

CARMANAH TECHNOLOGIES CORPORATION



**MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE THREE AND NINE MONTH PERIODS ENDED SEPTEMBER 30, 2012**

NOVEMBER 13, 2012

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 lighting systems, continued government subsidies for solar grid-tie projects, and the successful development of new products to help penetrate new geographic markets.

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 14, 2012. 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. 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).

Management’s discussion and analysis

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 months and nine months ended September 30, 2012. These documents, along with additional information about our Company, including the Annual Report and Annual Information Form, are available at www.carmanah.com and www.sedar.com. This document contains forward-looking information qualified by reference to and should be read together with, the forward-looking statements above.

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”).

Our consolidated financial statements include our accounts and those of our wholly-owned subsidiaries, Carmanah Solar Power Corporation (a Canadian incorporated company), and Carmanah Technologies Corporation (a US incorporated company). In June of 2012, Carmanah Lightech 2010 Ltd (an Israel incorporated company) was dissolved. This entity was incorporated to effect the proposed merger with Lightech Electronics Ltd (“Lightech”). The merger with Lightech was never completed, and the subsidiary was never active.

Preparation of the MD&A

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 condensed consolidated interim financial statements were reviewed by our Audit Committee and approved by our Board of Directors. This MD&A is prepared as of November 13, 2012.

Our management has issued guidance on and reports on certain non-IFRS measures to evaluate 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”). The term Adjusted EBITDA used in this document deducts from Standardized EBITDA, items of an unusual nature that do not reflect our ongoing operations. See Section 8 for the definition, calculation and reconciliation of Adjusted EBITDA.

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1. FINANCIAL HIGHLIGHTS

The discussion in this section is qualified in its entirety by the *Caution regarding forward-looking statements* at the beginning of the MD&A.

Financial Highlights for the Three and Nine Month Periods Ended September 30, 2012 and 2011

(US\$ thousands, unless noted otherwise)	Three months ended			Nine months ended		
	September 30			September 30		
	2012	2011	Change	2012	2011	Change
Consolidated statements of loss						
Revenue	6,661	8,503	(1,842)	18,081	28,780	(10,699)
Gross margin %	31.1%	34.4%	(3.3)%	32.2%	32.3%	(0.1)%
Operating expenditures	(2,953)	(2,670)	(283)	(9,082)	(8,635)	(447)
Other income (expenses)	45	165	(120)	54	(106)	160
Net income (loss)	(838)	351	(1,189)	(3,200)	335	(3,535)
Consolidated statement of cash flows						
Cash provided/(used) in operating activities	(1,766)	(211)	(1,555)	(3,330)	(1,097)	(2,233)
Cash used in investing activities	(120)	(525)	405	(335)	(714)	379
Cash provided in financing activities	1,761	-	1,761	1,761	-	1,761
Other measures						
Adjusted EBITDA *	(489)	426	(915)	(2,135)	1,752	(3,887)

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

The following is an overview of our results comparing the first three quarters of 2012 to the first three quarters of 2011:

- Consolidated revenue decreased by \$10.7 million or 37.2% for the nine months ended September 30, 2012 compared to the same period in 2011. Approximately 60% of this decrease is the result of significantly lower solar engineering, procurement & construction services (“Solar EPC Services”, formerly referred to as Grid-tie) revenues due to a delay in contract awards stemming from uncertainties in Ontario, Canada’s Feed In Tariff (“FIT”) program in late 2011 which were resolved in early 2012. Solar EPC Services revenues increased in the second and third quarters of 2012 and are expected to recover further in the fourth quarter, however will not return to prior year levels. The remainder of the revenue decrease is primarily due to the longer than expected timing to close sales in our Outdoor Lighting, Marine, and Aviation markets. We believe this is reflective of both general economic conditions as well as competitive activity.
- Gross Margin % decreased by 0.1% for the nine months ended September 30, 2012 compared to the same period in 2011. This net decrease is primarily due to a 4.9% decrease in margin within our Lighting group related to competitive pricing pressures, offset by a 5.5% increase in margins within our Solar Power Systems group.
- Operating expenditures for the first nine months of 2012 were \$9.1 million, up from \$8.6 million in the same period in 2011. This increase is primarily due to an increase in head count as we hired a number of sales and marketing staff to support our market verticals in our effort to build future revenue growth. In addition, significant investment in new product development in the period has negatively impacted operating expenses.
- Other income/(expenses) for the nine months ended September 30, 2012 were \$0.1 million and are primarily related to foreign exchange gains recognized on the revaluation of foreign denominated working capital. In the same period in 2011, we recorded other expenses of \$0.1 million. This was made up of transactional foreign exchange loss of approximately \$0.2 million and a \$0.3 million provision relating to the resignation of our previous CEO. This expense was partially offset by a \$0.2 million recovery related to costs previously recorded for the terminated Ligtech merger agreement, and investment tax credits of \$0.2 million.
- Net loss for the nine months ended September 30, 2012 was \$3.2 million, compared to net income of \$0.3 million in the same period in 2011. This decrease was primarily driven by lower revenues in the first three quarters of 2012.
- Adjusted EBITDA (a non-IFRS measure – see Section 8: Definitions and Reconciliations) for the nine months ended September 30, 2012 was negative \$2.1 million, down from positive \$1.8 million in the same period in 2011.
- Liquidity and capital resources highlights, with a comparison between September 30, 2012 and December 31, 2011 are as follows:
 - During the nine months ended September 30, 2012, our overall cash balance declined by \$1.9 million. This decrease was largely the result of the net loss during the period.
 - Cash used in operating activities, for the nine months ended September 30, 2012 was \$3.4 million, compared to cash use of \$1.1 million in the same period in 2011.

- Cash used in investing activities, for the nine months ended September 30, 2012 was \$0.3 million, compared to cash use of \$0.7 million in the same period in the prior year.
- Cash provided from financing activities for the nine months ended September 30, 2012 was \$1.8 million, compared to nil in the same period of the prior year.
- The overall decrease in cash over the past three quarters has primarily been driven by lower than expected revenues. Our expectation is that revenue will partially recover in the fourth quarter of this year, although there will still be significant pressures on the cash balance due to timing of supply chain working capital requirements for near term Solar EPC Services projects. During the current quarter we completed a non-brokered private placement that resulted in net proceeds of \$1.8 million; however, these funds were required for working capital purposes during the quarter. Also during the third quarter, we secured a new credit facility; however the terms of the agreement prevent us from drawing on it unless we have positive EBITDA.

2. OUR BUSINESS

The discussion in this section is qualified in its entirety by the *Caution regarding forward-looking statements* at the beginning of the MD&A.

From our headquarters in Victoria, British Columbia, Canada, we design, develop and distribute renewable and energy-efficient technologies. Our business is divided into two operating segments, the “Lighting” group (formerly referred to as the Lighting division) and the “Solar Power Systems” group (formerly referred to as the Solar Power Systems division). Our Lighting group includes two market lines: (1) solar-powered beacons for marine, aviation, obstruction, and traffic applications (referred to as our “Signals” or “Signalling” market sector), and (2) solar-powered outdoor area lighting (referred to as our “Outdoor Lighting” market sector). Our Solar Power Systems group includes grid-tie solar power systems for industrial applications (referred to as our “Solar EPC Services” market sector (formerly known as our Grid-tie market sector)) and GoPower! systems (referred to as our “GoPower!” market sector (formerly referred to as our “Mobile” market sector)). These businesses are described in our 2011 annual MD&A. Any significant changes that have occurred in 2012 related to these businesses are outlined in the operational highlights section below.

3. OPERATIONAL AND BUSINESS HIGHLIGHTS

The discussion in this section is qualified in its entirety by the *Caution regarding forward-looking statements* at the beginning of the MD&A.

Our year-to-date operational and business highlights in 2012 include the following items:

- Negotiated and signed two long term exclusive co-operation agreements to enhance our portfolio and strengthen our network of strategic partnerships with the following companies:
 - Sabik Oy (“Sabik”), our marine signalling partner based in Finland, which we have worked with over the past few years. The five year agreement expands on our previous two year sales and marketing collaborations to include reciprocal technology access as well as joint product development.
 - Laser Guidance Inc., a US-based pioneer in aviation precision guidance systems. The agreement provides us with a five year exclusive world-wide marketing license for a portfolio of Laser Guidance aviation navigation aids.
- Strengthened our distribution channel through the addition of new partners in key markets including Best Light in Mexico and Al-Babtain in Saudi Arabia for our Outdoor Lighting market.
- Embarked on major development efforts for our signalling products which will see a variety of new products launched this year, most significantly a new state of the art Marine signal lantern to replace our 700 series lights and a new Traffic signalling device, the rectangular rapid flashing beacon (“RRFB”) that improves crosswalk safety.
- Negotiated a number of major sales contracts, including 5 Solar EPC Services projects worth over \$3.3 million.
- Signed a \$10 million non-binding letter of agreement with one of our South American distributors to procure, commission and install various aids to navigation on a major South American waterway. Conditionality by the end customer has been resolved, and progress has been made to move forward into the finalization of technical specifications on the product. It is anticipated that this will be completed in late 2012 with commencement of delivery of the product throughout 2013.
- Expanded our focus on revenue growth with the hiring of an additional five sales employees to complement our new vertical orientated sales structure. Under this new structure, each market vertical has its own leadership and supporting team and is directly responsible for driving the planning, development and execution within the market.
- Closed a non-brokered private placement of 3,981,722 common shares for net proceeds of \$1.8 million.

The following sections highlight significant events within our specific groups and various market segments.

3.1. Lighting Group

Signals market segment

During the third quarter of 2012, in our Aviation and Obstruction market segments, we have focused heavily on launching several exciting new products and on marketing efforts to promote our airfield lighting solutions. Highlights included:

- Launching new products including the OL10A obstruction light and the OL32 obstruction light. These obstruction lights are designed in both standard and high-performance versions and are used for marking towers, cranes and other hazards to aerial navigation. We also applied for and received Intertek certification for International Civil Aviation Organization (“ICAO”) Type A and ICAO Type B standards for these lights.
- Promoting and marketing our total airfield solution at multiple distributor training events as well as at the Canadian Airport Electrical Association conference. The Total Airfield Solution offers for the first time a comprehensive LED/solar airfield lighting system that includes the entire range of products needed for complex aviation operations, increasing safety of flight in low visibility weather conditions and breaking down barriers to important new markets for our solar lights. We anticipate near-term sales growth as a result of these promotions.
- Our ADB-Carmanah partnership delivered a shipment of 90 solar runway lights, a solar powered wind cone, and a wireless control device for use at a remote installation in Central America. The project includes the deployment of white runway edge lights, red/green threshold lights, and yellow/white caution lights. The wireless, solar system dramatically increases the operational capability at the airfield by ensuring a continuous and reliable light output and light power supply in a remote location.

Our Marine segment’s third quarter of 2012 highlights included a focus on improving sales in our North American markets. Supported by our Master Distributors, First Choice Marine Supply located in Tampa, Florida, and Go Deep International located in St. John, New Brunswick, product sales in these markets improved substantially. In addition, we received a substantial order for approximately 400 navigational lights from the United States Coast Guard. Other non-North American market highlights in the Marine segment during the current quarter included:

- Delivery of 3 large long-range LED marine lanterns for the Peruvian Navy, the first of potentially many more lanterns that South America will employ as they move toward LED based Lighthouse systems;
- First delivery of new M650GPS lanterns was installed as “C” class Oil and Gas lanterns in the Gulf region by ESSI Corporation;
- Our UK Master Distributor, Hydrosphere, delivered 174 Carmanah 601 and M650 solar powered marine navigation lights for the construction phase of the Greater Gabbard Offshore Wind Farm project. Great Britain is one of the fastest growing wind farm installation locations in the world currently, and we anticipate significant potential sales growth in this market as a result.

In our Traffic segment, the third quarter of 2012 has been significant, with the production shipments of our new Rectangular Rapid Flash Beacon (“RRFB”) crosswalk warning system commencing. We launched the system during the second quarter of 2012, and have successfully delivered initial orders across the United States and Canada, with shipments to cities from Washington State to Maine. Customer feedback on the design has been extremely positive, and some repeat orders have already been received. Product approvals are under-way with, among others, Florida and Oregon Department of Transportation. Additionally, we are engaged in the specification process with several key city and county traffic agencies throughout the United States, the goal of which is to standardize them on the Carmanah model. Our sales channel has purchased product samples, and our distributors are actively demonstrating the product to prospective customers, which in addition to municipal, county and state traffic departments, also include corporate and educational campuses. We anticipate near-term sales growth as a result of this momentum.

Outdoor Lighting market segment

During the third quarter of 2012, we continued to focus on growing the lead generation for the North America marketplace as well seeking opportunities outside of North America through our regional partners. Key sales highlights for the quarter include:

- a highway in Mexico City using 109 units of the EG500, where the EG500 was fully compliant to the required Mexican lighting specifications for a multi-lane highway achieving performance standards equivalent to grid-connected lighting performance yet providing significant capital cost savings during installation;
- a deployment in Trinidad, for 75 units of EG320, demonstrating penetration to new non-North American locations with the value-engineered EG series;
- a follow-on order from a customer in, Costa Rica, of EG145s based on a successful first pilot demonstration of the product where the customer valued the light levels provided and net cost of installation;
- a follow-on order from a customer in Malaysia, of EG145s and EG80s, post a successful first pilot, again highlighting the performance and value of the new EG series;
- an initial pilot order for the EG series to Queensland, Australia, based on the earlier success of product certification by the Queensland department of traffic.

Our near term sales continue to be lumpy as Outdoor solar lighting opportunities are typically tied to new long lead time non-residential infrastructure construction starts rather than retrofit or modification of existing infrastructure opportunities., Continued uncertainty in both domestic and rest of the world economics is tempering growth in this category. Our key near term strategic activities include the sourcing of a new performance increased/ cost reduced LED luminaire to pair with the EG series. We expect this luminaire will be rolled-out to our full portfolio as well.

3.2. Solar Power Systems Group

Solar EPC Services market segment

The Ontario, Canada government’s review of the Feed in Tariff (“FIT”) program, which began in October of 2011, was completed in the first half of 2012 after extensive consultation with various industry stakeholders. The Ontario government has directed the Ontario Power Authority (“OPA”) to continue the program with some amendments, such as prioritizing applications through a modified points system, and policies to protect agricultural lands, etc. Overall, we are pleased with the positive outcome from this review, which should bring stability to the industry and will help to generate further projects and opportunities for us. It is expected that OPA will be opening the commercial roof-top application window in the fourth quarter of 2012 with a plan to release the next round of contracts in the following months.

During the first half of 2012, we saw a significant decrease in our revenues over the same period in 2011, as contract awards industry wide were delayed until the review of the FIT program was completed. Consequently, we focused on a smaller number of larger potential contract bids with the goal of building up our pipeline of work for the remainder of the year. During the third quarter we continued to pursue bids of various projects, as well as execute existing projects and prepare for installations that will continue for the remainder of 2012 into 2013. We continue to maintain our position as a market leader for EPC services for commercial rooftop grid-tie systems.

GoPower! market segment

Our GoPower! market sector continues to show steady growth year over year and appears to have almost fully recovered from the general economic downturn in 2008 that affected the industry overall. With continued sales and marketing efforts we have expanded our market share in a recovering industry. Although our unit volumes continue to grow substantially, the revenue growth is less due to the general fall in photovoltaic (“PV”) pricing which has reduced our revenue per unit sold. However, overall the reduced prices to our customers have increased additional demand as our solutions become less costly and accessible to more end users.

During the second and third quarters of 2012, our main focus was on both the Recreational Vehicle (“RV”) market and the Go Power! Inverter market where we have seen steady growth. We also continued to build the Go Power! brand with the introduction of a new series of portable solar charging kits which allows further penetration into our existing markets. For the remainder of 2012, our focus will be to continue supporting the RV dealer markets in both the US and Canada.

4. FINANCIAL RESULTS

The discussion in this section is qualified in its entirety by the *Caution regarding forward-looking statements* at the beginning of the MD&A.

As previously noted, the information presented in the sections below have been derived from, and should be read in conjunction with our condensed interim consolidated financial statements for the three and nine months ended September 30, 2012.

4.1. Quarterly trend

<i>(US\$ thousands, except EPS amounts)</i>	2012			2011				2010
	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4
Revenue	6,661	6,063	5,357	7,124	8,503	10,725	9,552	9,311
Gross margin	2,070	1,765	1,993	1,961	2,924	3,281	3,096	2,422
Gross margin %	31.1%	29.1%	37.2%	27.5%	34.4%	30.6%	32.4%	26.0%
Operating costs	(2,953)	(3,190)	(2,939)	(2,904)	(2,670)	(3,157)	(2,808)	(3,622)
Other income (expense)	45	(26)	35	(3,958)	165	(244)	(27)	(4,109)
Income tax recovery (expense)	-	-	-	(3,987)	(68)	(54)	(103)	1,206
Net income/(loss)	(838)	(1,451)	(911)	(8,888)	351	(174)	158	(4,103)
EPS – Basic	(0.02)	(0.03)	(0.02)	(0.21)	0.01	0.00	0.00	(0.10)
EPS– Diluted	-	-	-	-	0.01	-	0.00	-
Adjusted EBITDA ⁽¹⁾	(489)	(1,073)	(573)	(423)	426	633	693	(262)

⁽¹⁾ Adjusted EBITDA is a non-IFRS measure defined in section 8

Quarterly revenues have fluctuated widely over the past couple of years, presenting a lumpy nature to revenue results. This is primarily due to the large and infrequent orders we realize in several of our markets. In addition, a large portion of our revenues are derived from infrastructure projects that often have long tender, negotiation and closing processes. This is most pronounced within our Solar EPC Services, Aviation/Obstruction, and Outdoor Lighting market segments, and to a lesser extent within our Marine and Traffic markets. The GoPower! market segment, on the other hand, is more seasonal in nature with higher revenues in the first two quarters as our distributors stock up for the busier spring and summer periods. Solar EPC Services revenue is also typically lower in the fourth quarter due to limited construction in the winter months as a result of weather conditions. From a quantitative perspective, a significant portion of the revenue growth between the fourth quarter of 2010 and the second quarter of 2011 was due to an increase in the number and size of Solar EPC Services projects, which has seen strong demand as a result of the Ontario FIT program. However, Solar EPC Services sales fell overall in the third and fourth quarters of 2011 and in the first three quarters of 2012 due to a slowing in the Ontario Solar EPC Services market place as a result of uncertainty surrounding the FIT program resulting from the Ontario provincial election followed by the scheduled review of the FIT program. This created industry wide delays in contract awards. The third quarter of 2012 has started to show an increase in Solar EPC Services revenue, and we expect a further increase in the fourth quarter of 2012 as the FIT program regains momentum and we secure additional contracts.

Our gross margin varies on a quarterly basis and is reflective of the product revenue mix and any inventory adjustments or write-offs that are tied to changes in component pricing, technology, and product offering/design. Historically, we see lower margins in the fourth quarter of each year as revisions are made to operational and product plans that often impact the recoverability of inventory.

Our operating costs, and in particular compensation costs, have been reduced since the fourth quarter of 2010 as a result of our restructuring initiatives that occurred at the end of 2010. Offsetting some of these savings was the expensing of research and development costs related to new product design starting in the third quarter of 2010.

Other income (expense) includes various non-operating items such as foreign exchange gains and losses, major asset write offs, acquisition costs, and other items. Our other income (expense) has fluctuated significantly over the quarters from the fourth quarter of 2010 and during 2011. The major spike in other expenses in fourth quarter of 2010 was due to a write off of development intangibles and costs incurred in the terminated Ligttech acquisition. Additionally in the fourth quarter of 2011, we decided to write-off our Investment Tax Credits, as we concluded that the probability of utilizing the credits in the near term was in question due to our current and anticipated revenue stream, our historical net income results, and our early stage of development in key markets. Other fluctuations during 2011 mainly related to foreign exchange gains and losses, and additional costs surrounding the terminated Ligttech acquisition lawsuit.

4.2. Three and nine month periods ended September 30, 2012 and 2011

Revenue and gross margin

(US\$ thousands, unless noted otherwise)

	Three months ended September 30			Nine months ended September 30		
	2012	2011	Change	2012	2011	Change
Revenues						
Signals	2,822	4,320	(1,498)	8,591	12,673	(4,082)
Outdoor lighting	653	651	2	2,345	3,340	(995)
Total Lighting	3,475	4,971	(1,496)	10,936	16,013	(5,077)
Solar EPC Services	1,569	2,446	(877)	2,223	8,669	(6,446)
GoPower!	1,617	1,086	531	4,922	4,098	824
Total Solar Power Systems	3,186	3,532	(346)	7,145	12,767	(5,622)
Total Revenue	6,661	8,503	(1,842)	18,081	28,780	(10,699)
Gross margin %						
Signals	33.0%	43.1%	(10.1)%	36.8%	42.2%	(5.4)%
Outdoor lighting	25.4%	13.1%	12.3%	23.5%	26.3%	(2.8)%
Total Lighting	31.6%	39.2%	(7.6)%	34.0%	38.9%	(4.9)%
Solar EPC Services	26.8%	25.0%	1.8%	21.8%	20.5%	1.3%
GoPower!	34.2%	33.7%	(0.5)%	33.1%	31.7%	1.4%
Total Solar Power Systems	30.5%	27.7%	2.8%	29.6%	24.1%	5.5%
Total Gross margin %	31.1%	34.4%	(3.3)%	32.2%	32.3%	(0.1)%

Overall revenues decreased by \$10.7 million or 37.2% for the nine months ended September 30, 2012 compared to the same period in 2011. For the three months ended September 30, 2012, total revenue was \$6.7 million, down \$1.8 million from \$8.5 million in the prior year same period. Approximately 60% of the year-to-date decrease is the result of significantly lower Solar EPC Services revenues due to a delay in contract awards stemming from uncertainties in the FIT program, which were resolved in the early part of 2012. Solar EPC Services revenues picked up in the second and third quarters of 2012 and due to our backlog, are expected to increase notably further in the fourth quarter. The remainder of the revenue decrease is primarily due to the longer than expected timing to close infrastructure/project sales in our Outdoor Lighting, Marine and Aviation markets.

Lighting

Our Signals revenues for the first three quarters of 2012 were \$8.6 million, down from \$12.7 million in the comparable period in 2011. For the quarter ended September 30, 2012, revenues from our signalling sector were \$2.8 million, down \$1.5 million from the same period of the prior year. The results from the various market segments are outlined below:

- Year-to-date 2012, our Aviation/Obstruction revenues were \$2.6 million, down from \$5.2 million in the same period in 2011. Third quarter revenues were \$0.9 million, compared to \$1.6 million in third quarter of 2011. This decrease is due to the timing of major project-based sales involving large aviation installations, and deep US Department of Defense spending cutbacks associated with withdrawal of forces from Operations in the Middle East. Year-to-date 2012, our Marine revenues were \$4.1 million, down \$0.9 million from the same period in 2011. Third quarter 2012 revenues were \$1.3 million, compared to \$1.8 million in third quarter of 2011. These decreases were primarily due to increased competitive pressures on some of our older product lines. We anticipate that future near term product releases will help to counter this trend.
- Year-to-date 2012, our traffic revenues were \$1.9 million, down \$0.6 million from 2011. Third quarter 2012 revenues were \$0.6 million, comparable to \$1.0 million in the third quarter of 2011. As previously mentioned, this decline is primarily due to a reduced focus on this vertical over the past year as we assessed the opportunities in this market. We have re-invested in this market and are starting to see revenue growth for this segment as a result of recent new product introductions and increased focus on development, marketing and sales efforts.

Year-to-date 2012, Outdoor lighting revenues were \$2.3 million, down from \$3.3 million from the prior year. Our third quarter 2012 revenues were \$0.7 million, consistent with in the same period in 2011. The change year-to-date is primarily due to the longer than expected timing of closing infrastructure project sales from emerging countries as well as the fact that during the first quarter of 2011, a \$0.6 million sale was recognized with no comparable significant sale in the same period of 2012. This highlights the continued lumpiness of our revenues in this segment.

Our Lighting group gross margin percentage during the first three quarters of 2012 was 34.0%, down from 38.9% in the comparable period in 2011. This decrease is primarily due to lower margins in our (1) Outdoor lighting market as we provided aggressive pricing on a couple of projects in an effort to better penetrate new markets, and (2) Marine market as we adjusted our pricing among major distributors in response to competitive activities.

Solar Power Systems

Year-to-date 2012, Solar Power Systems revenues were \$7.1 million, down from \$12.8 million in the prior year. Our third quarter 2012 revenues were \$3.2 million, down from \$3.5 million in the prior year. This is primarily due to substantially lower Solar EPC Services sales, which year-to-date are down \$6.4 million over 2011 as a result of the industry uncertainty during the Ontario FIT program review in the first half of 2012, which has now been resolved.

Although our Solar EPC Services segment revenues increased moderately in the second and third quarters of 2012 as a result of contracts starting to be awarded, we continued to see the delayed effects of the industry wide uncertainty. With the recent positive announcements regarding the future of the Ontario FIT program, we expect a significant upturn in contract awards to continue in the fourth quarter of 2012. During the third quarter of 2012 we saw a significant increase in opportunities and sales activities, and we were awarded 2 new Solar EPC Services projects totalling approximately \$1.0 million. We anticipate further project wins in the coming quarters, which should help the recovery of Solar EPC Services sales in the latter part of 2012.

In regards to our GoPower! segment, year-to-date 2012 revenues were \$4.9 million, up \$0.8 million from the prior year. Our third quarter 2012 revenues were \$1.6 million, up from \$1.1 million in the prior year. These increases are primarily due to channel developments, new product introductions, a strengthening RV market and general economic conditions improving in the US and Canada.

The gross margin percentage during the first three quarters of 2012 for our Solar Power Systems group was 29.6%, up from 24.1% in the same period in 2011. This increase is primarily due to the sales mix between GoPower! and Solar EPC Services, with significantly less lower margin Solar EPC Services revenues in 2012 and a larger volume of higher margin GoPower! revenues recognized in 2012 compared to the same period of 2011.

Sales by geographic region

All of our international revenues have been generated by our Lighting group, as our Solar EPC Services business is currently solely focused on the Canadian market and our GoPower! revenues are generated from the Canadian and US markets.

During the nine months ended September 30, 2012, approximately 15.7% of our revenues were from outside North America. This is down from 19.9% in the same period of 2011.

We are focused on increasing our international revenues by modifying and developing products to serve the rapidly growing markets outside North America, and fostering new and existing partnerships within strategic markets.

Operating expenses

<i>(US\$ thousands, unless noted otherwise)</i>	Three months ended			Nine months ended		
	September 30			September 30		
	2012	2011	Change	2012	2011	Change
Sales and marketing	1,043	531	(512)	3,180	2,192	(988)
Research and development	391	556	165	1,231	1,604	373
General and administration	1,519	1,583	64	4,671	4,839	168
Total operating expenditures	2,953	2,670	(283)	9,082	8,635	(447)
Operating expenses (excluding restructuring) as % of sales*	44.3%	31.4%	(12.9)%	50.2%	30.0%	(20.2)%
Non-cash items:						
<i>Amortization</i>	288	288	-	853	822	(31)
<i>Stock-based payments</i>	61	108	47	212	281	69

* A Non-IFRS measure

Our total operating expenses for the nine months ended September 30, 2012 were \$9.1 million, up \$0.4 million from the comparable period in 2011. During the third quarter of 2012, total operating expenses were \$3.0 million, up \$0.3 million from the same period in 2011. These increases are primarily a result of hiring several sales and marketing staff to support our market segments in our effort to build future revenue growth, partially offset by other executive headcount reductions. Year-to-date operating costs as a percentage of sales have increased to 50.2% from 30.0%, primarily due to lower revenues.

Sales and marketing

Our sales and marketing expenses for the first three quarters of 2012 were \$3.2 million, up \$1.0 million from the same period in 2011. Sales and marketing expenses for the third quarter of 2012 were \$1.0 million, up \$0.5 million from the same period in 2011. These increases are primarily due to higher salaries and travel costs as we increased our sales and marketing staffing levels by 13 people, 7 of which were new hires with the remaining 6 coming from transfers from other roles within the company.

Research and development

Our research and development (“R&D”) expenses for the first three quarters of 2012 were \$1.2 million, down from \$1.6 million in the same period in 2011. Development expenses for the third quarter of 2012 were \$0.4 million, down from \$0.6 million in the comparable period in 2011. The decrease largely relates to the refocus of development resources into sales and marketing functions within our signalling segments. Although general research and development spending has decreased year over year, more development projects have been undertaken or are in progress throughout 2012.

General and administration

Our general and administrative (“G&A”) expenses for the first three quarters of 2012 were \$4.7 million, down slightly from \$4.8 million in the same period in 2011. G&A expenses for the third quarter of 2012 were \$1.5 million, down \$0.1 million from the comparable period in 2011. Overall, lower salary expenditures were partially offset by small increases in rent, insurance, and legal costs.

Other income (expense)

Our other income (expense) relate mainly to interest, foreign exchange gains or losses and various miscellaneous non-operating items. During the nine months ended September 30, 2012, we recorded other income of \$0.01 million, primarily related to foreign exchange gains recognized on the revaluation of foreign denominated working capital. In the comparable period in 2011, we recorded other expenses of \$0.3 million. This was made up of \$0.2 million in legal expenses related to the terminated Lightech merger agreement, and a \$0.3 million provision relating to the resignation of our CEO. This was offset by transactional foreign exchange gains of approximately \$0.1 million, and investment tax credits of \$0.1 million.

Income taxes

During the nine months ended September 30, 2012, we recorded no income tax expense. Effective this year, we are no longer recognizing the benefit of tax losses and other temporary differences. In the comparable period, we had recognized an expense of \$0.2 million related to future income tax.

5. LIQUIDITY, CAPITAL RESOURCES AND OTHER DISCLOSURES

The discussion in this section is qualified by the *Caution regarding forward-looking statements* at the beginning of the MD&A.

5.1. Summary of consolidated statement of cash flows

Nine months ended September 30 (US\$ thousands, unless noted otherwise)	2012	2011	Change
Cash used in operating activities	(3,330)	(1,097)	(2,233)
Cash used in investing activities	(335)	(714)	379
Cash provided from financing activities	1,761	-	1,761
Effects of exchange rate changes on cash	(41)	(43)	2
Total change in cash	(1,945)	(1,854)	(91)

Cash used in operating activities

During the first three quarters of 2012, cash used by our operating activities, excluding changes in working capital, was negative \$2.1 million compared to positive \$1.5 million in the same period last year. In the nine months ended September 30, 2012, changes in working capital were negative \$1.2, compared to negative \$2.6 million in the same period in 2011. The swing in working capital in 2011 was primarily due to an increase in receivables and a decrease in payables due to ongoing Solar EPC Services projects at that time. 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 first three quarters of 2012, cash used for investing activities was \$0.3 million, compared to \$0.7 million in the same period in 2011. In both years, the additions mainly related to minor investments in IT hardware and software.

2012 includes \$0.1 million related to a five year exclusive cooperation agreement with Laser Guidance Inc. (“LG”). Under the agreement signed in April 2012, we obtained the exclusive world-wide marketing license for a portfolio of aviation navigation aids designed and manufactured by LG which will enable us to sell comprehensive airfield solutions. The agreement provides fixed payments to LG totalling \$0.45 million to be made over 15 months. In addition, during the term of the agreement, a variable payment of 2% of all airfield revenues that include LG products as part of the purchase order is payable to LG. At September 30, 2012, we had recorded an intangible asset of \$0.45 million, \$0.18 million of which has been paid with the remaining balance accrued as a liability. The total is being amortized on a straight-line basis over the 5 year term of the agreement. No variable payments have been made under the agreement, and those costs will be expensed as a cost of sale when the revenue is recognized.

Cash provided by financing activities

During the third quarter of 2012, we closed a non-brokered private placement of 3,981,722 common shares and received net proceeds of \$1.8 million. The Placement consisted of common shares priced at CAD \$0.45 per common share. In 2011, there were no financing activities where cash was provided by or used in.

5.2. Liquidity and capital resource measures

We continue to have no debt. Our total cash balance has decreased by \$1.9 million since December 31, 2011. This decrease was largely the result of (1) substantially lower revenues and (2) higher inventory levels within our GoPower! market line which was required to support sales growth in this vertical.

Of the \$3.0 million total cash balance at September 30, 2012, \$0.1 million (December 31, 2011 - \$0.7 million) was externally restricted by our bank due to outstanding performance letters of credits on specific Solar EPC Services projects, and to secure credit associated with our corporate credit cards and foreign exchange hedging products.

Our overall working capital was \$6.8 million at September 30, 2012, a decrease of \$1.0 million compared to \$7.8 million at December 31, 2011.

5.3. Credit facilities

On August 23, 2012, we secured a new CDN \$5.0 million revolving demand and a CDN \$0.5 million term credit facility with Royal Bank of Canada (“RBC”). This new facility replaces a prior credit facility with Bank of Montreal which expired in July 2012. The RBC credit facility carries certain covenants such as earnings and liquidity thresholds that may limit the amount available to us. Specifically, the terms of the agreement requires us to maintain positive EBITDA in the preceding rolling 4 quarters. Currently we are prevented from drawing on the facility.

The overall decrease in cash over the past three quarters has primarily been driven by lower than expected revenues. Our expectation is that revenue will recover in the later part of the year, although there will still be significant pressures on the cash balance due to timing of supply chain working capital requirements for near term Solar EPC Services projects. As a result, we initiated and closed a private placement which raised \$1.8 million. These funds were raised for and are being used in product development and working capital purposes, as well as future strategic acquisitions.

5.4. Contractual obligations and commitments

We have a manufacturing services agreement with Flextronics Industrial Ltd. (“Flextronics”), a contract manufacturer, to build and supply a large portion of our manufactured products. Under this agreement, we are required to provide demand forecasts to Flextronics for our expected sales. Flextronics utilizes these forecasts to acquire raw materials and inventory to support that demand. If our sales are below the demand forecasts, we are then required to purchase the excess inventory. The value of the Flextronics inventory held at September 30, 2012 was \$1.0 million (December 31, 2011 - \$1.2 million), and the value of planned purchase orders to support our expected future demand was \$1.6 million (December 31, 2011 - \$2.3 million).

There have been no other substantial changes in contractual obligations since those reported in the 2011 annual MD&A.

5.5. Claims and lawsuits

None

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.

5.8. Related party transactions

On August 28, 2012, we completed a non-brokered private placement (“Placement”) of 3,981,722 common shares at a price of \$0.45 CAD a share. We received \$1.81 million in gross proceeds from the issuance and incurred costs of \$0.05 million. The common shares issued are subject to a hold period of four months plus one day from the closing of the Placement. The majority of the private placement was subscribed by “insiders” of the Company, as defined by the regulations of the TSX exchange. In total, directors of the Company were involved with 1,364,444 of the shares issued, of which 444,444 were associated with our current Chief Executive Officer. A further 2,017,278 shares were acquired by MUUS Holding LLC (“MUUS”), a company controlled by Michael Sonnenfeldt. After this private placement, MUUS controlled approximately 19.99% of the outstanding shares of the Company.

5.9. Outstanding share data

Our common shares trade on the Toronto Stock Exchange (“TSX”) (TSX: CMH), and as at September 30, 2012 we had 47,693,789 fully issued and outstanding common shares. The following table summarizes the outstanding shares, options and other outstanding stock units stated in CDN\$.

	November 13, 2012	September 30, 2012	As at June 30, 2012	March 31, 2012	December 31, 2011
Share price – closing (Cdn \$)	0.30	0.35	0.47	0.46	0.45
Market capitalization (Cdn \$ in thousands)	14,324	16,693	20,374	19,931	19,383
Outstanding					
Shares	47,746,884	47,693,789	43,348,547	43,327,716	43,074,027
Options	1,588,756	1,588,756	2,079,656	2,094,156	2,094,156
Restricted share units	89,942	143,037	317,768	294,151	404,737
Performance share units	86,336	86,336	242,865	243,865	323,633

6. Critical Accounting Estimates and accounting policy developments

The discussion in this section is qualified in its entirety by the *Caution regarding forward-looking statements* at the beginning of the MD&A.

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:

- **Warranty reserve** – 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 September 30, 2012 was \$0.6 million, down from \$0.7 million at December 31, 2011. The warranty provision was decreased after we continued to see reduced warranty costs over the past several quarters.
- **Valuation of inventory** - 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 favourable than forecasted or if unforeseen technological changes occur, we may be required to record write-downs 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 September 30, 2012 our inventory provision was approximately \$0.6 million, down from \$0.7 million at December 31, 2011.

- **Allowance for doubtful accounts** - 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 September 30, 2012, our allowance for doubtful accounts was \$0.2 million, compared to \$0.1 million at December 31, 2011.
- **Forfeiture rates associated with share-based payments** – 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 5% to 16% and vary depending upon the employee make-up of the associated grants.

6.2. Accounting policy developments

There have been no changes to our accounting policies from those disclosed in the consolidated financial statements for the years ended December 31, 2011 and 2010. IFRS 7 *Financial instruments: Disclosures* which became effective in 2012 had no significant impact.

6.3. Future changes in accounting policies

Unless stated otherwise, the following standards are required to be applied for periods beginning on or after January 1, 2013 and based upon our current facts and circumstances, we do not expect to be materially affected by the application of the following standards:

- IFRS 9, Financial Instruments, is required to be applied for periods on or after January 1, 2013
- IFRS 10, Consolidated Financial Statements
- IFRS 11, Joint Arrangements
- IFRS 12, Disclosure of Interests in Other Entities
- IFRS 13, Fair Value Measurement
- IAS 1, Presentation of Financial Statements (amended), is required to be applied for periods beginning on or after July 1, 2012.
- IAS 12, Income Taxes (amended), is required to be applied for periods beginning on or after January 1, 2012.
- IAS 27, Separate Financial Statements (amended)
- IAS 28, Investments in Associates (amended)

Other than for the disclosure requirements therein, the requirements of IFRS 10, IFRS 11, IFRS 12, IAS 27 (amended 2011) and IAS 28 (amended 2011) must be initially applied concurrently.

6.4. 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.

There were no changes in internal control over financial reporting that occurred during our most recent interim period that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

7. Risks and Risk Management

The discussion in this section is qualified in its entirety by the *Caution regarding forward-looking statements* at the beginning of the MD&A.

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 below.

Competitive Environment

The off-grid LED lighting industry is highly competitive. Our competition includes companies who manufacture, sell and install off-grid lighting devices. We compete on the basis of product performance, product features, price, quality and post-installation product support. Our ability to compete successfully depends on factors within and beyond our control, including successful and timely development of new products, product performance and quality, product availability, intellectual property protection obtained by us and our competitors, customer service, pricing, industry trends and general economic trends. In particular, we anticipate that certain competitors may transition to off-grid lighting in the future. If and when this transition occurs, the greater name recognition and financial resources of these competitors may make it difficult for us to compete.

To be successful, we will need to keep pace with rapid changes in lighting technology, changing customer requirements, new product introductions by competitors and evolving industry standards, any of which could render our existing products obsolete if it fails to respond in a timely manner. Development of new products incorporating advanced technology is a complex process subject to numerous uncertainties. We have in the past experienced, and could in the future experience, delays in introduction of new products. If effective new sources of light are discovered, our current products and technologies could become less competitive or obsolete. If others develop superior innovative proprietary lighting technology, or if we fail to accurately anticipate technology and market trends, respond on a timely basis with our own development of new products and enhancements to existing products, and achieve broad market acceptance of these products and enhancements, our competitive position may be harmed and it may not achieve sufficient growth in revenue to attain, or sustain, profitability.

Competition with Other Energy Sources

Off-grid LED lighting products compete with products powered by conventional energy and other sources of renewable energy. There is a risk that similar products with alternative power sources will enjoy greater policy support or provide a more cost-effective alternative to conventional lighting than our products.

Technological Changes

Our products rely on us keeping pace with technological changes. Failure to keep pace with state-of-the-art technologies and methodologies may have a materially adverse effect on our results. Evolving industry standards and/or customer needs may have an effect on demand for our products. Our products may be rendered obsolete or less marketable due to technological advances made by competitors. In order to maintain our current market share, we may have to make substantial investments in product innovation and development.

Anticipated Adoption Rates for Off-Grid LED Lighting

While we have invested heavily in the development of off-grid LED lighting products, off-grid LED lighting is still in its early stages. If the rate of off-grid LED lighting adoption is slower than the anticipated commercial trends and we are unable to meet the forecasted sales volumes, we may not generate sufficient revenues to sustain profitability. In addition, demand for off-grid LED lighting products in our targeted markets may not develop or may develop to a lesser extent than anticipated.

Ability to Manage Expansion Effectively

We expect to expand our business in the future to meet the anticipated growth in demand for off-grid LED lighting products. If we are unable to manage growth effectively, we may not be able to take advantage of market opportunities, execute our business strategy or respond to competitive pressures. To manage the potential growth of our operations, we may be required to improve operational systems and procedures and expand our relationships with suppliers, manufacturers, distributors and customers. There can be no assurance that the current and planned operations, personnel, systems and internal procedures will be adequate to support future growth.

Foreign Exchange

Although we utilize the US Dollar as our functional currency, we are still exposed to fluctuations in the exchange rates between the US and Canadian dollar as a portion of our sales are denominated in currencies other than US dollars. Our exposure to Canadian dollar/US dollar fluctuations is reduced as we purchase a portion of inventory and other cost of sales items in Canadian dollars. If the US dollar rises relative to the Canadian dollar, our operating results may be negatively impacted.

Additionally, we enter into foreign exchange contracts to manage foreign exchange risk as required. We do not use contracts or any other financial instruments, for speculative purposes. As at September 30, 2012, we had no forward exchange contracts outstanding.

Reliance on Third Party Manufacturers

We rely on third party manufacturers and suppliers to provide certain products used in our components. While we maintain good relationships with suppliers, increased product demand can lead to increased demand on these providers, which they may not be able to meet. The failure of a supplier to meet product demands and/or specifications could result in significant production delays, which could harm our operations. Should a manufacturer or supplier suffer financial difficulties or any other disruption in manufacturing capacity, we may not be able to secure adequate substitute manufacturing sources for our products in a timely manner. While we believe we have sufficient access to manufacturing capacity to meet current and expected future requirements, it is possible that future capacity needs will not be available. Additionally, as we rely on third

party manufacturers, we are subject to risks associated with limited control over delivery schedules, reductions in capacity, the possibility of defects, the possibility of increased products costs and variable product quality.

Reliance on Outside Agents and Distributors

We utilize a mixture of a direct sales force, strategic relationships and distribution agency arrangements to access our target markets. As a consequence, we rely to a significant extent upon our ability to develop strategic alliances with distributors, particularly in niche markets and in developing and emerging economies. Furthermore, market penetration of our products heavily depends on the success levels of our distributors and sales agents. There can be no assurances that we will successfully develop and maintain such alliances or that the sales efforts of our distributors and sales agents will be successful.

Reliance on Key Employees

Our success depends on our continued ability to identify, attract, hire, train, retain and motivate highly skilled technical, managerial, manufacturing, administrative and sales and marketing personnel. To a significant extent, our success will depend on our senior management team. Competition for these individuals is intense and we may not be able to successfully recruit, assimilate or retain sufficiently qualified personnel. In particular, we may encounter difficulties in recruiting and retaining a sufficient number of qualified technical personnel, which could harm our ability to develop new products and adversely impact our relationships with existing and future customers. The inability to attract and retain necessary technical, managerial, manufacturing, administrative and sales and marketing personnel could harm our ability to obtain new customers and develop new products and could adversely affect our business and operating results.

Intellectual Property Risks

We consider our technology and processes proprietary. If we are not able to adequately protect or enforce the proprietary aspects of our technology, competitors may utilize our proprietary technology and our operations could be harmed. We currently attempt to protect our technology through a combination of patent, copyright, trademark and trade secret laws, employee and third party nondisclosure agreements and similar means. Despite our efforts, other parties may attempt to disclose, obtain or use our technologies. Competitors may also be able to independently develop products that are substantially equivalent or superior to our products or design around our patents. In addition, the laws of some foreign countries do not protect proprietary rights as fully as do the laws of Canada. As a result, we may not be able to protect our proprietary rights adequately in Canada or abroad.

Because our patent position involves complex legal, scientific, and factual questions, the issuance, scope, validity and enforceability of our patents cannot be predicted with certainty. Our issued patents may be invalidated or their enforceability challenged, they may be designed around, and they may not provide us with competitive advantages against others with similar products and technology. Furthermore, others may independently develop similar products or technology or duplicate or design around any technologies that we have developed.

We may receive notices that claim we have infringed upon the intellectual property of others. Even if these claims are not valid, they could subject us to significant costs. Litigation may be necessary in the future to enforce our intellectual property rights or to determine the validity and scope of the proprietary rights of others. Litigation may also be necessary to defend against claims of infringement or invalidity by others. An adverse outcome in litigation or any similar proceedings could subject us to significant liabilities to third parties, require us to license disputed rights from others or require us to cease marketing or using certain products or technologies. We may not be able to obtain any licenses on acceptable terms, if at all. We also may have to indemnify certain customers if it is determined that we have infringed upon or misappropriated another party’s intellectual property. Any of these results could adversely affect our business, financial condition and results of operations. In addition, the cost of addressing any intellectual property litigation claim, both in legal fees and expenses, and the diversion of management resources, regardless of whether the claim is valid, could be significant and could materially harm our business, financial condition and results of operations.

Environmental and Regulatory Compliance

We are subject to a variety of environmental laws, rules and regulations, with which we believe we are in compliance. In certain cases, the cost of compliance with regulations can be substantial. Failure to comply with present or future regulations could result in legal claims, fines, operation suspensions or cessation of operations. Compliance often requires incurring costs and capital expenditures. We face few, if any, of these issues directly as we rely on third party manufacturers.

Government Contracts and Subsidies

A significant portion of our revenues are derived from government and military agencies. Consequently, any disruption in government funding or in the relationship with those agencies could adversely affect our business.

Additionally, there are many government subsidies and economic incentives for solar energy related businesses, including the FIT Program established by the Government of Ontario. There is no guarantee that these incentives and subsidies will remain in place or that other countries, states, provinces or municipalities will adopt similar programs. The elimination of such subsidies and incentives, or the failure of additional countries, states, provinces or municipalities to adopt similar programs, may have an adverse impact on the solar market, and may result in rapid changes in demand and pricing. Such changes may have an adverse impact on our business and financial condition.

Product Quality & Reliability, Warranty Liability and indemnification Risks

Problems with product quality and/or performance, including defects in products could damage our reputation, or result in a decrease in customers and revenue, unexpected expenses and loss of market share. We cannot test for all defects, and occasionally defects may be detected after products have been shipped or installed. These defects could cause us to incur significant costs, including product replacement, and may adversely affect our customer relations and business reputation. Additionally, because we source many of our components from third party manufacturers, our ability to control product quality is limited.

Our grid tie business strategy is to focus on securing EPC contracts. By their nature, these contracts include construction industry agreement terms including, amongst others, liquidated damages and indemnification obligations. We try to use our commercial best efforts to minimize our liability on such exposure. If negative factors occur that are beyond our control or if disputes arise and are not settled favorably, they may have an adverse impact on our business, financial condition and results of operations.

Downturn in Economic and Market Conditions

The lighting industry is susceptible to downturns related to declines in general economic conditions. 2012 continues to be challenging for the solar lighting industry, as demand for solar lighting products and components are adversely impacted by the global financial crisis and corresponding decreases in or postponement of infrastructure spending budgets.

We may continue to be adversely impacted by downturns in general economic and market conditions, both nationally and internationally. Economic downturns generally, or in our markets specifically, would have a material adverse effect on our, cash flows, financial condition and results of operations. Our future results of operations may experience substantial fluctuations from period to period as a consequence of these factors, and such conditions and other factors affecting capital spending may affect the timing of orders. As we sell to governments who continue to suffer from deficit spending and may need to cut spending further, we may experience a softening demand for our products.

Continued economic adversity coupled with a decline in our revenue could adversely affect our ability to meet capital requirements, support working capital requirements and growth objectives, or otherwise adversely affect our business, financial condition and results of operations.

Liquidity and Capital Requirements

We face significant challenges in order to achieve profitability. There can be no assurance that we will be able to maintain adequate liquidity or achieve long-term viability. Our ability to meet our obligations in the ordinary course of business is dependent upon our ability to establish profitable operations or raise capital, as needed, through public or private debt or equity financing, or other sources of financing to fund operations.

The disruption of the capital markets and the continued decline in economic conditions, amongst other factors, could negatively impact our ability to achieve profitability or raise additional capital when needed. In order to optimize the growth of the business, we may need to seek to raise additional debt or equity financing. There can be no assurance that we will be able to identify a source of such financing, or that such financing will be available on terms acceptable to it, if at all. Moreover, should the opportunity to raise additional capital arise, any additional debt or equity financing could result in significant dilution of the existing holders of our common shares.

Litigation Risk

We may in the future become involved in disputes, litigation or arbitration proceedings. The results of these proceedings cannot be predicted with certainty. If we are unable to resolve these disputes favorably, it may have an adverse impact on our business, financial condition and results of operations.

Acquisitions or other Business Transactions

We may, when and if the opportunity arises, acquire other products, technologies or businesses involved in activities, or having product lines, that are complementary to our business. Acquisitions involve numerous risks, including difficulties in the assimilation of the operations, technologies and products of the acquired companies, the diversion of management’s attention from other business concerns, risks associated with entering new markets or conducting operations in industry segments in which we have no or limited experience and the potential loss of key employees of the acquired company. Moreover, there can be no assurances that any anticipated benefits of an acquisition will be realized. Future acquisitions by us could result in potentially dilutive issuances of equity securities, the use of cash, the incurrence of debt and contingent liabilities, and write-off of acquired research and development costs, all of which could materially adversely affect our financial condition, results of operations and cash flows.

Potential Reorganization of Operations or Product Offerings

We routinely review our operations for additional efficiency opportunities or to reduce costs. That analysis may lead to the determination to close, eliminate, rationalize or reduce operations and divisions and/or alter the sales, manufacturing or distribution structure. Should we decide to pursue any such changes, it may incur additional charges and losses in connections with such changes in the future, and such charges and losses may be material. In addition, we could experience difficulties, disruptions or delays in the implementation of any such changes and there can be no assurance that we will be able to implement these programs successfully or on a timely basis.

Geopolitical and other Global or Local Events

We currently distribute our products in a number of markets. Accordingly, geopolitical and other global or local events may have a significant effect on our operations. Various events, including natural disasters, extreme weather conditions, labour disputes, civil unrest, war, political instability, terrorism, and contagious illness outbreaks, or the perceived threat of these events, may cause a disruption of our normal operations and may disrupt the domestic and international travel of our distributors and sales agents.

8. Definitions and reconciliations

The discussion in this section is qualified in its entirety by the *Caution regarding forward-looking statements* at the beginning of the MD&A.

Adjusted EBITDA

For the three and nine month periods ended September 30, 2012 and September 30, 2011, we are disclosing adjusted EBITDA, a non-IFRS financial measure, as a supplementary indicator of operating performance. We define adjusted EBITDA as net loss before interest, income taxes, amortization, non-cash stock-based compensation, retirement provisions, and terminated Ligttech agreement costs. 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. Adjusted EBITDA is not intended as a substitute for IFRS measures.

Adjusted EBITDA reconciliation <i>(US\$ in thousands)</i>	Three months ended September 30		Nine months ended September 30	
	2012	2011	2012	2011
Net loss	(838)	351	(3,200)	335
Add/(deduct):				
Interest	-	-	-	4
Income tax expense/(recovery)	-	68	-	225
Amortization	288	288	853	822
EBITDA*	(550)	707	(2,347)	1,386
Terminated Ligttech agreement recovery	-	(360)	-	(176)
Retirement provision	-	(29)	-	261
Non-cash stock based compensation	61	108	212	281
Adjusted EBITDA*	(489)	426	(2,135)	1,752

* A Non-IFRS measure