



# Message from the CEO

As we strive to become the global leader in the provision of signalling and solar lighting solutions for infrastructure, we are equally committed to providing solutions that combine the greatest cost savings with the highest environmental sensitivity.

Integrated into the depth of this corporate vision is our commitment to the triple bottom line—people, planet, and profit. This year, we show our triple bottom line commitment by publishing our first Corporate Social Responsibility (CSR) Report, a summary of our businesses and our progress in 2015.

Last year was an important one for us: we were able to prove that committing to our people, to the community in which we live, and to reducing impacts on the planet are entirely consistent with and supportive of improving profitability. Through the acquisition of the Sabik Group of Companies, realignment of corporate strategy, and significant developments within our breadth of products, we have cultivated a company that is solidly profitable and steadily growing.

"It is good to step back and check in on one's aspirations from time to time. In recent years our team has resonated with a goal of a triple bottom line; people, planet, and profit. Addressing all three components, without a sacrifice to any single component, is a challenge for any corporation and one that we strive to meet. I am pleased that we have created a sustainable and profitable business, but where we are equally focused is on our human resources and the communities in which we live," said Michael Sonnenfeldt, chairman of our board of directors, in Carmanah's 2015 Annual Report. "Virtually



every product we produce saves CO2, but in addition, we have continued to focus on other areas where environmentally sensible policies can make a difference. This ranges from "greening" our head office to ensuring our supply chain and distribution policies are as efficient as possible. All of these efficiencies add to our profitability and help focus us on core beliefs, and we expect that trend to continue."

I couldn't agree with Michael more, and feel privileged to be able to work with such a highly engaged and amazingly capable group of people—a group of people who do right not only for their shareholders, but for all social and environmental stakeholders as well.

Overall, we are pleased but not satisfied by the achievements that are outlined in the following pages. As we advance we will continue to build on our successes and further integrate our commitment to the triple bottom line into our strategy. Stay tuned.

We thank you for your interest in Carmanah Technologies and our Corporate Social Responsibility Report, and we invite you to follow our progress in the years to come. As we continue to move towards our goals, we welcome your input and are mindful of—and grateful for—the support of our shareholders and community.

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Mr. John Simmons

# Our Triple Bottom Line Strategy

Carmanah designs, develops, and distributes renewable and energy-efficient technologies, with installations in over 110 countries worldwide. The positive environmental impacts of Carmanah's products include a reduction in greenhouse gas (GHG) emissions and a decrease in electrical grid reliance.

Since our beginnings in 1996, Carmanah has always been involved in sustainable initiatives. But that was not enough for us. In our 2015 Annual Report, we were proud to announce and report on our corporate triple bottom line activities.

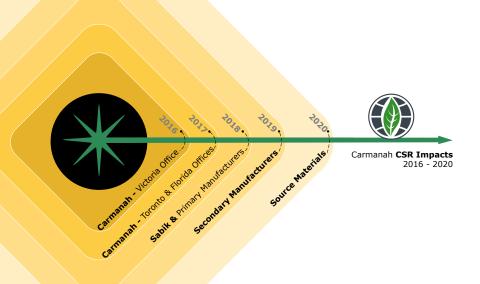
Our triple bottom line commitment means doing business in a manner that supports people, planet, and profit. We committed minimizing the environmental impact of our operations and supporting the health, well-being, and education of our people and the people in the communities we serve. We believe that these activities will benefit both the environment and society, while simultaneously enhancing our corporate profitability and value.

The first step in our strategy is to focus on reducing the impact of our Victoria, Canada, headquarters, as strong leadership in these initiatives must start at the core of the company. Leadership at our corporate headquarters is a precursor for engaging our other offices, and setting up our manufacturers and suppliers to comply with our future sustainable practices.

We realize that outside of the four walls surrounding our

headquarters is where upwards of 80% of our impact occurs. Therefore, we have outlined our overall "circle of influence" as an action plan to reach all layers over the next 5–10 years.

Our goals are in place to work from the centre of the circle of influence out to the very outer ring—the source materials (raw components) of our products—and develop initiatives throughout this journey.



"We are committed to minimizing the environmental impact of our operations and supporting the health, well-being, and education of our people and the people in the communities we serve."



# About this Report

We are pleased to share our first ever Corporate Social Responsibility (CSR) report, which summarizes our triple bottom line performance for our 2015 fiscal year. While the information in this report is limited to our Victoria, Canada, office, in future years we hope to also report on our subsidiary offices, manufacturing, and supply chain.

The environmental metrics in this report include Scope 1, 2, and 3 Greenhouse Gas (GHG) emissions from our headquarters in Victoria, Canada. In relation to headquarters operations, we identified areas in which we have excelled and will discuss areas in which we have work to do. Our performance indicators in the "People" category include current internal initiatives and external recognition. A successful triple bottom line company does not neglect its financial performance, and as such we have included a high-level summary of the financials from our 2015 Annual Report.

Going forward, our objective is to report on our sustainability metrics every year in accordance with the criteria outlined by the GRI G4 Reporting Guidelines. Our next CSR report can be expected in Q2 of 2017.

Our greenhouse gas emission reporting has been compiled by Synergy Enterprises and is aligned with the reporting guidelines defined in *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition*. Emission factors have been reviewed and approved annually by carbon management provider Offsetters.

Going forward, our objective is to report on our sustainability metrics every year in accordance with the criteria outlined by the GRI G4 Reporting Guidelines. Our next CSR report can be expected in Q2 of 2017.

### **DISCLAIMER**

This document may contain forward-looking statements. Often, but not always, forward-looking statements can be identified by the use of words such as "expects," "plans," "estimates," "intends," "believes," "could," "might," "will," or variations of such words and phrases. Forward-looking statements involve known and unknown risks, uncertainties, and other factors that may cause the actual results, performance, or achievements of Carmanah to be materially different from any future results, performance, or achievements expressed or implied by the forward-looking statements. These statements are based on management's current expectations and beliefs and are subject to a number of risks and uncertainties. Examples of forward-looking information in this release include, but are not limited to, statements with respect to future revenue growth. For additional information on these risks and uncertainties, see Carmanah's most recently filed Annual Information Form (AIF) and Annual Management Discussion and Analysis (MD&A), which are available on SEDAR at www. sedar.com and on the company's website at www.carmanah.com. The risk factors identified in Carmanah's AIF and MD&A are not intended to represent a complete list of factors that could affect Carmanah. Accordingly, readers should not place undue reliance on forward-looking statements. Carmanah does not assume any obligation to update the forward-looking information contained in this document.



# Carmanah at a Glance

Publicly Traded	TSX:CMH		
Year Founded	1996		
Corporate Headquarters	Victoria, Canada		
Office Locations	Toronto, Canada		
	Stuart, USA		
	Porvoo, Finland		
	Schwerin, Germany		
	Singapore		
	Norwich, United Kingdom		
Brands	Go Power!		
	Sol, Inc.		
	Sabik Marine		
	Sabik Offshore		
Businesses	Signals:		
	<ul><li>Airfield Ground Lighting</li><li>Aviation Obstruction</li></ul>		
	Marine		
	Offshore Wind		
	Traffic		
	Illumination:		
	Illumination		
	Power:		
	• On-Grid		
	Off-Grid		
Employees	Approximately 135 globally		
2015 Revenue	Approximately \$68 million USD		
Carbon Reporting Period	January 1, 2015 - December 31, 2015		
	Scope 1 (Direct emissions): Natural gas		
Inventory Boundary	Scope 2 (Indirect emissions from purchased electricity): Electricity		
inventory boundary	Scope 3 (Indirect emissions from other sources): Water, waste, paper,		
	travel, shipping, service calls, staff commuting		
Sustainability Counsultant	Synergy Enterprises		
Reporting Guidelines	Aligned with those defined in <i>The Greenhouse Gas Protocol: A Corporate</i>		
	Accounting and Reporting Standard, Revised Edition (The GHG Protocol).		
	Emissions factors reviewed and approved by Offsetters.		
Contact	Alison Keller		
	csr@carmanah.com		
	250-380-0052		



## **Our Business**

We manage our business within three segments: Signals, Illumination, and Power. Each of our segments either produces clean energy or utilizes energy-efficient technology through solar or LEDs. Our products focus on moving customers from grid infrastructure and fossil fuel reliant technologies to LED and solar solutions. Additionally, these products provide infrastructure solutions where traditional power is unavailable or unreliable. Carmanah's power divisions each provide energy generation through solar technology.

### **Signals**

Airfield Ground Lighting

**Focus:** Solving airfield lighting challenges for clients in off-grid or weak-grid locations.



**Sustainability highlights:** Increased opportunities and improved safety in demanding environments around the globe.

#### **Aviation Obstruction**



**Focus:** Providing practical, cost-effective solutions for ground hazard marking, tower lighting, way-finding, wind-tower marking, equipment marking, and more.

**Sustainability highlights:** Reduced the need for maintenance and site visits due to our products' built-in monitoring systems.

#### Offshore Wind



**Focus:** Providing marine aids to navigation solutions for offshore wind farms, both temporary (construction phase) and permanent.

**Sustainability highlights:** In 14 years of operation, Sabik Offshore has marked over 800 offshore wind structures, each on average generating more than 6 million kWh electricity for 1,500 average homes.

### Marine



Focus: Supplying Coast Guards, marine authorities, navies, and ports around the globe.

**Sustainability highlights:** Used thoughtful design to reduce the environmental impact of the 600 series Marine Lantern without compromising performance or customer expectations; for example, customers could extend the product's life by replacing components rather than complete units.

### Traffic



**Focus:** Installing solar flashing beacons, including pedestrian crosswalk signals, school zone flashers, and 24-hr roadway beacons, across North America.

**Sustainability highlights:** Used advocacy programs to donate systems to local communities and universities to promote pedestrian safety.



### Illumination

Illumination



**Focus:** Illuminating pathways, parking lots, and pedestrian areas, and providing highway/street lighting and perimeter lighting.

**Sustainability highlights:** Installed thousands of solar lighting systems annually in communities where access to electrical power is either unreliable or non-existent. Further, our products meet customer needs while maintaining the lowest environmental impacts on the market.

### **Power**

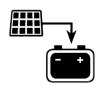
On-Grid



**Focus:** Developing and constructing commercial solar grid-connected systems, primarily in the Ontario market due to a Feed-in-Tariff ("FIT") program the provincial government introduced.

**Sustainability highlights:** Generated approximately 42 million kilowatt hours of energy through EPC installations over the past 10 years, the equivalent of the yearly power consumption for 3,333 average households in Canada.

Off-Grid



**Focus:** Providing solar kits, solar panels, inverters, chargers, batteries and other power accessories for the RV, utility, and fleet vehicles, and marine markets under the Go Power! brand.

**Sustainability highlights:** Supported anti-idling regulations by providing truck fleets with free, continuous power for decades. By installing a Go Power! hybrid system, a customer would be able to reduce generator runtime by 50%, saving money and carbon emissions, and providing a backup power source if the generator were to fail.





### **Planet**

### 2015 HIGHLIGHTS

- Completed GHG emission analysis for 2014 and 2015 fiscal years.
- Monthly GHG analysis for travel and shipping, two significant emission sources.
- 15% reduction in electricity usage over previous year due to more efficient servers.
- 98% of office waste diverted from landfill.
- 29% of staff commuting by low-emissions transportation methods (e.g., bike, bus, walk, etc.).
- Product design to reduce dependence on PVC.
- Product development focused on increased energy efficiency.
- Initiated packaging recycling instructions.
- Introduced product disposal and recycling instructions for new products.
- Greenest office award at the Vancouver Island Eco Star Awards.

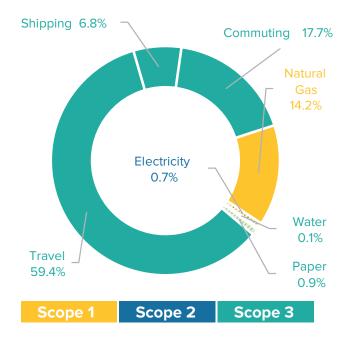


#### PERFORMANCE IN REVIEW

In early 2015, we embarked on a journey to track and reduce the carbon emissions generated by our Victoria headquarters. We found we are doing well in some areas, including waste diversion and heating efficiency; however, travel and shipping are significant emission sources. This carbon reporting will continue and is now part of our internal KPI reporting on a quarterly basis. This is important to us, as we see this as the first step in expanding out our triple bottom line circle of influence.

### **CARBON FOOTPRINT SUMMARY**

Measuring our carbon footprint allows us to understand our greatest areas of impact and best opportunities for reduction. Scope 3 activities drive 84.9% of emissions, with travel and staff commuting as the two largest contributors to the overall carbon footprint. Due to efficiency upgrades, the emissions from heating and electricity in our headquarters have been reduced from 2014 levels.

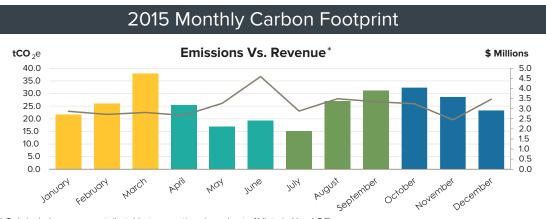




### ANNUAL EMISSIONS (tCO<sub>2</sub>e) - VICTORIA HQ

	Total Emissions (tCO <sub>2</sub> e)	Total Emissions per FTE	Total Emissions per Million Revenue
2014	262.7	4.04	8.10
2015	305.3	4.49	8.07

Emissions increased between 2014 and 2015 as the business grew. In the future, we will focus on maintaining and reducing total emissions per million dollars in revenue.

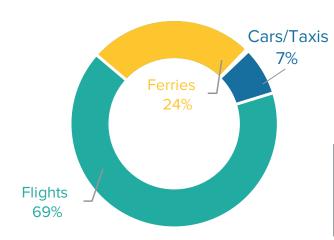


<sup>\*</sup> Only includes revenue attributable to operations based out of Victoria Head Office.

### **TRAVEL**

Our travel emissions account for approximately 60% of the company's total carbon footprint, thus presenting a significant opportunity for Carmanah to reduce its impact. In 2015 our staff travelled a total of 1,453,524 km spread over 638 individual flights. Our travel-related tCO2e increased over 50% per full-time employee over our 2014 data. This increase can likely be accounted for with our 2015 acquisition activities.

We are currently looking at strategic methods of reducing corporate travel when possible.



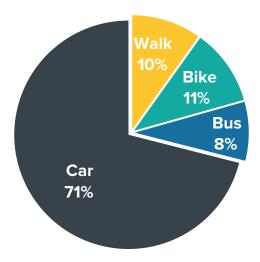
	# of trips	km traveled	tCO ₂e
Flights	638	1,453,524	162.0
Cars/Taxis	68	50,562	12.5
Ferries	224	10,054	1.5



### **COMMUTING**

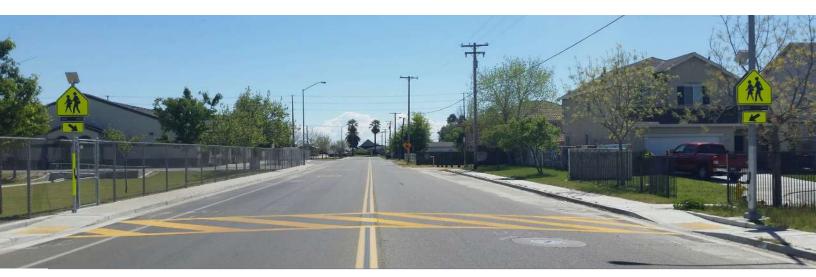
Currently 29% of employees commute through low-emission transport, such as biking, walking, or public transportation. This is a percentage we hope to increase in future years. Current commuting methods have an impact of 51.8 tCO2e per year, which is equal to the emissions from 14 cars on the road in one year.

Annually Carmanah participates in Bike to Work Week, during which most employees commute to work with lowemission transport. This is the only week of each year you can easily find parking within our lot!



### **SHIPPING**

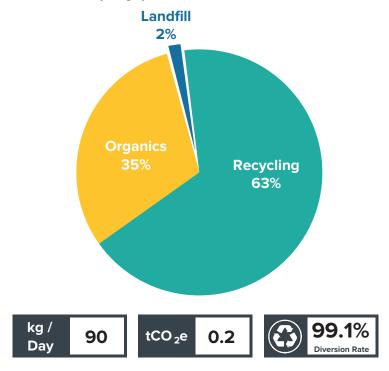
Shipping products is an integral part of our business. While we recognize we can't completely eliminate emissions from shipping, we can prioritize low-emission shipping methods such as ocean and rail. Shipping-based emissions, predominantly air shipping, generate 6.8% of our carbon footprint. In 2015 we saw a 7% decrease in our shipping by low-emission methods in favour of shipping via air. This change in shipping habits is detrimental to reducing our carbon emissions and therefore is something that we are working to reduce in 2016.





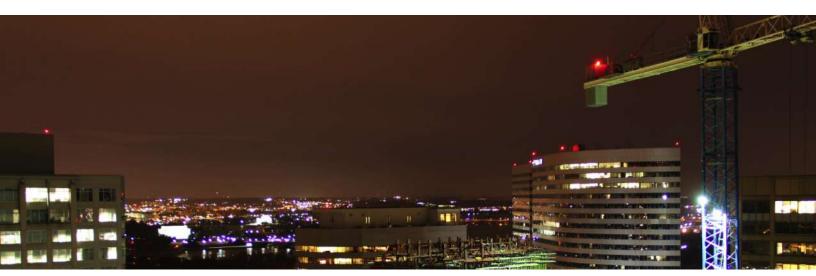
### **WASTE**

We have an impressive recycling program in place at our HQ, something we are very proud of! Carmanah encourages employees to not only recycle at work, but also continue these trends at home. In 2015 we had a waste diversion rate of 98%, with all organics, paper, glass, metals, plastics, cups, and drink containers being recycled through our multi-stream recycling system.



### **LOOKING FORWARD**

Tracking our Victoria headquarters' carbon emissions was the first step in getting our house in order, and has inspired a stronger commitment internally towards greening our circle of influence. Over the next few years we will see this commitment to sustainability reverberate to our subsidiary offices, distribution, customers, and value chain. We look forward to continuing this journey.





## People

### **AWARDS**

2015 UVic Co-op Employer of the year.



It takes a very special co-operative education (co-op) employer to stand out from the 1,130 organizations that provided outstanding dynamic learning opportunities for UVic co-op students in 2015. It is with great excitement that the Co-operative Education Program and Career Services (Co-op and Career) has named Victoria-based LED and solar technology provider Carmanah Technologies Corporation as the 2015 UVic Co-op Employer of the Year for putting students at the forefront of emerging clean energy technologies, and for welcoming and mentoring them in the workplace in exemplary ways.

Outstanding VIATEC Food Bank Challenge participation. All funds are donated to the local Mustard Seed food bank and charity.

- Greatest Overall Contributor November 2015
- Greatest Per Employee Contributor November 2015
- Second Greatest Overall Contributor February 2015





### **INITIATIVES**

- Corporate donation-matching programs exist for all fundraising intiatives.
- Carmanah University is a monthly, employee-run educational session that allows all employees to learn more about other departments of our operation. These sessions are highly anticipated and increase our interdepartmental efficiencies.
- All Carmanah employees are encouraged to submit their business ideas to our "Big Bold Ideas" program, which spans process improvements and corporate ideas all the way to new market expansion suggestions and more. This program has allowed for all employees to contribute to the roadmap and overall success of Carmanah.
- Through World Vision, Carmanah donated one goat in the name of each employee in recognition of the 2015 holiday season. These goats will be gifted to families in South Sudan and Somalia.



#### PERFORMANCE IN REVIEW

At Carmanah, we all embrace five core values:

### **CUSTOMERS**

We value and listen to our customers to deliver them a positive experience.

### **ACCOUNTABILITY**

We uphold high standards and are dedicated to fulfilling our commitments.

### **PERFORMANCE**

We are huge believers in people and their ability to come together and go beyond.

### **SIMPLICITY**

We focus on what is relevant, practical, and valued. We take decisive action.

### **FUN**

We are passionate and love what we do. Fun is mandatory!

### CULTURE

At Carmanah, we are passionate about what we do and making a difference in the world. We believe in transparency and an open and forthright culture, with integrity at all levels of the organization.

# SOCIAL EVENTS AND COMMUNITY

Our Social Committee organizes a number of fun activities that bring the team together. Events include rooftop volleyball, bowling, BBQs, pancake breakfasts, Halloween extravaganza, a Christmas party, and many more.

Carmanah supports a number of community fundraising events, including Bike to Work Week, Run for the Cure, VIATEC Food Bank Challenge, charity drives, and others.

# EQUAL EMPLOYMENT OPPORTUNITY

We believe that all should be provided the opportunity to work in a supportive and equitable environment. It is the policy of Carmanah that employment shall be based on merit, qualifications, and competence.

# HEALTH AND SAFETY

Carmanah and all its subsidiaries are committed to ensuring the health, safety, and welfare of all their employees, contractors, customers, and visitors to their sites. It is also committed to maintaining pollution-free operating practices and complying with any relevant standards and guidelines.

# GROWTH AND OPPORTUNITY

At Carmanah, we cultivate career growth and advancement opportunities for our employees. With a strong focus on continual learning and mentorship, our dynamic work environment promotes engagement in all areas of the organization.



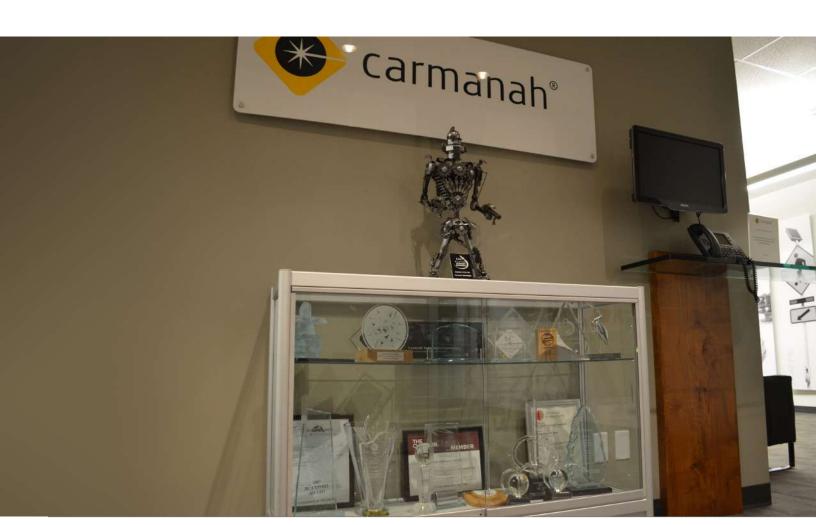


### **AWARDS AND RECOGNITION**

Carmanah has received numerous awards and recognitions over the years for its business and organizational achievements. We thank our amazing employees for these accolades, and always acknowledge and reward exceptional work.

Below are a few awards Carmanah has received over the last few years:

- University of Victoria Co-Op Employer of the Year (2015)
- ACE Industry Partner of the year (2015)
- Greenest Office Vancouver Island Eco Star Awards (2015)
- Greatest Overall Contributor VIATEC Food Bank Challenge (Nov 2015)
- Greatest Per Employee Contributor VIATEC Food Bank Challenge (Nov 2015)
- Greatest Overall Contributor (Second Place) VIATEC Food Bank Challenge (Feb 2015)
- Supplier Partnership Award (2014)
- Supplier Partnership Award (2013)
- Environmental Excellence Award (2011)





### Profit

As a publicly traded company, we have a high level of commitment to all of our stakeholders, including those who hold shares in our stock (TSX:CMH).

Importantly, we are proving that a commitment to our people and the community in which we live—as well as a commitment to reducing impacts on the planet—is entirely consistent and supportive of improving profitability. Below are some highlights of our 2015 fiscal year.

### 2015 HIGHLIGHTS

For the year ending December 31, 2015, the Company recorded net income of \$10.7 million on revenues of \$68.2 million. This compares to net income of \$1.0 million on revenues of \$43.7 million over the same period in 2014.

Carmanah management relies on Adjusted EBITDA1 (a non-IFRS measure) to gauge financial performance. In 2015 the Company generated \$8.6 million of Adjusted EBITDA, up from \$4.0 million in 2014.

The business highlights by segment included:

- The Signals segment, which now includes the July 2015 acquisition of the Sabik Group of Companies ("Sabik" or the "Sabik companies"), showed strong organic growth and margin expansion, generating full year revenues of \$34.2 million in 2015, up 56% from \$16.8 million in the same period in 2014. The majority of this increase is due to the acquisition of Sabik, which contributed revenues of \$6.0 million in the third quarter and \$8.4 million in the fourth quarter. "In all respects Sabik has exceeded our expectations," said John Simmons, Chief Executive Officer. Ignoring the effects of Sabik, our Signals segment showed year-over-year organic growth of 18% compared to 2014.
- The Illumination segment generated full year revenues of \$8.9 million in 2015, down 15% from \$10.5 million in the same period in 2014. The decline year-over-year is due to a very soft third quarter of 2015 due to a lack of projects that could be closed and shipped in that period, rather than a general slowdown in sales or a trend in losing projects to competitors.
- The Power segment generated full year revenues of \$25.1 million in 2015, up 53% from \$16.4 million in the same period in 2014. The increase is due to higher sales in both our On-Grid and Off-Grid verticals.

<sup>1</sup> NON-GAAP FINANCIAL MEASURES: EBITDA and Adjusted EBITDA. This news release presents information about EBITDA and Adjusted EBITDA. both of which are non-IFRS financial measures, to provide supplementary information about 2015 operating performance. Carmanah defines EBITDA as net income or loss before interest, income taxes, amortization, and non-cash stock based compensation. Adjusted EBITDA removes unusual or non-operating items from EBITDA, such as merger and acquisition costs, restructuring charges, asset writeoffs, and foreign exchange gains and losses. Carmanah uses these non-IFRS measures internally to make strategic decisions, forecast future results, and evaluate its performance. EBITDA and Adjusted EBITDA are not intended as a substitute for IFRS measures. A limitation of utilizing these non-IFRS measures is that the IFRS accounting effects of the non-recurring items do in fact reflect the underlying financial results of Carmanah's business and these effects should not be ignored in evaluating and analyzing Carmanah's financial results. Therefore, management believes that Carmanah's IFRS measures of net loss and the same respective non-IFRS measure should be considered together. Non-IFRS measures do not have any standardized meaning prescribed by IFRS and are therefore unlikely to be comparable to similar measures presented by other companies. Readers should refer to the "Definitions and Reconciliations" section of the Company's most recently filed MD&A for the four and twelve months period ended December 31, 2015, for a more detailed discussion of these measures and their calculation.



"Our Company continued to progress well in 2015 and built on the turnaround that started to take hold in 2014," said John Simmons, Chief Executive Officer. "In 2016, we will begin to make strategic investments in our Signals and Illumination divisions in an effort to develop profitable growth. Our plan in this respect is to concentrate first on organic growth, which we hope to achieve through the addition of distribution on a global scale. In addition, we see opportunities to make strategic acquisitions to add to our product portfolio and to make further distribution gains. Finally, in 2016 we will begin to ramp up our product development spending, which will be focused on adding advanced telematics to all of our product offerings so that we can lead our markets in the 'internet of things' capability. Overall we are optimistic that we can continue Carmanah's progress in 2016 and achieve reasonable levels of growth."

Highlights for the year are provided below:

Ye	ar	en	d	ed
Dec	۵m	he	٦r	31

(US\$ thousands)	2015	2014
Revenue	68,206	43,732
Gross margin %	33.6%	34.7%
Operating expenditures	(18,158)	(12,792)
Net (loss)/income	10,680	994
Adjusted EBITDA *	8,569	3,971

<sup>\*</sup>Adjusted EBITDA is a Non-IFRS measure. Foreign exchange gain/loss is now included in the adjusted EBITDA calculation; as such, historical amounts have been updated.

### FINANCIAL CONDITION AT DECEMBER 31, 2015, COMPARED TO DECEMBER 31, 2014

- Cash and cash equivalents of \$14.9 million, up \$6.1 million from \$8.8 million
- Working capital of \$28.3 million, up \$12.2 million from \$16.1 million

### COMPLETE SET OF FINANCIAL STATEMENTS AND MANAGEMENT DISCUSSION & ANALYSIS

A complete set of the year ended December 31, 2015, Financial Statements and Management's Discussion & Analysis are available on Carmanah's corporate website. To view these documents, visit: www.carmanah.com/Company/Investors/Financial\_Reports.aspx.

