

# **CARMANAH TECHNOLOGIES CORPORATION**



**MANAGEMENT'S DISCUSSION AND ANALYSIS  
FOR THE THREE AND SIX MONTH PERIODS ENDED JUNE 30, 2014**

**August 7, 2014**

## About this MD&A

This MD&A discusses the consolidated financial condition and operating performance for our Company and should be read together with our condensed consolidated interim financial statements for the three and six months ended June 30, 2014, and our audited consolidated financial statements for the year ended December 31, 2013. These documents, along with additional information about our Company, including the Annual Report, Annual Information Form, and so forth, are available at [www.carmanah.com](http://www.carmanah.com) and [www.sedar.com](http://www.sedar.com). This document contains forward-looking information qualified by reference to the forward-looking statements in the next section.

Unless otherwise indicated, all financial information presented in this MD&A is in our functional and presentation currency, United States of America ("US") dollars, and has been prepared in accordance with International Financial Reporting Standards ("IFRS"). Section 6.2 outlines any relevant recent or pending Accounting policy developments that may impact our financials.

Our consolidated financial statements include our accounts and those of our wholly-owned subsidiaries, Carmanah Solar Power Corporation, and Carmanah Technologies (US) Corporation (a US incorporated company).

Our disclosure controls and procedures are designed to provide reasonable assurance that all relevant information is gathered and reported to our senior management on a timely basis so that appropriate decisions can be made regarding public disclosure. Our management determines whether or not information is material based on whether they believe a reasonable investor's decision to buy, sell or hold securities in our Company would likely be influenced or changed if the information were omitted or misstated. The MD&A and the consolidated financial statements were reviewed by our Audit Committee and approved by our Board of Directors. This MD&A is prepared as of August 7, 2014.

Our management reports on certain non-IFRS measures which is used to evaluate financial performance. As non-IFRS measures generally do not have a standardized meaning, securities regulations require non-IFRS measures to be clearly defined, qualified and reconciled with their nearest IFRS measure. Earnings before Interest, Taxes, Depreciation and Amortization ("EBITDA") used in this document means standardized EBITDA as defined by the Canadian Performance Reporting Board of the Canadian Institute of Chartered Accountants ("CICA"). See Section 8 for the definition, calculation and reconciliation of.

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## Caution regarding forward-looking statements

Certain statements in this Management Discussion & Analysis ("MD&A") are forward-looking statements that involve risks and uncertainties. Forward statements are often, but not always, identified by words such as "may", "would", "could", "will", "intend", "should", "expect", "plan", "anticipate", "believe", "estimate", "predict", "potential", "continue" and similar expressions. Forward-looking statements in this MD&A include, but are not limited to, statements relating to the expected growth opportunities and commercial acceptance and demand for on-grid and off-grid LED (Light-emitting diode) lighting systems, continued government subsidies for solar grid-tie projects, and the successful development of new products to help penetrate new geographic markets. Specific examples of forward-looking information in this MD&A include, but are not limited to, statements with respect to: the future success of our recent restructuring initiative and our ability to produce positive operating income.

By their very nature, forward-looking statements involve inherent risks and uncertainties, both general and specific, and a number of factors could cause actual results or events to differ materially from those anticipated in such forward looking statements. Although the forward-looking statements contained in this MD&A are based upon what we believe to be reasonable assumptions, prospective investors cannot be assured that actual results will be consistent with these forward-looking statements. In evaluating these statements, readers should specifically consider various factors, including the risks discussed under the heading "Risk Factors" in our annual information form dated March 31, 2014. Additionally, factors that could cause or contribute to such differences include, but are not limited to, the following:

- actions of competitors, including competitors with greater name recognition and financial resources;
- our ability to keep pace with rapid changes in lighting technology and evolving industry standards;
- competition with other energy sources;
- slower than anticipated adoption of off-grid LED lighting technology;
- our ability to manage expansion effectively;
- fluctuation in foreign currency exchange rates;
- our reliance on third party manufacturers;
- our reliance on sales agents and third parties with whom we have developed strategic relationships to sell our products, particularly in niche markets and developing and emerging economies;
- our reliance on key employees;
- intellectual property risks;
- environmental and regulatory compliance;
- our reliance on government contracts and subsidies, such as the Ontario, Canada Feed-in Tariff ("FIT") program;
- problems with product quality or reliability;
- downturns in general economic and market conditions;
- our ability to maintain adequate liquidity or raise additional capital when needed; and
- geopolitical or other global or local events.

Readers should not place undue reliance on forward-looking statements. Some of the specific forward looking statements may include estimates surrounding capital plans, future restructuring costs and anticipated amounts to be raised under the offering. The forward-looking statements in this MD&A are made as of the date hereof. We do not assume any obligation to update the forward-looking information contained in this MD&A other than as required by applicable laws (including without limitation Section 5.8(2) of National Instrument 51-102 Continuous Disclosure Obligations).

# 1. FINANCIAL HIGHLIGHTS

## Financial Highlights for the Three and Six Month Periods Ended June 30, 2014 and 2013

(US\$ thousands, unless noted otherwise)	Three months ended June 30			Six months ended June 30		
	2014	2013	Change	2014	2013	Change
<b>Consolidated statements of loss</b>						
Revenue	8,994	6,319	42.3%	18,113	13,287	36.4%
Gross margin %	36.3%	24.4%	11.9%	34.5%	27.5%	7.0%
Operating expenditures	(2,846)	(3,039)	(6.4)%	(5,310)	(5,840)	(9.1)%
Other Operating expenditures	-	(965)	(100)%	-	(965)	(100)%
Other income (expenses)	23	(15)	253.3%	(422)	(31)	1,261%
Net income (loss)	438	(2,477)	117.7%	515	(3,189)	116.1%
<b>Consolidated statement of cash flows</b>						
Cash provided/(used) in operating activities	(344)	129	(366.7)%	(194)	(454)	57.3%
Cash used in investing activities	(225)	(72)	212.5%	(419)	(170)	146.5%
Cash provided in financing activities	3,790	-	n/a	3,790	-	n/a
<b>Other measures</b>						
EBITDA *	809	(2,174)	137.2%	1,266	(2,604)	148.6%

\*EBITDA is a Non-IFRS measure – see section 8 for discussion

Following are the highlights of our operating results for both the second quarter of 2014 and the six months ending June 30, 2014:

- **Revenue** - Our revenues for the second quarter of 2014 were \$9.0 million up 42.3% over the second quarter of 2013 during which we had revenues of \$6.3 million. Year to date revenues of \$18 million represent a 36.4% improvement over the comparable period in 2013. Revenue increases in both the second quarter and year to date have been recorded in both of our business divisions. We attribute the increases to improvements in our operating structure and staff efficiency. Not reflected in current revenue was an increase in our contract order back log which increased substantially during the second quarter. This was due to the booking of a number of larger contracts which we expect to deliver on over the next few quarters.
- **Gross Margins** - Gross margins percent was 36.3% in the second quarter of 2014 which is an 11.9% improvement over the second quarter of 2013. However, it should be noted that in the second quarter we recognized the revenue arising from the conversion of a beta project to a commercial sale which added an unusually high gross margin to the totals. If not for this anomaly gross margins in the second quarter of 2014 would have been very close to those achieved in the first quarter of 2014 which is still up substantially to gross margins in the comparable prior period. We attribute the gross margin increases to a more efficient operating structure and improved operating discipline. Gross margin percent for the first six months of 2014 was 34.5%, up 7.0% from the same period in 2013. The reason for this increase is similar to those outlined for the second quarter.
- **Operating costs** - Operating costs in the second quarter of 2014 were \$2.8 million, down from \$3.0 million in the same period of 2013. This decrease was mostly resulting from lower salaries, bank charges and amortization, which were down a combined \$0.3 million, offset by higher legal costs resulting from defending an ongoing lawsuit described under section 5.5. These legal costs are expected to continue in future quarters until the lawsuit is completed. Year to date operating costs were \$5.3 million, down from \$5.8 million in the same period of 2013. These changes are due to similar reasons as outlined for the second quarter.
- **Other expenses/income** - Total other expenses/income in the second quarter of 2014 were under \$0.1 million of other income compared to a slight loss in the same period of 2013. Within the second quarter of 2014, we incurred approximately \$0.3 million of merger and acquisition costs, offset by a recovery on foreign exchange and restructuring charges.
- **Net income/loss** - Our overall net income for the second quarter of 2014 was \$0.4 million, compared to a net loss of \$2.5 million in 2013. The improvement in our net income in both the second quarter and year to date results directly from higher sales revenues, improved gross margins and lower operating costs.

During the second quarter we announced the following events which were completed in the quarter or subsequent to quarter end including:

- We announced two private placements and closed one private placement in the second quarter. The first private placement provided proceeds of approximately \$4.2 million CDN through the issuance of 19,300,000 shares at the

price of \$0.22 CDN per share and closed on April 3, 2014. A second private placement was announced in the second quarter and closed subsequent to quarter end. This private placement provided proceeds of approximately \$3.0 million CDN through the issuance of 12,000,000 shares at the price of \$0.25 CDN per share and closed on July 17, 2014. Both private placements were subscribed for predominantly by members of our board and management.

- We closed the acquisition of SOL Inc. ("Sol") on July 2, 2014. Details of these are discussed under our Operational and Business Highlights section.

## 2. OUR BUSINESS

From our headquarters in Victoria, British Columbia, Canada, we design, develop and distribute industrial and commercial solar powered outdoor LED lighting systems, solar powered signalling systems for the marine, aviation, traffic and obstruction markets, solar powered energy systems for the mobile markets (primarily RV's and trucks), and we design and install PV rooftop and greenfield power plants. As one of the most trusted names in solar technology, we have earned a reputation for delivering strong and effective products for industrial applications worldwide. Industry-proven to perform reliably in some of the world's harshest environments, our solar LED lights and solar power systems provide a durable, dependable and cost-effective energy alternative.

In early 2014, we realigned our reporting segments to better reflect the strategic nature of our underlying businesses and how they will be managed going forward. The reportable segments which we now utilize are "Signals" and "Power". The Signals segment includes results from our Traffic, Marine, Aviation and Obstruction verticals. The Power segment includes results from our Outdoor Lighting, GoPower! and Solar EPC Services verticals. The following provides an overview of these segments and their associated underlying verticals.

The product offering across the verticals of the Signals Division are similar in nature and share common technology and components. These products can often be used in a variety of applications with little or no modifications. They are also manufactured in a similar fashion and have common customers, distribution channels and routes to markets.

### Signals

Aviation	Carmanah's Aviation department specializes in solving the airfield lighting challenges encountered by clients in off-grid or weak-grid locations. Our self-contained solar airfield lights support daily flight operations at helipads and airstrips in demanding environments around the globe from South Africa to the Jordanian desert and northern Alaska. Our aviation customers include both military and civilian airports. Our main competitors in our Aviation market include Avlite Systems Pty Ltd and Metalite.
Obstruction	Carmanah Obstruction department provides practical and cost-effective solutions for ground hazard marking, fence and barricade lighting, way-finding, railway blue flag protection, equipment marking and more. Through rugged and wire-free designs our self-contained, solar powered obstruction lights and hazard markers are ideally suited to withstand the harsh environments typically encountered in oil and gas development projects, mining operations and other industrial development sites across all regions of the globe. Our main competitors in our Obstruction sector include Orga BV and Dialight Plc.
Marine	Since initially working with the Canadian and US Coast Guards to create a new generation of aids-to-navigation lanterns, the Carmanah Marine department has become an established supplier to Coast Guards, marine authorities, navies and ports around the globe. In 2010, we partnered with the Sabik Group with a vision to deliver one of the most comprehensive lines of short and long-range marine navigation aids on the market. Our main competitors in our Marine market include Sealite Pty Ltd, Vega, and Tideland.
Traffic	Carmanah solar flashing beacons have been in use across North America for well over a decade, working as reliably in the harsh winter climates of Ohio as they do in the hot Florida sun. Departments of transport, traffic agencies, and active transportation groups continue to call on Carmanah beacons when they are looking for reliable, cost-effective products backed by a friendly and knowledgeable team of experts. Products include pedestrian crosswalk signals, school zone flashers and 24-hr roadway beacons. Our main competitors to our Traffic department include JS Foster Corporation and TAPCO (Traffic & Parking Control Company Inc).

The verticals within the Power Division are also similar in nature. Each of these departments integrates solar components into unique product and project solutions.

### Power

Outdoor Lighting	Carmanah Outdoor Lighting department provides products for use in general illumination applications for pathways, parking lots, and pedestrian areas, as well as highway/street lighting and perimeter lighting. Our outdoor lighting department serves local and federal government facilities, government ministries, departments of defense, private utilities (power and lighting), highway concession owners, national and multi-national commercial facilities and public institutions. Our
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	main competitors in outdoor lighting are Solar Electric Power Company (SEPCO) and Solar One. In July, 2014 we completed the acquisition of Sol, Inc. which, prior to the acquisition was our largest competitor.
Solar EPC	The Solar Engineering Procurement and Construction ("EPC") Services department is focused on the development and construction of roof top commercial solar grid-connected systems. It is operated through our Ontario, Canada based subsidiary, Carmanah Solar Power Corporation ("CSPC"). Over the past decade, we have installed utility connected systems with aggregate capacity of more than five megawatts across more than seventy installations, amassing the broadest range of installation type and complexity of any EPC provider in Canada. Currently this business is primarily focused on the Ontario market due to a Feed-in-Tariff ("FIT") program introduced there by the provincial government. As a leading Solar EPC Services provider, we believe we are well-positioned to support the continued rapid development of the systems the Ontario Power Authority FIT Program facilitates. We continue to monitor opportunities in other jurisdictions beyond the Canadian market.
Mobile	Marketed under the Go Power! brand, our Mobile department provides solar kits, solar panels, inverters, chargers, batteries and other power accessories for the RV, utility and fleet vehicles, and marine markets. Our sales are made through an established channel of dealers, distributors and agents throughout the US and Canadian markets, through Amazon.com, a large online retailer and on an OEM basis to major new motorhome manufacturers. Operationally we utilize several 3rd party manufacturers and logistics warehouses to stock and distribute associated inventory. Some of our Go Power! competitors are Xantrex and Samlex.

### 3. OPERATIONAL AND BUSINESS HIGHLIGHTS

Our 2014 operational and business highlights are discussed below.

#### Acquisition of SOL, Inc.

During the first half of 2014 we worked to complete the acquisition of SOL Inc. ("Sol"), a Florida based solar outdoor lighting competitor. This acquisition was initially announced on March 21, 2014 after we entered into a binding letter of intent. An Agreement and Plan of Merger (the "Merger Agreement") was signed on May 26, 2014, and the transaction was approved by eligible Carmanah shareholders at the Company's Annual General and Special meeting held on June 23, 2014. We completed the acquisition on July 2, 2014.

The acquisition was a related party transaction, as Michael W Sonnenfeldt, who is the Chairman of our Board of Directors (the "Board") and our largest shareholder, was also the majority shareholder of Sol. Prior to the transaction he beneficially held (1) approximately 84.5% of Sol's outstanding shares and (2) a note receivable from Sol of approximately \$5.3 million. As a result of this potential conflict of interest, the Board convened a special committee consisting of disinterested directors who were responsible to evaluate and assess the potential acquisition. This committee evaluated the proposed transaction and management's assessments and oversaw a variety of work including the completion of a valuation and fairness opinion by an independent consultant.

We acquired 100% of the outstanding shares of Sol and an outstanding note receivable due from Sol which was beneficially owned by Michael W Sonnenfeldt. Consideration paid upon close included the issuance of 37,858,606 of our common shares which were issued from treasury, and a \$0.05 million cash payment to certain minority shareholders of Sol. The aggregate value of the shares issued on July 2, 2014 amounted to approximately \$7.1 million based on the closing share price of \$0.20 CDN and a US/CDN exchange rate of 0.938. The Merger Agreement also provides an earn-out of 3% of certain revenues received by us and is available to electing former shareholders of Sol. This earn-out applies to specifically identified prospective sales opportunities brought forth by Sol and is subject to various conditions. Most significantly, each of these projects must result in revenues of at least \$5.0 million and the sales order must be received and accepted by Carmanah prior to December 31, 2015, although cash and delivery can occur after that date. Mr. Sonnenfeldt and certain of his affiliates have elected to waive their right to receive all earn-out payments should they accrue. Accordingly any earn-out payment will be payable to the remaining Sol shareholders on a proportional basis. As of the date of this MD&A, we are not able to determine if any amounts will be paid out under this earn-out.

We anticipate a significant amount of effort will be required to appropriately integrate the companies together. A comprehensive plan has been developed and work has begun, however there are some uncertainties which may ultimately impact our results negatively over the next few quarters. A variety of one-time charges will likely occur, the timing and amounts are not yet determinable as our plans depend on a number of external factors.

#### Equity

In the first half of 2014 we have continued our efforts to bolster our working capital and balance sheet. This was primarily done in an effort to position ourselves to take advantage of future growth opportunities, which we anticipate will come from both organic sales growth and acquisitions. Early in the second quarter, we completed a non-brokered private placement which

provided proceeds of \$4.2 million CDN which resulted in the issuance of 19,300,000 shares that carried a price of \$0.22 CDN a share. 10,000,000 of these shares were purchased by insiders of the Company as noted below:

- Michael Sonnenfeldt, our largest shareholder and Chairman of our Board, subscribed for 3,500,000 shares under the private placement through MUUS Lending Inc., an entity that is beneficially owned by Mr. Sonnenfeldt. Subsequent to the placement, Mr. Sonnenfeldt beneficially held 28,037,778 common shares, representing approximately 23.4% of our issued and outstanding common shares at that time.
- Jim Meekison, a member of our Board of Directors of the Company, subscribed for 3,000,000 shares under the private placement through JDM Investment Holdings Inc, an entity that is beneficially owned by Mr. Meekison. Subsequent to the placement, Mr. Meekison beneficially held 13,178,000 common shares, representing approximately 11.0% of our issued and outstanding common shares at that time.

Subsequent to June 30, 2014, we completed a further non-brokered private placement which raised \$3.0 million CDN. This private placement closed July 17, 2014 and resulted in the issuance of 12,000,000 common shares at a price of \$0.25 CDN a share. The private placement was subscribed by insiders of the Company as noted below:

- Jim Meekison, a member of our Board of Directors, subscribed for 10,000,000 shares under the private placement through JDM Investment Holdings Inc, an entity that is beneficially owned by Mr. Meekison. Subsequent to the private placement, Mr. Meekison held 23,178,000 common shares, representing approximately 13.6% of our issued and outstanding common shares.
- Terry Holland, a member of our Board of Directors, subscribed for 2,000,000 shares under the private placement through TMH Capital Corporation, an entity that is beneficially owned by Terry Holland. Subsequent to the private placement, Mr. Holland held 4,679,000 common shares, representing approximately 2.75% of our issued and outstanding common shares.

Also subsequent to the end of the quarter, we announced plans to complete a consolidation of our shares on the basis of one (1) post-consolidated Common Share for every ten (10) pre-consolidation Common Shares (the "Consolidation"). We received conditional approval for the TSX for the Consolidation on July 23, 2014 and expect the post-consolidated shares will begin to trade on the Toronto Stock Exchange at some point in August 2014. Following the consolidation, the Company will have approximately 16,977,062 common shares outstanding. All outstanding stock options will be adjusted proportionately to reflect the consolidation.

#### **Corporate initiatives**

We have continued to work to complete our initial efforts to streamline and simplify our operations. This initiative began in late September 2013 with the goal of reducing our fixed operating costs while still positioning the Company for future growth. One component of this was a staff restructuring whereby a number of positions were eliminated, the realignment of our internal reporting structures, and the creation of several new positions that are focused on developing new business opportunities. Another component of this initiative was to replace our current ERP and CRM systems with a more cost effective solution.

At the end of 2013 we established a provision of \$0.6 million associated with these restructuring activities, with \$0.2 million to be paid in 2014. In the first half of 2014, we completed the intended eliminations of positions initially envisioned under the plan however in doing so we did not liquidate the entire provision. As a result of this, a recovery of \$0.1 million was recognized in the second quarter of 2014. A small amount of the restructuring accrual remains outstanding and is related to a cancellation fee associated with our old ERP system.

We are continuing to work on the implementation of our new ERP and CRM system. Our original plan was to "go live" with the new system on July 1, 2014, however this date was pushed back due to complexities in our business processes and our desire to have as little of impact to our customers as possible upon conversion. Our current "go live" date is expected to be later in 2014. Costs of the new system were originally estimated to be approximately \$0.4 million to \$0.5 million. The cost is now estimated to be approximately \$0.6 million.

## 4. FINANCIAL RESULTS

As previously noted, the information presented in the sections below have been derived from, and should be read in conjunction with our condensed consolidated interim financial statements for the three and six months ended June 30, 2014.

### 4.1. Three and six month periods ended June 30, 2014 and 2013

#### Revenue and gross margin

<i>(US\$ thousands, unless noted otherwise)</i>	Three months ended June 30,			Six months ended June 30,		
	2014	2013	Change	2014	2013	Change
<b>Revenues</b>						
Signals	3,825	3,058	25.1%	7,882	6,194	27.3%
Power	5,169	3,261	58.5%	10,231	7,090	44.3%
<b>Total revenue</b>	<b>8,994</b>	<b>6,319</b>	<b>42.3%</b>	<b>18,113</b>	<b>13,284</b>	<b>36.4%</b>
<b>Gross margin %</b>						
Signals	49.8%	26.6%	23.1%	44.0%	31.4%	12.6%
Power	26.3%	22.3%	4.0%	27.1%	24.1%	3.1%
<b>Total Gross margin %</b>	<b>36.3%</b>	<b>24.4%</b>	<b>11.9%</b>	<b>34.5%</b>	<b>27.5%</b>	<b>7.0%</b>

Consolidated revenues for the six months ended June 30, 2014 were up \$4.8 million over the same period in 2013. Overall, our gross margin for the six months ended 2014 was 34.5%, up from 27.5% in the same period in 2013. The following section summarizes the changes by segment.

- Signals Division** – Revenues for the second quarter of 2014 were \$3.8 million, up from \$3.1 million in the same period in 2013. This increase is primarily due to higher revenues from our Marine and Traffic departments which have benefited from renewed products and a refreshed sales effort. Our Aviation and Obstruction department revenues were down slightly mainly due to a lack of larger project based sales closing in the period. Gross margins percentages within Signals in the second quarter of 2014 are up 23.1% over the same period in 2013. While overall gross margins are up in our Signals Division, the second quarter included the conversion of a beta development project into a commercial sale which resulted in extraordinarily high margins. This is an anomaly and is not indicative of future gross margins.
- Power Division** – Revenues for the second quarter of 2014 were \$5.2 million, up from \$3.3 million in the same period in 2013. This increase is driven by higher sales in all business lines - Outdoor Lighting, Mobile and Solar EPC verticals. Outdoor Lighting sales rebounded significantly in 2014 after a disappointing 2013. A number of large project sales were secured and shipped in the second quarter and we will carry over a strong backlog into the third quarter. Within the Mobile department sales have continued to grow as a result of the introduction of new products and the development of new markets. Our Solar EPC Services revenues were up in the second quarter over 2013 while, at the same time, a strong backlog of contracts have been secured for the remainder of the year. Gross margin percentages within Power for the second quarter of 2014 was 26.3%, up 4.0% from the same period in 2013. This increase is primarily due to product mix in addition to sales generated from the Solar EPC segment with higher margins.

#### Sales by Geographic Region

Approximately 25.8% of our revenues for the first half of 2014 were from outside North America. This is up significantly over the same period in 2013 which was 10.5%.

## Operating expenses

(US\$ thousands, unless noted otherwise)	Three months ended June 30			Six months ended June 30		
	2014	2013	Change	2014	2013	Change
Sales and marketing	1,011	961	5.2%	2,004	1,915	4.6%
Research and development	307	468	(34.4)%	611	1,061	(42.4)%
General and administration	1,528	1,610	(5.1)%	2,695	2,864	(5.9)%
<b>Total operating expenditures</b>	<b>2,846</b>	<b>3,039</b>	<b>(6.4)%</b>	<b>5,310</b>	<b>5,840</b>	<b>(9.1)%</b>
Operating expenses (excluding restructuring) as % of sales*	31.6%	48.1%	(16.5)%	29.3%	44.0%	(14.7)%
<i>Non-cash items:</i>						
Amortization	82	240	(65.8)%	171	475	(64.0)%
Stock-based payments	84	63	33.3%	101	108	(6.5)%

\* A Non-IFRS measure

Our total operating expenses for the six months ended June 30, 2014 were \$5.3 million, down from \$5.8 million in the same period in 2013. These decreases are largely due to lower salaries with a net reduction of eight full time staff equivalents year over year.

**Sales and Marketing**

Our sales and marketing expenses for the six months ended June 30, 2014 were \$2.0 million, comparable to the same period in 2013. We realized some savings on salaries but this was offset by increased variable compensation and agent fees as a result of higher sales.

**Research, Engineering and Development**

Our research, engineering and development expenses for the six months ended June 30, 2014 were \$0.6 million, which is down from \$1.1 million from the same period in 2013. This decline is primarily due to reduced salary expense. We have opted to undertake product development through the retention of a smaller internal team which will be supplemented by external development resources as and when project requirements arise.

**General and Administration**

Our general and administration ("G&A") expenses for the six months ended June 30, 2014 were \$2.7 million, which is down from \$2.9 million in the same period in 2013. The following significant changes have occurred year over year:

1. A decrease in salary expense of \$0.1 million. The majority of this decrease is due to lower average salary costs. There has been no change to number of full time employees.
2. Decreases in occupancy, travel, and IT expenditures resulting from cost savings due to the restructuring effort implemented in Q4 2013.
3. An increase in legal expense of \$0.3 million due to substantial costs incurred to defend the lawsuit described under section 5.5.

Amortization expense for the six months ended June 30, 2014 was \$0.1, down \$0.3 million over the same period in 2013. This decrease is due to the various asset write offs recognized in the fourth quarter of 2013.

## Other operating expenses

During the 2013, we incurred a number of operating expenses that are non-recurring in nature and have been separately disclosed for better clarity and presentation. In the second quarter of 2013, the following was recognized under this caption:

- We recognized an impairment loss of \$0.3 million relating to a license asset that covered a portfolio of specialized Aviation mobile precision laser guidance approach systems. It was written off after a review of the potential sales pipeline no longer included products covered under the agreement.
- We recognized an impairment loss of \$0.6 million associated with the Spot acquisition previously discussed in our 2013 annual MD&A. This write off was required after we were unable to secure an economically viable license agreement for a service that underpinned a number of products which Spot previously sold.

## Other income (expense)

Other expenses were \$0.4 million for the six months ended June 30, 2014, which is down from \$1.0 million in the same period of 2013. The 2014 amount is primarily relates to foreign exchange gains offset by and merger and due diligence costs associated with the acquisition of Sol. The 2013 amount primarily relates foreign exchange losses and the write offs associated with the Spot acquisition in Q1 of 2013.

## Income taxes

Our income tax expense for the six months ended June 30, 2014 relates to US state taxes.

### 4.2. Quarterly trends

(US\$ thousands,  
except EPS  
amounts)

	2014			2013			2012	
	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
Revenue	8,994	9,119	7,755	4,863	6,319	6,965	8,361	6,661
Gross margin	3,261	2,985	2,583	1,152	1,542	2,107	2,411	2,070
Gross margin %	36.3%	32.7%	33.3%	23.7%	24.4%	30.3%	28.8%	31.1%
Operating costs	(2,846)	(2,464)	(2,364)	(2,599)	(3,039)	(2,801)	(2,984)	(2,953)
Other operating expenditures	-	-	(1,062)	-	(965)	-	-	-
Other income (expense)	23	(445)	(90)	8	(15)	(16)	(146)	45
Income tax (expense)	-	1	-	(3)	-	(2)	(2)	-
Net (loss)/income	438	77	(933)	(1,442)	(2,477)	(712)	(721)	(838)
EPS – Basic	0.00	0.00	(0.01)	(0.03)	(0.05)	(0.01)	(0.02)	(0.02)
EPS– Diluted	0.00	0.00	(0.01)	(0.03)	(0.05)	(0.01)	(0.02)	(0.02)
EBITDA <sup>(1)</sup>	809	457	(676)	(1,297)	(2,174)	(430)	(428)	(489)

<sup>(1)</sup> EBITDA is a non-IFRS measure defined in section 8

Our quarterly revenues have fluctuated over the past several years, primarily due to product mix and the nature of our sales within our market segments. A large portion of our revenues are derived from infrastructure projects that typically often have longer tender processes and fluctuating timelines. This is most pronounced within our Solar EPC Services, Aviation and Outdoor Lighting market segments and to a lesser extent within our Marine and Traffic markets. GoPower! revenues are more seasonal in nature with higher sales in the first two quarters of the year as our distributors gear up for the busier spring and summer periods. The reasons for the larger quarterly swings in revenue are explained below:

- At \$8.4 million, Q4 2012 higher than trend. This spike was primarily the result of a few larger projects that occurred at the same time and resulted in substantially higher sales from our Solar EPC and Outdoor Lighting segments.
- At \$4.9 million, Q3 2013 revenues were substantially below our other quarters. This was due to lower sales in our Aviation, Outdoor Lighting and Solar EPC segments, due primarily to timing of project sales. The quarter also suffered from production problems caused by the transition between contract manufacturing facilities.
- Revenues for the first and second quarters of 2014 are up over the historic trend. This is due to increasing sales in both Divisions.

Our gross margin on a quarterly basis is variable and reflects the mix of products and any inventory adjustments/write-offs that are tied to changes in component pricing, technology, and product offering/design.

Our operating costs were relatively stable at around \$3 million a quarter up until the end of Q2 2013. Q3 2013 onwards operating expenses have trended lower due to restructuring efforts which began in Q3 2013. These initiatives resulted in lower salaries expense, development expenditures, travel, occupancy and other costs. Q2 2014 saw higher operating costs as a result the ongoing lawsuit described in section 5.5.

As noted under section 4.1, other operating expenditures are operating costs that are non-reoccurring in nature and have been separated to better highlight their effects. The charge in the fourth quarter of 2013 relates to (1) restructuring expenses of \$0.5 million, primarily related to severance costs associated with a reduction in our staffing levels, and (2) asset impairment charges of \$0.5 million. The charge in the second quarter of 2013 relates to asset impairment associated with a license asset and the impairment of assets acquired in the acquisition of Spot Devices Inc.

Our other income (expense) fluctuates over the quarters due to the nature of items in this capture. It includes items such as foreign exchange gains and losses, merger and acquisition costs, and other items.

## 5. LIQUIDITY, CAPITAL RESOURCES AND OTHER DISCLOSURES

### 5.1. Summary of consolidated statement of cash flows

Period ended June 30 (US\$ thousands, unless noted otherwise)	2014	2013	Change
Cash provided/(used) in operating activities	(194)	(454)	(57.3)%
Cash used in investing activities	(419)	(170)	146.5%
Cash provided from investing activities	3,790	-	N/A
Effects of exchange rate changes on cash	85	45	88.9%
<b>Total increase in cash</b>	<b>3,262</b>	<b>(579)</b>	<b>(663.4)%</b>

#### Cash used in operating activities

During the six months ended June 30, 2014, cash provided in our operating activities, excluding changes in working capital, was \$0.7 million which was up from \$1.8 million used in the same period in 2013. This change is largely due to increased profitability. Changes in non-cash working capital were negative \$0.9 million during the six months ended June 30, 2014, up from positive \$1.5 million in the same period in 2013. The change is primarily due to increased accounts receivable associated with increases sales. We actively manage our working capital by monitoring inventory turnover data, collection of accounts receivable, and taking advantage of trade discounts and/or extended payment terms granted by suppliers.

#### Cash used by investing activities

During the six months ended June 30, 2014, cash used for investing activities was \$0.4 million, up from \$0.2 million in the same period in 2013. The 2014 additions relate to the initial costs associated with our project to replace our ERP and CRM systems. The costs incurred related to software license and consulting services. The majority of the remaining costs associated with this project is expected to be incurred in the third quarter of 2014, although some costs will likely flow into subsequent quarters as adjustments are made to the system. We expect to switch to the new systems later in 2014. The additions in 2013 mainly related to production equipment.

#### Cash provided from financing activities

During the six months ended June 30, 2014, cash provided from financing activities was \$3.8 million up from nil in the same period 2013. These funds were provided from a private placement which was initiated in Q1 2014 and completed in Q2 2014 as described in section 3.

### 5.2. Liquidity and capital resource measures

On June 30, 2014, our overall working capital was \$12.3 million, which is up from \$8.1 million at December 31, 2013.

We previously disclosed that the proceeds from our fourth quarter of 2013 offering would be used for general corporate purposes including, but not limited to: (1) funding restructuring costs and process improvement expenditures all of which will be directed at reducing operating costs; (2) investments in new product development activities to meet market demands and improve gross margins; (3) funding an increase in inventory to meet customer demands and, if required by a change in manufacturing strategy, to buy back parts inventory from the Company's contract manufacturer; and (4) funding operating losses until the results of (1) and (2) can be achieved. To date, the proceeds have been used for working capital needs and in the execution of our restructuring plan previously described. The following table outlines the use of proceeds to June 30, 2014 for items other than working capital:

(US\$ thousands)	As per previous disclosure	Incurred to June 30, 2014
Restructuring activities	Cash amounts not specified	408

Our major capital expenditures in 2014 will relate to our ERP and CRM replacements. As previously noted, this project was kicked off in Q1 2014 and the majority of it will be completed during the second and third quarters. Total costs associated with this project are expected to be about \$0.6 million with some additional costs required for hardware to support the systems

We are continuing to evaluate our operations in an effort to improve our ability to meet our customer's needs in a profitable manner. Future changes in our inventory management and manufacturing arrangements may occur which could have a significant impact on our liquidity and working capital positions.

We also expect to continue to pursue growth through acquisitions and will consume some cash pursuing opportunities in a number markets. Depending on the size and nature of potential acquisition, we may raise additional funds through a further equity offering or through debt financing.

### 5.3. Credit facilities

We currently do not have access to a credit facility. Any credit extended to us by our bank, Royal Bank of Canada ("RBC"), for products such as letters of credits, credit cards, and foreign exchange hedges are on a cash secured basis.

### 5.4. Contractual obligations and commitments

We have a number of contract manufacturers who build and supply our manufactured products. Our agreements with these contract manufacturers generally require us to be liable for inventory and outstanding committed purchase orders they have outstanding to support our business. If one of these agreements is terminated, we would be required to purchase the associated underlying inventory or arrange for a new contract manufacturer to acquire and hold it in a similar capacity. Our largest contract manufacturer, Flextronics, also requires us to purchase excess raw inventory which arises in situations where our demand forecasts for particular product is less than our actual use or sales in a given period. The value of the Flextronics inventory held at June 30, 2014 was \$1.2 million (December 31, 2013 - \$0.9 million), and the value of planned purchase orders to support our expected future demand was \$1.3 million (December 31, 2013 - \$1.8 million). Inventory held at other contract manufacturers is approximately \$0.2 million in aggregate.

There have been no substantial changes in contractual obligations since those reported in the 2013 annual MD&A, except for some commitments related to the EPR/CRM project. These commitments mainly relate to implementation services which in total will cost us between \$0.5 million and \$0.6 million in 2014. Once implemented, we anticipate our new ERP/CRM systems will allow us to realize some meaningful savings compared to our previous systems.

### 5.5. Claims and lawsuits

On July 18, 2013, we were named in a United States District Court lawsuit filed by R.D. Jones, Stop Experts, Inc., and RRFB Global, Inc. (all of which are related parties – collectively the "Plaintiffs") alleging patent infringement with respect to a specific flash pattern used with respect to our solar powered flashing beacons for the traffic safety market and other claims relating to advertising and business practices. Various actions have been taken in regards to this matter, including an unsuccessful application by the Plaintiff for a temporary restraining order and a motion for a preliminary injunction and a countersuit against the Plaintiffs with respects to patent of a similar nature that we hold. In early 2014, our application to re-examine a number of aspects of the Plaintiffs patent was accepted by the US patent office. The outcome of the review was positive, with the examiner agreeing with our position. The Plaintiff can appeal this decision. We are not certain of the outcome of this case and we intend to continue to defend ourselves and will file additional appropriate responses to the Court as required to do so. As the outcome of these matters is not currently determinable, no provision has been made at June 30, 2014. If the case continues, trial is expected to occur sometime in early 2015. Subsequent to quarter end we received notice that the US Federal Highways Administration has now approved a new standard for flash patterns that we intend to adopt immediately. Notwithstanding our view that we have not infringed the Plaintiff's patent, we are of the further opinion that the new flash pattern change is fully outside any potential claim by the Plaintiff thereby providing additional future limitation of damages potential.

### 5.6. Contingent liability

None

### 5.7. Off balance sheet arrangements

We have not entered into any off balance sheet arrangements other than standard office/facility lease agreements and vendor managed inventory as noted under section 5.4, Contractual obligations and commitments.

### 5.8. Financial instruments and other instruments

The fair value of our accounts receivable, accounts payable and accrued liabilities approximates their carrying value due to the immediate or short-term maturity of these financial instruments.

We are exposed to foreign exchange risks as we transact business and have working capital denominated in multiple currencies. We attempt to minimize our exposure through managing our working capital and entering into foreign exchange products or contracts when are where appropriate. At June 30, 2014, our net CDN dollar denominated working capital is higher than normal due the recent closure of our rights offering. Given the recent changes in the business, we are currently reviewing our situation with respects to foreign exchange and our associated policies.

## 5.9. Related party transactions

The Sol acquisition outlined in section 3 would be considered a related party transaction given the shareholdings of our Chairman of the board, The private placement, also outlined in section 3, would be considered a related party transaction given the involvement of insiders.

## 5.10. Proposed transaction

As noted under section 3, Operational and Business Highlights, we recently closed the acquisition of Sol subsequent to Q2 2014.

## Outstanding share data

Our common shares trade on the Toronto Stock Exchange ("TSX") (TSX: CMH), and as at June 30, 2014 we had 109,912,011 fully issued and outstanding common shares. The following table summarizes the outstanding shares, options and other outstanding stock units stated in CDN\$.

	August 7, 2014	As at June 30, 2014	March 31, 2014	December 31, 2013	September 30, 2013
Share price – closing (CDN \$)	0.27	0.20	0.21	0.15	0.16
Market capitalization (CDN \$ in thousands)	45,838	23,982	21,129	15,092	8,047
<b>Outstanding</b>					
Shares	169,770,617	119,912,011	100,612,011	100,612,011	50,294,000
Options	11,096,000	10,369,500	3,772,000	4,114,000	1,792,000
Restricted share units	-	-	-	-	6,944
Performance share units	-	-	-	-	-

## 6. CRITICAL ACCOUNTING ESTIMATES AND ACCOUNTING POLICY DEVELOPMENTS

### 6.1. Critical accounting estimates

Our financial statements are prepared in accordance with IFRS. The application of IFRS requires that we make estimates that affect our reported amounts of assets and liabilities and the disclosure of contingencies at the date of the financial statements and the reported amounts of revenues and expenses during the period. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ significantly from these estimates.

The significant accounting policies and estimates are discussed below:

Accounting area	Description of policy and estimates
<b>Warranty provision</b>	A provision for future potential product warranty costs is included in cost of goods sold based primarily on prior warranty experience regarding cost of claims and expected product returns. These future product warranty costs include costs associated with repair or replacement of products returned under warranty. Actual future costs in support of these claims may differ from those estimates. We review the provision quarterly and adjust it prospectively. The total provision as at June 30, 2014 was \$0.6 million, unchanged from December 31, 2013.
<b>Other provisions</b>	A number of accounting provisions have been recorded relating to the acquisition of Spot which we previously disclosed in our annual MD&A. They are described below:  \$0.1 million has been provided to cover costs associated with monitoring services provided by Cirrus for SIMA enabled products which we sold. As previously disclosed, we were never able to secure an economically viable license agreement for SIMA monitoring services which are provided by Cirrus, a related company to Spot. During 2013, we sold approximately 220 SIMA-enabled units with service terms ranging from 1 to 10 years. This provision covers current and future costs associated with this service. It is based upon our understanding of Cirrus's cost structure and preliminary monthly fee ranges discussed during negotiations with Cirrus.

	<p>\$0.1 million has been provided to cover potential returns or product replacements associated with an offer we extended to customers who purchased SIMA enabled products from us. During the third quarter of 2013, concerns about the reliability of SIMA enabled products were brought to management's attention. In some situations SIMA enabled products can suddenly or unexpectedly fail which could result in a safety hazard. As a result, we extended an offer to customers who purchased SIMA enabled product from us the ability to obtain replacement products on a free or a substantially discounted basis. We estimate the total maximum exposure associated with this offer is approximately \$0.2 million, which is the cost of the SIMA-enabled product we sold during the period. We have recorded \$0.1 million as a provision which is our best estimate given the wide range of options open to the end customers. These options include everything from modifying the product, upgrading their solution, or retaining the risk or lost functionality. In early 2014, a notice was released by Cirrus (the provider of the monitoring) indicating the service was to be discontinued on June 30, 2014. As a result we anticipate customers may begin to request solutions to overcome the lack of connectivity sometime during the next two quarters.</p>
<b>Valuation of inventory</b>	<p>We evaluate inventory balances at each balance sheet date and record a provision as necessary for slow moving or obsolete inventory. In performing this review we consider such factors as forecasted sales, demand requirements, product lifecycle and product development plans, quality issues, and current inventory levels. If future demand or market conditions for our products are less favorable than forecasted or if unforeseen technological changes occur, we may be required to record write-down which would negatively affect gross margins in the period when the write-downs are recorded and our operating results and financial position could be adversely affected. At June 30, 2014 our inventory provision was approximately \$0.9 million, down from \$1.0 million at December 31, 2013.</p>
<b>Allowance for doubtful accounts</b>	<p>We record an allowance for doubtful accounts related to trade accounts receivable. This allowance is based on our knowledge of the financial condition of our customers, the aging of the receivables, the current business environment and historical experience. A change in one or more of these factors could impact the estimated allowance and provision for bad debts recorded. At June 30, 2014, our allowance for doubtful accounts was \$0.2 million, up from \$0.1 million at December 31, 2013.</p>
<b>Forfeiture rates associated with share-based payments</b>	<p>In determining share-based payments expense, we make estimates related to forfeiture rates for each specific grant. Forfeiture rates are used to estimate the number of awards that are expected to vest considering employee turnover rates. The changes in estimates are recognized in the statement of income (loss) and total comprehensive income (loss) in the year that they occur. Current forfeiture rates applied to grants range from 14% to 25% and vary depending upon the employee make-up of the associated grants.</p>

## 6.2. Future changes in accounting policies

Unless stated otherwise, the following standards are required to be applied for periods beginning on or after January 1, 2015 and based upon our current facts and circumstances, we are evaluating the impact of the application of the following standards:

- IFRS 9, Financial Instruments, initially to be applied for periods on or after January 1, 2015 but the effective date has been deferred. In February 2014, the IASB tentatively determined that the revised effective date would be January 1, 2018, with earlier adoption still permitted.
- In May 2014, the IASB issued IFRS 15 – Revenue from Contracts with Customers ("IFRS 15") which supersedes IAS 11 – Construction Contracts, IAS 18 – Revenue, IFRIC 13 – Customer Loyalty Programs, IFRIC 15 – Agreements for the Construction of Real Estate, IFRIC 18 – Transfers of Assets from Customers, and SIC 31 – Revenue – Barter Transactions involving Advertising Services. IFRS 15 establishes a single five-step model framework for determining the nature, amount, timing and uncertainty of revenue and cash flows arising from a contract with a customer. The standard is to be applied prospectively and is effective for annual periods beginning on or after January 1, 2017, with early adoption permitted. The Company is in the process of evaluating the impact that IFRS 15 may have on the Company's financial statements.

## 6.3. Disclosure controls and internal controls over financial reporting

Disclosure controls and procedures ("DC&P") have been designed to provide reasonable assurance that information required to be disclosed is accumulated and communicated to management as appropriate to allow timely decisions regarding required disclosure. ICFR have been designed to provide reasonable assurance regarding the reliability of financial reporting. Pursuant to Multilateral Instrument 52-109, the Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), collectively referred

to as Officers, are responsible for overseeing the establishment and maintenance of disclosure controls and procedures as well as internal controls over financial reporting.

### Disclosure Controls

Our officers and management have evaluated the effectiveness of our DC&P as at June 30, 2014 as required by Canadian securities laws. The evaluation approach involved looking at the size, nature and state of development of the business and thus used a top down risk-based approach to focus evaluation on areas that were deemed to provide the greatest risk to a material misstatement. Our evaluation also took into account our corporate disclosure procedures and the functioning of our Officers, other executive officers, management, Board of Directors, and Audit Committee. Based on this evaluation, our Officers concluded that the Company's disclosure controls and procedures were effective, at a reasonable assurance level, to ensure that material information relating to the Company and its consolidated subsidiaries would be made known to them by others within those entities, particularly during the period in which the MD&A and the Condensed Consolidated Interim Financial Statements contained in this report were being prepared.

### Internal control over financial reporting

A variety of changes to internal processes and accounting procedures are occurring as a result of the recent restructuring and implementation of our new ERP and CRM systems. We are currently evaluating the impact of these changes and are designing tests to evaluate the design and effectiveness of controls. High level compensating controls remain in place which we feel provides reasonable levels of assurance that the financial statements are not materially incorrect.

## 7. RISKS AND RISK MANAGEMENT

In the course of our operations, we are exposed to various business risks and uncertainties that can affect our financial condition. While some financial exposures are reduced through insurance, hedging and other risk management measures we have in place, there are certain cases where the market and operating risks are driven by external factors beyond our influence and control. A discussion of certain risks that may affect us is included in our annual MD&A and Annual information form.

## 8. Definitions and reconciliations

### EBITDA

For the six months ended June 30, 2014 as well as the comparative period in 2013, we are disclosing EBITDA, a non-IFRS financial measure, as a supplementary indicator of operating performance. We define EBITDA as net income or loss before interest, income taxes, amortization, merger and acquisition costs and non-cash stock based compensation. We are presenting the non-IFRS financial measure in our filings because we use it internally to make strategic decisions, forecast future results and to evaluate our performance. We are also presenting this measure because we believe that our current and potential investors and many analysts use it to assess our current and future operating results and to make investment decisions. EBITDA is not intended as a substitute for IFRS measures.

EBITDA reconciliation (US\$ in thousands)	Three months ended June 30		Six months ended June 30	
	2014	2013	2014	2013
Net income (loss)	438	(2,477)	515	(3,189)
Add/(deduct):				
Income taxes	-	-	(1)	2
Amortization	82	240	171	475
Merger and acquisition costs	205	-	480	-
Non-cash stock based compensation	84	63	101	108
<b>EBITDA*</b>	<b>809</b>	<b>(2,174)</b>	<b>1,266</b>	<b>(2,604)</b>

\* A Non-IFRS measure