10, 2013, the TSX-V accepted the Company's notice of intention dated May 1, 2013 to make a normal course issuer bid (the "NCIB") for its common shares through the facilities of the TSX-V.

During the NCIB period, that ended on May 7, 2014, a total of 1,950,000 common shares of the Company were repurchased and cancelled. This includes 850,000 common shares purchased under the NCIB during Q1 2014, which were cancelled in Q2 2014.

Photon Control was entitled to purchase up to a maximum of 5,000,000 common shares, which represented approximately 4.86% of the Company's 102,909,518 issued and outstanding common shares at May 8, 2013. Canaccord Genuity Corp. was conducting the NCIB on behalf of the Company. Any common shares acquired under the NCIB was purchased at the market price.

**CORPORATE VISION AND STRATEGY**

Photon Control remains focused and fully committed to its core values and long-term growth strategy.

Some of Photon Control's key operational objectives are to:

- Implement prudent measures that enhance revenue and capitalize on growth opportunities on a global scale, with initiatives to create demonstrable value for shareholders;
- Continuously enhance manufacturing efficiency, capacity and agility in order to more proficiently meet customer trends and demands;
- Create efficient financial planning, maintain strong budget controls and adhere to strict inventory control procedures in order to quickly adapt to new and changing market conditions;
- Renegotiate contracts with vendors and suppliers to obtain more favourable terms; and
- Expand distribution network to match strategic goals and to help achieve long-term business relationships.

These activities remain important elements of Photon Control continuing liquidity management and organizational efficiency plan.

The Company is supplying commercial products to the following market verticals through direct sales and in some cases through distributors for particular territories.

Manufacturing - Semiconductor  
Capital Equipment:



- OEM optical sensing solutions (optical sensors for positioning, spacing, detection, and related controls, robot alignment and positioning jigs, analytical tools for inspection of silicon wafers) or Silicon Wafer Sensing
- Optical sensors (Immersion and Contact temperature measurement systems)
- UV / VIS / NIR Spectrometers, Light Sources and Accessories

Oil, Gas & Petrochemical:



- Focus® Optical Flow Meters for measurement of stack emissions (greenhouse gases, flares), fuel gas, associated gas, coal bed methane, biogas
- Total Sulphur Analyzer for measurement of total sulphur content in diesel, gasoline, kerosene, jet fuel, and other processed hydrocarbons

Power & Energy:



- PowerTemp Series single-channel and multi-channel temperature measurement systems for monitoring of dry transformers, switchgear and power generators

Life Sciences:



- UV / VIS / NIR Spectrometers, Light Sources and Accessories
- Optical sensors (Life Science temperature measurement systems)

Institutional Research:



- UV / VIS / NIR Spectrometers, Light Sources and Accessories
- Optical sensors (Immersion and Contact temperature measurement systems)

Food and Agriculture:



- UV / VIS / NIR Spectrometers, Light Sources and Accessories
- Optical sensors (Immersion and Contact temperature measurement systems)

**SELECTED INTERIM FINANCIAL INFORMATION**

The comparative figures for all fiscal periods conform with the presentation in accordance with IFRS adopted by the Company commencing with fiscal year beginning January 1, 2011.

<i>Canadian dollars</i>	<b>Six months Ended June 30</b>		
	<b>2014</b>	<b>2013</b>	<b>2012</b>
Total revenues	\$ 9,878,341	\$ 6,517,884	\$ 5,887,249
Income before discontinued operations and extraordinary items	3,032,714	1,134,743	1,214,280
Net income per share before discontinued operations, extraordinary items and taxes, basic and diluted	0.03	0.01	0.01
Net income before taxes	3,032,714	1,134,743	1,214,280
Net income before taxes per share, basic and diluted	0.03	0.01	0.01
Net income after taxes per share, basic and diluted	0.03	0.01	0.01
Total assets	19,484,637	15,809,745	12,360,363
Total long-term financial liabilities	-	-	-
Cash dividends declared per common share	-	-	-

*See "Reclassification of revenue and cost of sales" below for changes to total revenue for 2014 and restatement of comparative 2013 and 2012*

**SECOND QUARTER 2014**

**Highlights of Q2 2014**

- Sales of \$4.1 million (Q2 2013: \$3.7 million)
- Operating Expenses of \$0.8 million (Q2 2013: \$0.9 million)
- Profit before taxes of \$960,603 (Q2 2013: profit before taxes of \$743,516)
- Gross Margin of 46.7% (Q2 2013: 40.0%)
- Sales Order Backlog of \$3.3 million (Q2 2013: \$3.3 million)

**Sales**

Photon Control's product sales for the three months ended June 30, 2014 were \$4.1 million, an increase of \$0.4 million or approximately 11% compared with \$3.7 million reported in the same quarter of 2013.

## **Expenses**

General and administrative expenses totalled \$418,801 in Q2 2014 compared to \$541,639 in Q2 2013. This decrease primarily relates to reduction of legal judgements but offset by increases in insurance, rent, and stock options expense recorded.

Research and development expenses totalled \$269,671 in Q2 2014 compared to \$222,102 in Q2 2013. This increase is primarily due to engineering consulting fees.

Business development and marketing expenses totalled \$101,553 for Q2 2014, slightly above \$99,178 in Q2 2013.

## **Profit for the Period**

Photon Control's Q2 2014 profit before taxes was \$960,603 representing an increase of \$217,087 or approximately 29% compared with a profit before taxes of \$743,516 reported in the same quarter of 2013. (see "Net Earnings" and "Operating Expenses" sections below for more details).

## **RESULTS OF OPERATIONS AND Q2 2014 OVERVIEW**

Since 2009, Photon Control has made significant progress in implementing its five-year strategy and with the record Fiscal Year 2013 has posted a fifth consecutive year of profits. During 2013, Photon Control continued to lay the foundation for creating a long term value and has demonstrated its commitment to corporate, operational and financial discipline. During the second half of 2013, Photon Control benefited from the more favourable economic and industry conditions. In the fiscal year 2013, Photon Control delivered a strong finish to a very good year achieving its best annual results on record reporting \$17.3 million in product sales, and \$4,595,050 profit before taxes. The Company's significant increase in product sales was mainly due to accelerated levels of activity in the semiconductor market supported by the non-semiconductor product sales and the Company's enhanced operational efficiency.

The significant progress achieved during fiscal 2013 made a positive impact on Photon Control's current fiscal year, securing the Company's profitability throughout the first half of 2014. During the first six months of 2014, the Company achieved solid results with a good profitability progression recording \$9.9 million in product sales and \$3,032,714 profit before taxes, representing an increase of approximately 52% and 167% respectively compared to the same period last year.

In Q2 2014, Photon Control recorded \$4.1 million in product sales, approximately 11% higher than sales in Q2 2013. The Company's profit before taxes for Q2 2014 was \$960,603 an increase of approximately 29% compared with \$743,516 profit before taxes for the same period in 2013.

During 2014, Photon Control continued to identify and evaluate opportunities to enhance its operational results and to diversify its product range. Photon Control continues to develop new sensor technologies and customized products for existing OEM customers, and is further expanding its product lines to pursue new customers in other sectors. In addition, the Company continued to implement better communication procedures with existing distributors for increasing productivity and marketing initiatives.

Geographically, the United States remained Photon Control's strongest performing region, followed by Asia, Canada and Europe. To this end, Photon Control has 18 active distribution agreements, however, performance measures through sales will require some time.

The Company’s strategic decision to invest in sales resources, new product development and the engineering support to accelerate future growth is predominantly driven by these factors:

- to maintain strong customer relationships including having a technical team of engineers readily available to quickly and cost-effectively meet each customer's needs;
- to maintain a strong team working with the existing OEM accounts, tailored to support their unique needs in custom engineered projects;
- to maintain competitive edge and expand the Company’s reach in increasingly complex OEM environment and the marketplace; and
- to refine the Company’s strategy and ensure maximum awareness when introducing new or existing products while pursuing new channels and market opportunities.

During the current fiscal year 2014, Photon Control remains encouraged by solid volume of orders and as of the day of this report, the Company’s current sales order backlog stood at \$3.9 million. This represents the value of sales orders to be fulfilled in the current fiscal year 2014. The Company’s order backlog levels vary primarily due to the fluctuations in the market conditions of the semiconductor OEM customers. In addition, the Company continues to analyze and monitor industry trends and customer needs in order to ensure proper budgeting, supported by cost management and operational efficiency programs. In 2012, the bank operating line of credit facility was increased from \$500,000 to maximum of \$1,000,000. As at June 30, 2014, the bank line of credit was not utilized due to the increase in cash flow from operations and currently remains available for use if needed.

**MARKETING AND RECENT DEVELOPMENTS**

**Commercialized Products and Business Trends**

*Worldwide Distributor Locations*



Photon Control has a broad geographic representation with dedicated distributors in North America, Europe, Asia, and Australia. The Company's expanded sales and marketing efforts are resulting in the success of securing orders from new customers as well as follow-on orders from existing customers.

During Q2 2014, Photon Control continued to build brand presence locally and in international markets through stronger on-line initiatives, with a new "responsive" website launch together with product demonstration videos, direct sales in local markets and continuing strong communication procedures with distributors. The Company participated in the Analytica exhibition in Munich, Germany and the Defense Sensing Security exhibition in Baltimore, Maryland where the Company presented its Spectrometer product line, Optical Temperature Sensors and the new PalmSense2. The Company also promoted its OEM manufacturing capabilities and met with potential distribution companies for the European market. In June 2014, the Company also unveiled the Focus® 2.0 Optical Flow Meter at the Global Petroleum show in Calgary.

To date in 2014, the Company has been recognized by Canadian Business and PROFIT in its 26th annual PROFIT 500, ranked in Business in Vancouver's "Top 100 Tech Companies in B.C. and has been awarded "Technology Fast-Growth Business of the Year – Canada" in Acquisition International Magazine's 2014 Business Excellence Awards.

Photon Control is continuing market research and planning for 2015 sales and marketing initiatives.

### **Product Sales and Operational Update**

Product sales in Q2 2014 reported \$4.1 million, approximately 11% increase compared with \$3.7 million recorded during the same period last year. Photon Control sales to the semiconductor sector contributed significantly to the second quarter 2014 results supported by the continued inflow of orders from the non-semiconductor sector, that included analytical products, flare gas meters, optical temperature sensors and spectrometers.

### **Gross Margin**

The gross margin percentage for Q2 2014 of 46.7% increased from the Q2 2013 gross margin percentage of 40%. The increase of gross margin percentage during Q2 2014 was primarily due to a higher revenue level compared to 2013, sales of more favourable margin products, and greater production efficiency due to this higher volume.

### **Operating Expenses**

General and administrative expenses totalled \$418,801 in Q2 2014 compared to \$541,639 in Q2 2013 due to an increase in:

- non-directors' stock option expense	\$ 11,548
- directors' stock option expense	\$ 17,473
- rent and office premises expenses	\$ 17,203
- travel	\$ 3,334
- audit	\$ 2,850
- insurance	\$ 18,860
- dues	\$ 37

and offset by a decrease in:

- salaries/financial services	\$ 27,085
- legal	\$ 14,046
- legal judgements	\$ 142,096
- depreciation	\$ 2,367
- other expenses	\$ 1,691
- supplies and postage	\$ 2,881
- communications	\$ 977
- bad debt	\$ 3,000

Research and development expenses totalled \$269,671 in Q2 2014 compared to \$222,102 in Q2 2013 primarily due to an increase in:

- consulting expenses	\$ 42,266
- certification and testing	\$ 5,295
- travel	\$ 1,726

and offset by a decrease in:

- depreciation	\$ 1,719
----------------	----------

Business development and marketing expenses totalled \$101,553 in Q2 2014 compared to \$99,178 in Q2 2013 primarily due to an increase in:

- trade shows	\$ 14,085
- promotion	\$ 6,870
- commissions	\$ 138

and offset by a decrease in:

- travel expenses	\$ 3,100
- staff salaries	\$ 15,359

### **Other Expenses**

Photon Control's products are priced in U.S. dollars. Fluctuations in the value of the U.S. dollar through 2014 and 2013 resulted in a foreign exchange loss of (\$176,373) in Q2 2014 compared to a foreign exchange gain of \$122,626 in Q2 2013.

### **Net Earnings**

The net earnings before taxes for Q2 2014 were \$960,603 compared to net earnings before taxes of \$743,516 in Q2 2013. This solid increase in net earnings was primarily attributed to an increase in sales volume and its corresponding favourable impact on gross margin supplemented plus a decrease in operating expenses. In detail, the \$217,087 increase was due to:

- \$449,734 increase in Gross Margin (due to both (a) mix of sales of product with more favourable margins and (b) greater production volume efficiencies due to an increase in sales);
  - \$122,838 decrease in General and Administrative expenses
  - \$47,569 increase in Engineering expenses
  - \$2,375 increase in Business Development expenses; and
  - \$305,541 reduction in Other Earnings (mainly foreign exchange loss)
- \$217,087 Total

## CORPORATE TAXES

As at June 30, 2014, the Company had a deferred tax asset of \$4,201,886. A tax recovery of \$1,376,953 for the fiscal year 2012 and \$3,926,888 for the fiscal year 2011 was recognized for unused loss carry forwards, deductible scientific research and development credits and the effects of changes in income tax rates. This deferred tax asset for 2011 and 2012 was reduced in 2013 by the recognition of a deferred income tax expense of \$1,101,955. In the fiscal years prior to 2011, there was some doubt if Photon Control could ever utilize these loss carry forwards before they expire, consequently this item was not recognized. However, the Company's recent history of profitability from 2009 to 2013 has removed this concern.

## ORDER BACKLOG

The second quarter of 2014 continued to demonstrate a solid sales order backlog. As at June 30, 2014, Photon Control's sales order backlog stood at \$3.3 million, equal to Q2 2013. This represents the value of sales orders already fulfilled or to be fulfilled in the current fiscal year 2014.

## SUMMARY OF QUARTERLY RESULTS

The following table is a summary of Photon Control's financial results for the past eight quarters. The comparative figures for all fiscal quarters below conform with the presentation in accordance with IFRS adopted by the Company commencing with fiscal year beginning January 1, 2011.

	June 30, 2014	March 31, 2014	December 31, 2013	September 30, 2013	June 30, 2013	March 31, 2013	December 31, 2012	September 30, 2012
Revenue	\$4,116,504	\$5,761,837	\$6,129,312	\$4,609,445	\$3,697,744	\$2,820,140	\$2,152,457	\$2,401,081
Net income / loss before taxes	\$ 960,603	\$2,072,111	\$2,338,357	\$1,121,950	\$ 743,516	\$ 391,227	\$ 136,011	\$ 309,524
Net income / loss per share Basic & Diluted	\$ 0.01	\$ 0.02	\$ 0.02	\$ 0.01	\$ 0.01	\$ 0.00	\$ 0.00	\$ 0.00

## LIQUIDITY AND CAPITAL RESOURCES

Cash and cash equivalents at June 30, 2014 had a balance of \$9,742,074 compared to \$3,872,033 as at June 30, 2013. The Company had working capital of \$14,016,208 as at June 30, 2014 compared to working capital of \$6,592,836 as at June 30, 2013. The increase in cash and cash equivalents as at June 30, 2014 resulted from continued improvements in reducing the collection time of receivables, but mainly from cash generated from operations due to large 2014 sales volumes. Working capital increased due to the increase in cash and inventory and decrease in legal provisions payable.

Although there can be no assurances, Photon Control believes that cash generated from operations, committed purchase orders, and the availability of the Company's line of credit will give Photon Control financial resources necessary to operate in the current year and the foreseeable future.

Cash provided by operations totalled \$3,860,695 for the six months ending June 30, 2014 compared to cash provided of \$268,636 for the same period in 2013. Investing activities used cash of \$19,573 for the six months ending June 30, 2014 compared to \$4,110 for the same period in 2013. Cash used in financing activities was \$167,181 (primarily NCIB share buy backs) for the six months ending June 30, 2014 compared to \$nil for the same period in 2013.

As at June 30, 2014, the Company's accounts payable and accrued liabilities, which fall due for payment within 12 months of the balance sheet date, were \$619,416 compared to \$749,046 as at June 30, 2013.

### **Nature of Business and Continuing Operations**

The Company has made efforts to diversify the industries that it serves in an attempt to reduce the impact of a downturn on any one segment. The continued manufacturing and distribution of existing products and the commercialization of new products in 2012, 2013 and the current fiscal year 2014 form the basis of management's opinion that the Company will meet its liabilities and commitments as they become due. The Company is currently monitoring all expenditures and implementing cash management strategies to ensure that it has adequate cash reserves to fund identified expenditure requirements. In 2012, the Company was successful in increasing its line of credit to \$1,000,000 (based on adding non-proprietary raw materials to bank covenants). In addition, the Company has insured its receivables in order to receive additional asset-based financing.

### **Contractual Obligations**

#### **Leases:**

The Company has entered into premises leases requiring the following minimum lease payments from June 30, 2014 as follows:

2014	370,211
2015	785,374
2016	830,452
	<hr/>
	\$ 1,986,037

In November 2011, the Company renewed its premises lease covering the period of January 2012 to December 2016. No deferred rent is applicable with this new lease.

#### **Litigation:**

In October 2001, a former member of management and President of the Company (the "Claimant") initiated an arbitration proceeding asserting that certain amounts were owing to him by the Company. The Company had commenced an action against the Claimant for a declaration that it had properly rescinded a loan agreement between the Company and the Claimant dated March 5, 2001 (the "Loan Agreement") and that the debt owed to the Claimant (the "Claimant Debt"), being \$340,887 as at the date of the Loan Agreement, was repayable in shares of the Company at a rate of one share per dollar of debt.

In addition, the Claimant has filed a claim against the Company seeking unspecified damages for wrongful dismissal. The Company considered the allegations in the lawsuit to be without merit and subsequently proceeded to defend the action.

The Company's application to dismiss the claim was denied in September 2009. The trial commenced on May 9, 2011 but did not complete on May 20, 2011 as scheduled. The trial resumed on June 13 and was completed on June 17, 2011. As announced in the Company's News Release dated August 2, 2011, the Supreme Court of British Columbia decided that the Company did not have the right to rescind the Loan Agreement and that this debt is repayable in accordance with the Loan Agreement. The amount of the Claimant Debt payable is \$374,562 including interest as at September 30, 2010 plus interest thereafter. The Court also ruled that the Claimant was dismissed without cause in 2001 and awarded 18 months notice at \$130,000 per year in salary plus the value of the benefits payable to him.

As announced in the Company's News Release dated September 12, 2011, Photon Control filed a Notice of Appeal from the decision of the Supreme Court of British Columbia in respect of the Court's decision on both rescission of the loan agreement and the dismissal of the Claimant from the Company. Subsequently, the Company's appeal of both the loan agreement decision and the wrongful dismissal decision was heard by the British Columbia Court of Appeal on March 15 and 16, 2012. As announced in the Company's News Release dated August 16, 2012, the Court of Appeal dismissed the Company's appeal and upheld the trial decision. As announced in the Company's News Release dated June 12, 2013, the Supreme Court of Canada has denied the Company's application for leave to appeal the decision of the British Columbia Court of Appeal.

A charge for the Claimant Debt in the amount of \$310,499 was previously taken by the Company as a long term liability and was reported on the Company's previous financial statements. Also, the Company recorded an additional \$539,501 in Q1 2012 to reflect the decision of the Court. Both of these amounts, totalling \$850,000, were classified in Q1 2012 as a contingent liability. Related to this issue, the Company has provided a \$850,000 standby irrevocable letter of credit as a guarantee against this lawsuit (included in restricted cash). An additional \$142,096 was added to the provision in Q2 2013 resulting in a total provision of \$992,096 as at June 30, 2013. During Q3 2013, the Company proceeded with payments to Claimant. Further applicable adjustments (if any) will be made in the Company's future 2014 financial statements to reflect the decision of the Court (see the Company's Audited Consolidated Financial Statements and accompanying notes as at and for the years ended December 31, 2013 and 2012 and the unaudited interim Consolidated Financial Statements and accompanying notes for the six months ending June 30, 2014 and June 30, 2013).

## **UPDATE**

### **RELATED PARTY TRANSACTIONS**

All transactions with related parties have been recorded in the normal course of operations and have been measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties. Related party transactions include transactions with Photon Control R&D Ltd and DCD Management Ltd. Photon Control R&D Ltd. commenced providing engineering consulting and research and development services to the Company on October 1, 2008 and, as a result, the Company has reduced its internal research and development operations. DCD Management Ltd. provides financial, payroll and IT services.

**PHOTON CONTROL INC.**  
**Management's Discussion and Analysis**

For the Six Months Ended June 30, 2014

The Company subleases space to Photon Control R&D Ltd. and DCD Management Ltd. at the same facility. The Company charges Photon Control R&D Ltd. and DCD Management Ltd. premises and related expenses to recover the Company's costs. Amounts outstanding with DCD Management Ltd. are non-interest bearing, unsecured and due on demand. Amounts outstanding with Photon Control R&D Ltd. are also unsecured and due on demand however they were changed to interest bearing in 2013. These accounts are active and payments are received on a monthly basis, and the balance is paid out at least twice during the year.

For the six months ended June 30	2014	2013
<b>Statement of Financial Position</b>		
Accounts receivable	\$ 621,245	\$ 1,313,321
Note receivable	128,429	157,702
Accounts payable and accrued liabilities	115,318	415,483
<b>Statement of Comprehensive Income</b>		
<b>Charges to:</b>		
Revenue from sales of products and services to Photon Control R&D	\$ 79,292	\$ 145,306
Payroll reimbursement re: Photon Control R&D Ltd.	720,381	734,094
Recovery of premises and related expenses (re: DCD Management Ltd. and Photon Control R&D Ltd).	169,501	153,178
<b>Charges from:</b>		
Products & services charged by Photon Control R&D Ltd.	\$ 105,399	\$ 327,642
Engineering, R&D services charged by Photon Control R&D Ltd.	468,353	412,568
Royalty expenses charged by Photon Control R&D Ltd.	544,592	302,600
Management services expenses charged by DCD Mgmt. Ltd.	\$ 96,528	\$ 93,438

The Company indemnifies its directors and officers against any and all claims or losses reasonably incurred in the performance of their service to the Company to the extent permitted by law. The Company has acquired and maintains liability insurance for directors and officers of the Company.

**SUBSEQUENT EVENTS**

See "Marketing and Recent Developments" above, and "Outstanding Share Data" below for subsequent events.

**CRITICAL ACCOUNTING POLICIES AND ESTIMATES**

The consolidated financial statements have been prepared in accordance with Canadian generally accepted accounting principles. A summary of the significant accounting policies used in the preparation of our financial statements is included in Note 2 of the unaudited interim consolidated financial statements for the six months ended June 30, 2014 and 2013. The measurement of certain assets and liabilities is dependent upon future events, the outcome of which will not be fully known until future reporting periods.

Therefore, the preparation of the consolidated financial statements requires management to make certain estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses. Actual results will vary from those estimated. Certain accounting policies are critical to understanding our reported financial results. These critical policies, which affect the reported amounts of revenue and the more significant areas involving management estimates, are described here.

**Inventory**

Inventory consists of optical, mechanical and electronic components and finished goods and is valued at the lower of cost or net realizable value. Cost is determined on an actual FIFO cost basis and includes the cost of direct material, direct labour and other overhead costs. Labour costs are allocated to items based on actual labour hours input. Fixed and variable overhead are allocated to production activities in converting materials to finished goods.

Inventory was \$2,147,278 as at June 30, 2014 (2013 - \$1,299,346). Inventory levels have increased primarily due to building finished goods ahead of time to fulfill Q3 2014 customer orders plus a request by one of the Company's major customers to maintain a higher level of consignment inventory.

**Revenue Recognition**

Revenue from sales of products is recognized when goods are shipped and title passes, there is persuasive evidence of an arrangement, collection is probable and the fee is fixed and determinable. Cash collected prior to revenue recognition criteria being met is recorded as deferred revenue on the consolidated balance sheet.

**Research and Development Costs**

Research costs are expensed as incurred. Development costs are expensed as incurred unless they meet the required criteria for deferral and amortization. There were no additional costs which were deferred in 2014 or 2013 relating to development of a portable sulphur analyzer product. Commercial production of this product started in 2013. The Company amortizes previously deferred development costs, commencing with commercial production, over the expected future benefit period based upon quantities delivered compared to expected levels contracted to be delivered. However, in Q2 2014, there were indications that gave rise to the possibility of impairment of these assets. The amount amortized over sales or considered impaired and discounted for the six months ending June 30, 2014 was \$49,500 (2013 - \$nil). Deferred development costs (internally generated intangible assets) were \$93,000 as of June 30, 2014 (2013 - \$148,824).

**Stock-based Compensation Plans**

The Company accounts for employee stock options using the fair value based method. Under the fair value based method, compensation cost attributable to options granted to employees and directors is measured at the fair value at the grant date using the Black-Scholes option pricing model. Compensation expense is recognized over the vesting period of the underlying option.

Any consideration paid by employees on exercise of stock options or purchase of stock is credited to share capital. No compensation cost is recognized for options that employees forfeit if they fail to satisfy the service requirement for vesting. Compensation expense is recognized for stock-based payments to non-employees using the fair value based method.

Stock options to purchase 60,000 common shares of the Company were granted to new employees during the six months ending June 30, 2014 (no stock options granted in the six months ended June 30, 2013).

**Warranty Provision Estimate**

The company accrues for the estimated obligation under warranty provisions at the time sales are recognized and any changes in estimates are recognized prospectively.

**Financial Instruments**

The Company has classified its financial instruments as follows:

- Cash and cash equivalents and bank indebtedness, if any, as "held-for-trading";
- Trade accounts receivable and other amounts due from related parties are classified as "loans and receivables"; and
- Accounts payable and accrued liabilities, amounts due to related parties and advances under credit facility are classified as "other financial liabilities".

All financial instruments are initially recognized at fair value and are subsequently accounted for based on their classification. The fair value of a financial instrument on initial recognition is the transaction price, which is the fair value of the consideration given or received. Subsequent to initial recognition, financial assets and liabilities classified as held-for-trading are measured at fair value with changes in fair value recorded in the Consolidated Statements of Operations. Financial assets classified as "loans and receivables" and "other financial liabilities" are carried at amortized cost using the effective interest rate method. The fair values are based on quoted market bid process if available; otherwise, fair value is obtained using discounted cash flow analysis. Transaction costs that are directly attributable to the issuance of financial assets or liabilities are accounted for as part of the carrying value at inception and are recognized over the term of the assets or liabilities using the effective interest method. The adoption of these standards did not have an impact on the classification and valuation of financial instruments.

**CHANGES IN ACCOUNTING POLICIES**

See the Company's consolidated financial statements for the six months ended June 30, 2014 Note 3 for recently adopted and future accounting pronouncements.

**RECLASSIFICATION OF REVENUE AND COST OF SALES**

Warranty provisions have been reclassified from revenue to cost of sales for both FY2014 and comparative fiscal years 2013 and 2012. The reason for such reclassification is to conform to IAS 18 definition of revenue which is the fair value of the consideration received or receivable taking into account the amount of trade discounts and volume rebates that the entity allows. Thus warranty provisions previously included in revenue should be re-classed to cost of sales. Gross margins remain unchanged for all fiscal years.

Impact of this change on six months ended June 30, 2014 and June 30, 2013 is:

For the six months ended June 30	2014	2013
Revenue prior to reclassification	\$ 9,780,341	\$ 6,435,884
Reclassification of warranty	98,000	82,000
<b>Revenue</b>	<b>\$ 9,878,341</b>	<b>\$ 6,517,884</b>

Reclassification of cost of sales		
For the six months ended June 30	2014	2013
Cost of sales prior to reclassification	\$ 5,140,801	\$ 4,011,448
Reclassification of warranty	98,000	82,000
<b>Cost of sales</b>	<b>\$ 5,238,801</b>	<b>\$ 4,093,448</b>

### **International Financial Reporting Standards**

The CICA's Accounting Standards Board announced that Canadian publicly accountable enterprises are to adopt IFRS as issued by the International Accounting Standards Board effective January 1, 2011. The unaudited consolidated financial statements of the Company for both the second quarter ending June 30, 2014 and for the previous first quarter March 31, 2014 have been prepared to reflect the Company's adoption of IFRS, with the effective date being the fiscal year beginning January 1, 2011.

### **OUTLOOK, BUSINESS RISKS AND UNCERTAINTY**

#### **Sales Risks**

The stable order trends and a sales order backlog continued over the last five years, including the current fiscal year 2014, despite semiconductor market fluctuations and difficulties in global economy recovery. Also, the Company endeavours to reduce the risk of key client dependence by continuing its initiative to diversify its product range and develop relationships with new distributors for products for the oil and gas, power, life science, and manufacturing industries.

#### **Going Concern Risk**

The consolidated financial statements have been prepared by management on a going concern basis which assumes the Company will continue in operation for the foreseeable future and will be able to realize its assets and settle its liabilities and commitments in the normal course of business. These financial statements do not reflect the adjustments to the carrying values of assets and liabilities and the reported expenses and balance sheet classifications that would be necessary should the going concern assumption become inappropriate.

**Outlook, Market, Competition, and Foreign Exchange Risk**

Since 2009, Photon Control has demonstrated the resilience of the Company's business and ability to generate revenue for the foreseeable future. During 2013, Photon Control continued to lay the foundation for creating a long term value while sustaining positive financial results for the last five years. Although the Company continues to be influenced by fluctuations in revenue as a result of volatility in the markets and product mix, Photon Control expects to maintain a stable level of orders and feels that the efforts made over the past couple of years have contributed to the Company's strong performance during the fiscal year 2013 including the continuous solid backlog and performance in the current fiscal year 2014.

Although there can be no assurance of the ability of the Company to penetrate target markets in 2014 while constantly facing new challenges and opportunities, Photon Control endeavours to limit the effects of risk factors, including competition risks, through its strategic planning, management processes and marketing research. Moreover, the Company continues to focus on improving the quality and efficiency of its operations and development, while securing consistent delivery of high quality and value-added products and services.

Market risk is the risk that changes in market prices such as foreign exchange rates and interest rates will affect the Company's net earnings or the values of financial instruments. The majority of the Company's sales revenues and trade receivables are denominated in United States dollars. As such, the Company may be subject to material, realized and unrealized exchange gains or losses resulting from above average changes in exchange rates between the Canadian and the United States dollars.

At the beginning of the fourth quarter 2013, the Company has started to utilize forward exchange contracts to mitigate the risks as mentioned above. (see Note 12, unaudited interim Consolidated Financial Statements for the six months ended June 30, 2014 and 2013 for additional details).

Photon Control manages its exposure to foreign currency fluctuation by maintaining Canadian and United States dollar bank accounts to offset foreign currency payables and planned expenditures. As at June 30, 2014, the Company was not exposed to significant credit or interest rate risk.

**OUTSTANDING SHARE DATA**

As at June 30, 2014, the Company had 101,754,518 common shares issued and outstanding. As at the day of this report, the Company had 102,135,518 common shares issued and outstanding due to the subsequent exercise of 381,000 share options in Q3 2014. There were 7,475,000 outstanding stock options to purchase common shares of the Company as at June 30, 2014 and 7,094,000 outstanding stock options as at the day of this report due to the subsequent exercise of share options in Q3 2014.

**ADDITIONAL INFORMATION**

Additional information and other publicly filed documents relating to the Company are available through the Canadian Securities Administrators' System for Electronic Document Analysis and Retrieval ("SEDAR") which can be accessed at SEDAR Home Page <http://www.sedar.com/>.

**INFO PAGE**



ISO 9001  
QMI-SAI Global



@PhotonControl



Photon Control Inc.