



2017

**Carmanah Technologies Corporation**

Corporate Social Responsibility Report



**People. Planet. Profit.**  
Carmanah Technologies



## Message from the CEO

In 2016, Carmanah celebrated its 20th anniversary as a global leader in the provision of signaling and solar lighting solutions. While we prepared to celebrate this milestone, we reflected on the fact that our subsidiaries, the Sabik businesses, have been leading the marine industry for an additional 14 years, making our celebration milestone really our 34th year of global excellence. What a feeling of pride we experienced, knowing that we have been manufacturing and supplying signaling and lighting solutions worldwide for the past 34 years.

With this reflection came an important future-focused discussion, where we reinforced our mission to maintain our position of global leadership in the signaling and solar lighting solutions markets through the provision of solutions that not only provide our customers with the greatest economic value, but also the highest environmental sensitivity. This directly aligns with our commitment to Carmanah being a triple bottom line—focused company—people, planet, and profit.

As we highlighted in our 2016 report, Carmanah remains committed to quarterly carbon emission tracking at our Victoria headquarters. Since the introduction of our carbon metrics, we have been able to streamline headquarters operations to minimize our impact to the environment through server upgrades, bike friendly facility improvements, and continued commitment to a waste-free office—99.7% of our waste is diverted from landfills.

We are also proud to report that we grew our business in 2017 through the acquisitions of Ekta and Vega Industries, located in Estonia and New Zealand, respectively, which were both previously direct competitors to our marine business. In 2018, we will be integrating the New Zealand operation into our current manufacturing and operating entity within Finland, Sabik Marine.



As outlined in our CSR circle of influence, 2017 was a year for reflection and review of our manufacturing procedures, as manufacturing and supply chain management is a challenging but very important aspect of responsible business operations. We kicked this off by conducting a thorough review of our manufacturing facilities and are now in the process of following up with recommendations related to packaging design, material sourcing, and end of life disposal. We will continue to report on this progress as it develops.

As we continue to show that we can pursue high degrees of profitability while simultaneously meeting our other important social responsibility goals, the response from our shareholders and the community has been very positive, and we thank you for continuing to follow our progress. We are ready to build upon our success in 2017 and further integrate our triple bottom line approach into our circle of influence. As always, we encourage your feedback as we move toward our goals.

Mr. John Simmons  
Chief Executive Officer  
April 20, 2018



# Our Triple Bottom Line Strategy

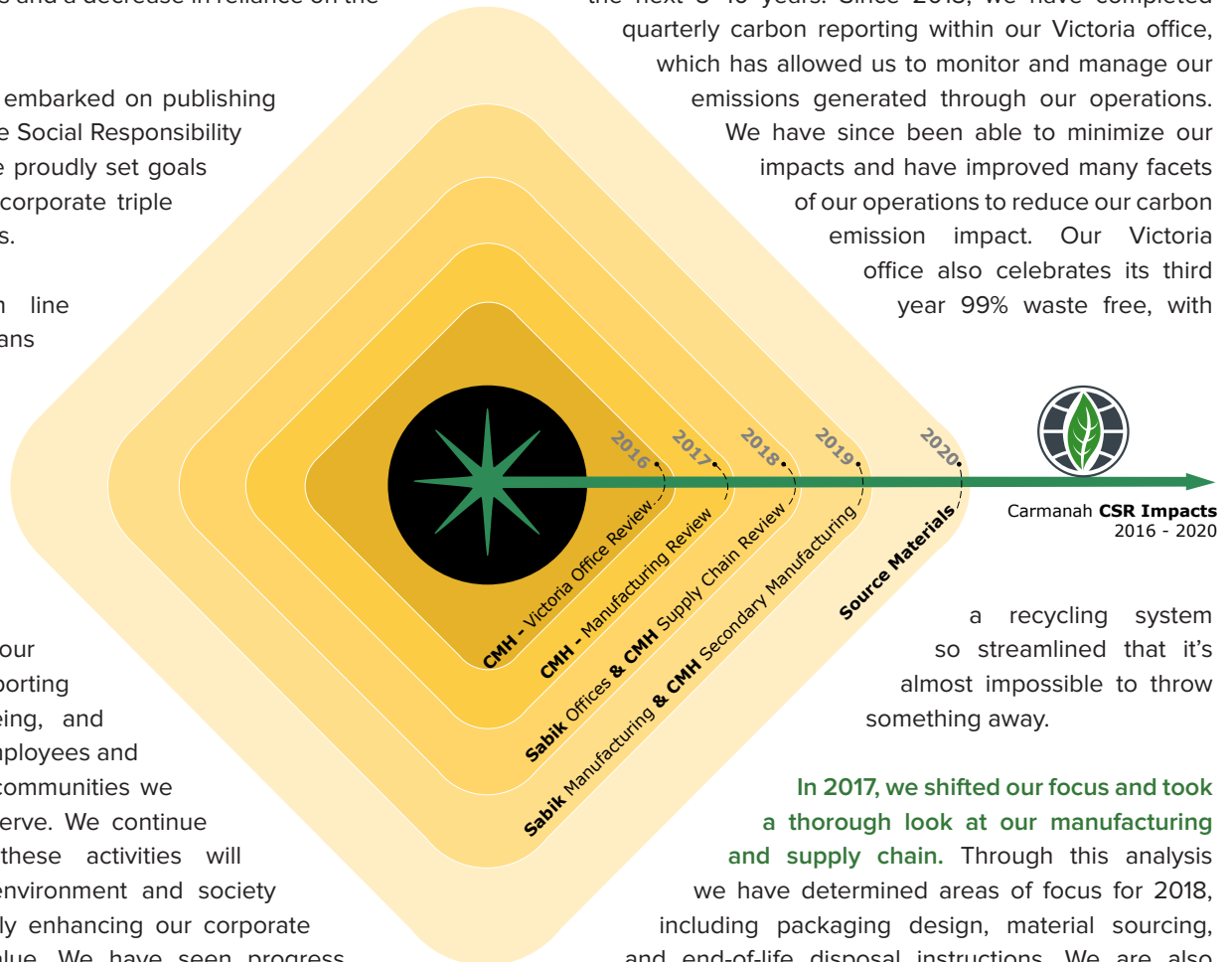
Carmanah designs, develops, and distributes renewable and energy-efficient technologies, with installations in over 110 countries worldwide. The positive environmental impacts of Carmanah's products include a reduction in greenhouse gas (GHG) emissions and a decrease in reliance on the electrical grid.

In 2015, Carmanah embarked on publishing an annual Corporate Social Responsibility Report, in which we proudly set goals 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 are committed to minimizing the environmental impact of our operations and supporting the health, wellbeing, and education of our employees and the people in the communities we interact with and serve. We continue to believe that these activities will benefit both the environment and society while simultaneously enhancing our corporate profitability and value. We have seen progress within many of our initiatives.

**The first step in our strategy was focusing 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.

When we started this journey, we reflected that most of our impact occurs outside of the four walls surrounding our headquarters. Therefore, we have outlined our overall "circle of influence" as an action plan aiming to reach all layers over the next 5–10 years. Since 2015, we have completed quarterly carbon reporting within our Victoria office, which has allowed us to monitor and manage our emissions generated through our operations. We have since been able to minimize our impacts and have improved many facets of our operations to reduce our carbon emission impact. Our Victoria office also celebrates its third year 99% waste free, with



a recycling system so streamlined that it's almost impossible to throw something away.

**In 2017, we shifted our focus and took a thorough look at our manufacturing and supply chain.** Through this analysis we have determined areas of focus for 2018, including packaging design, material sourcing, and end-of-life disposal instructions. We are also committed to discussions regarding a Supplier Code of Conduct with our manufacturing and supply chain, which will be published externally during 2018.

Our goal remains to continue to work towards the very outer rings of the circle of influence. **We will continue to develop initiatives within our areas of influence that will reduce the environmental impact of our company and increase the social and community wellbeing of our stakeholders.**



## About this Report

We are pleased to share our third annual Corporate Social Responsibility (CSR) report, which summarizes our triple bottom line performance for our 2017 fiscal year. While the information in this report is mainly focused on our Victoria, Canada, office, we have expanded our scope to include information on our subsidiary offices, manufacturing, and supply chain.

The “Planet” category in this report includes environmental metrics for 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 need to focus our attention in 2018. This quarterly carbon check-in has proved helpful in focusing our efforts, and we have been successful thus far in reducing our GHG emissions over the past three years. Our performance indicators in the “People” category include current internal initiatives at our Victoria head office, and we have also expanded it to introduce our global teams located in Schwerin, Germany, and Porvoo, Finland. 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 2017 Annual Report.

Going forward, our objective is to continue reporting 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 2019.

Our financial information is audited by an independent, registered public accounting firm. 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.

### 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](http://www.sedar.com) and on the company’s website at [www.carmanah.com](http://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.*

***Going forward,  
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# Carmanah at a Glance

Publicly Traded	TSX:CMH
Year Founded	1996
Corporate Headquarters	Victoria, Canada
Office Locations	Victoria, Canada Schwerin, Germany Porvoo, Finland Edinburgh, United Kingdom Norwich, United Kingdom Tallinn, Estonia Porirua, New Zealand Singapore, Singapore
Brands	<div>  carmanah®             </div> <div>    </div>
Businesses	<b>Signals:</b> <ul style="list-style-type: none"> <li>Airfield Ground Lighting</li> <li>Aviation Obstruction</li> <li>Marine</li> <li>Offshore Wind</li> <li>Telematics</li> <li>Traffic</li> </ul> <b>Illumination:</b> <ul style="list-style-type: none"> <li>Outdoor Lighting</li> </ul>
Employees	Approximately 140 globally
2017 Revenue	Approximately \$52 million USD
Carbon Reporting Period	January 1, 2017 - December 31, 2017
Inventory Boundary	<b>Scope 1 (Direct emissions):</b> Natural gas <b>Scope 2 (Indirect emissions from purchased electricity):</b> Electricity <b>Scope 3 (Indirect emissions from other sources):</b> Water, waste, paper, travel, shipping, service calls, staff commuting
Sustainability Consultant	Synergy Enterprises
Reporting Guidelines	Aligned with those defined in <i>The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition</i> (The GHG Protocol). Emissions factors reviewed and approved by Offsetters.
Contact	Corporate Social Responsibility <a href="mailto:csr@carmanah.com">csr@carmanah.com</a> 250-380-0052



# Our Business

We manage our business within two reporting segments: Signals and Illumination. **Each of our segments 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.

## 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; allows for medivac and emergency response in areas where daylight would have limited activities in the past.

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. Our products are often used instead of much larger, grid connected obstruction lighting systems.

Offshore Wind



**Focus:** Providing integrated marine aids to navigation, ID marking, and aviation obstruction lighting for the complete lifecycle of a wind farm. Temporary (construction) and permanent (operations).

**Sustainability highlights:** Sabik Offshore has marked over 2,200 offshore wind structures, enough to power more than 10 million homes. The Sabik Offshore office, located in Schwerin, Germany, is powered by energy generated through offshore wind.

Marine



**Focus:** Supplying Coast Guards, marine authorities, navies, and ports around the globe with aids to navigation lighting.

**Sustainability highlights:** Our development team is constantly improving our products to be technically, functionally, economically, and ecologically competitive and to be the highest quality in the industry. These performance improvements also contribute to sustainability. Lower energy consumption results in longer service intervals, less need to visit remote sites, and smaller power supply components.

Traffic



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

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

Telematics



**Focus:** Offering remote asset tracking and data capture/transmission powered by solar for new or retrofit devices.

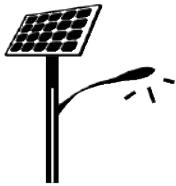
**Sustainability highlights:** Telematics allows for remote monitoring for just about any application that requires it, making both the item and its monitoring more sustainable through reduced trips to check applications and streamlined maintenance schedules.





## Illumination

### Outdoor Lighting

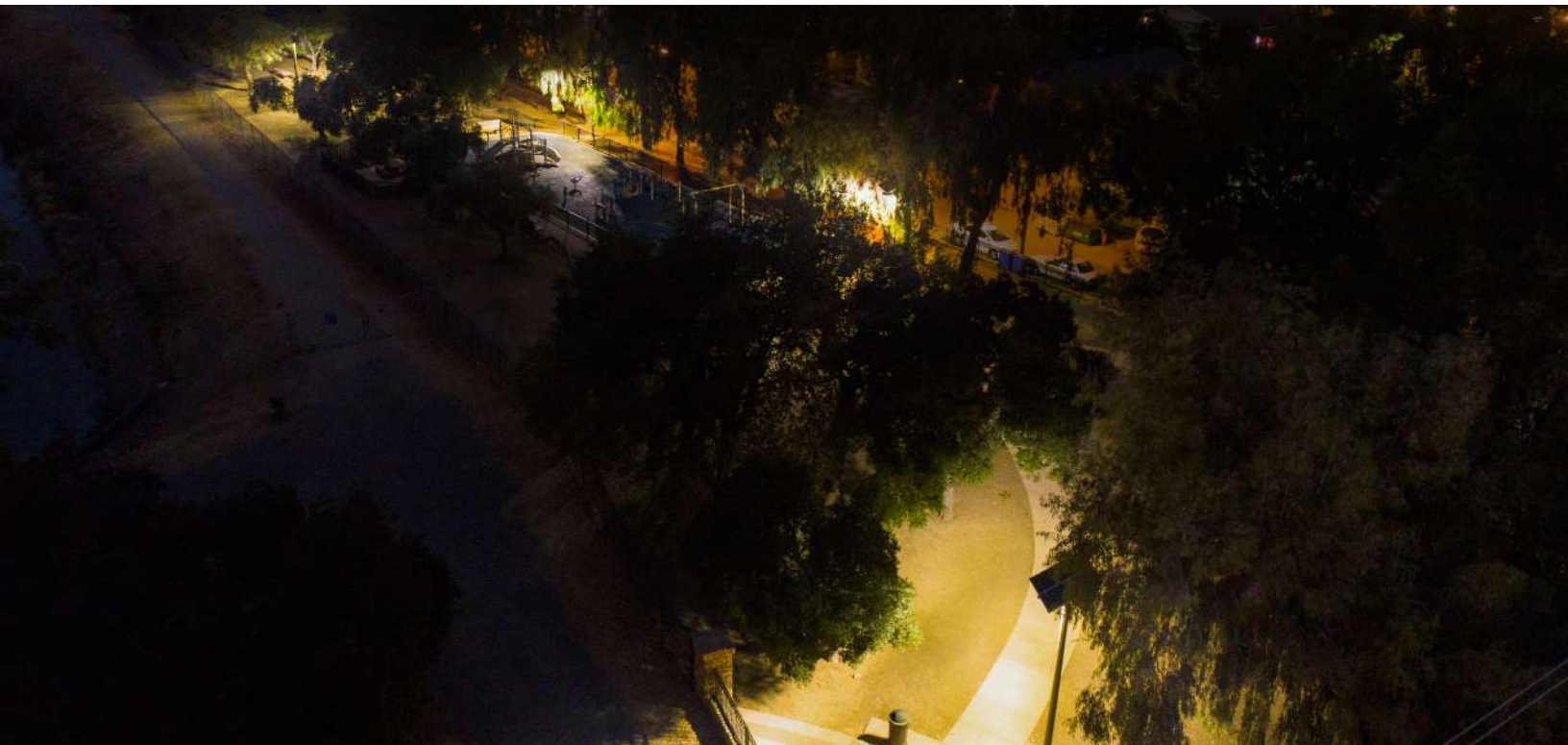


**Focus:** Providing street and roadway, pathway and park, parking lot, perimeter and security, and general area LED lighting.

**Sustainability highlights:** Illumination products promote dark-sky compliance, helping reduce light pollution through scheduled dimming, keeping lights no brighter than necessary, only placing light where it's intended, minimizing blue light emissions, and fully shielding lights to point only downwards.

*We actively support the dark-sky movement and the values the International Dark-Sky Association promotes to protect the night skies for present and future generations.*

*Learn more at <https://solarlighting.com/dark-sky-controls/>.*





# Planet

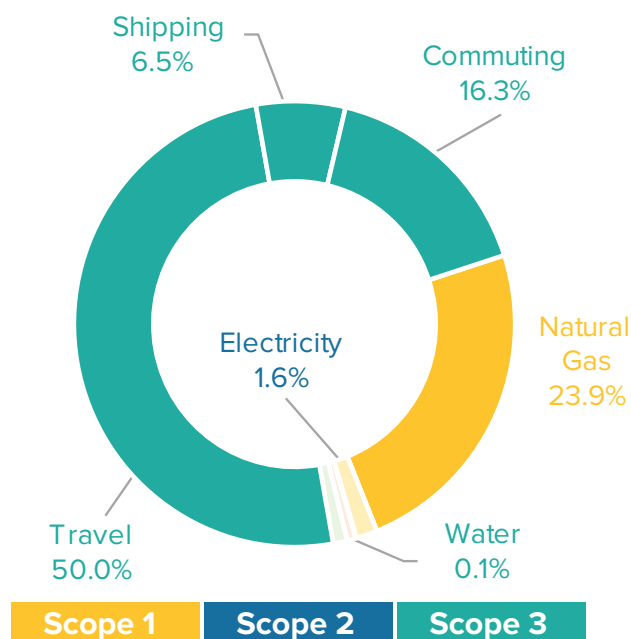
## 2017 HIGHLIGHTS

- Completed greenhouse gas (GHG) emission analysis for 2017 fiscal year.
- **1% overall increase of annual GHG emissions while increasing annual revenues by 8.8%.**
- **99% of office waste diverted from landfill with an 8% reduction of total waste (includes recycling and organics).**
- 16% decrease in emissions generated from staff commuting.
- 31% of employee commuting is done by low-emissions transportation methods (e.g., bike, bus, walk, etc.).
- Introduced product disposal and recycling instructions for new products. Also updating existing product manuals to include disposal and recycling instructions.

## 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 quite well in some areas; however, travel, service calls, shipping, and employee commuting are significant emission sources that could use our attention. This carbon reporting is now part of our internal quarterly KPI reporting. Monitoring our carbon emissions is important to us, as we see this as the first step in expanding our triple bottom line circle of influence. We are pleased to see limited increases in our carbon emissions continue as our annual revenues and awareness increase.

## ANNUAL EMISSIONS (tCO<sub>2</sub>e\*) – VICTORIA HQ



\* Tonnes of Carbon Dioxide Equivalent.

\*\* Emissions for one car on the road for a year is calculated by pairing the average yearly driving distance in British Columbia (~15,000 km) with an average vehicle fuel efficiency (10.3 L/100 km), then converting the total fuel used to GHG emissions.

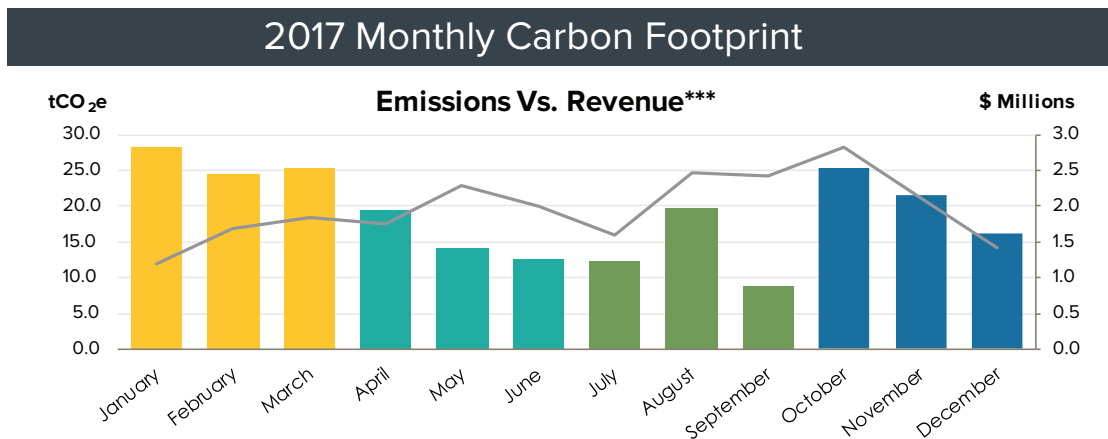




## CARBON FOOTPRINT SUMMARY

Measuring our carbon footprint allows us to understand our greatest areas of impact and best opportunities for reduction. Scope 3 activities drive 72.9% of emissions, with travel and staff commuting the two largest contributors to the overall carbon footprint. Due to increased employee awareness of the effects of water, waste, travel, shipping, and commuting, emissions in our Headquarters have been reduced from 2016 levels.

	Total Emissions (tCO <sub>2</sub> e)	Total Emissions per FTE	Total Emissions per Million Revenue
<b>2014</b>	235.8	4.53	14.04
<b>2015</b>	267.2	4.86	13.59
<b>2016</b>	226.7	3.78	8.79
<b>2017</b>	228.2	4.15	9.68



## SHIPPING

Our shipping emissions have decreased by **29%** since 2016, contributing to a significant drop in shipping-related emissions. While the total weight of content ships was consistent with 2016, we saw the reduction generated through sending these materials in fewer shipments. In 2017, we continued to look into potential ways to decrease these emissions without impacting day-to-day business, and we continue to pursue these reductions. Shipping accounts for a total of 6.5% of our overall carbon footprint.

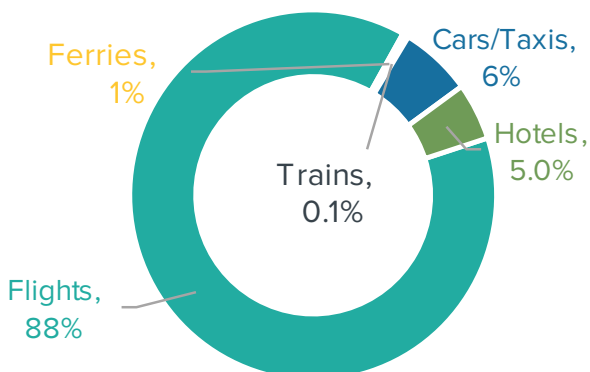
\*\*\* Revenue generated from Carmanah businesses residing in HQ office.



## TRAVEL

Emissions from business travel remained the same this year, with slight increases in air travel. We took 58 more flights, travelling a combined 950,000 km by plane in 2017. We were able to reduce our car and taxi travel significantly to make up for this increased flight travel.

With customers, last mile partners, and Carmanah business operations spread globally, travelling is an imperative part of doing business. Tracking our travel data and correlated tCO<sub>2</sub> emissions helps us to ask the tough questions: do we really need to travel, or could teleconferencing be sufficient? We will continue to examine strategic methods of reducing corporate travel when possible as travel-related emissions make up 50% of our overall tCO<sub>2</sub>e.



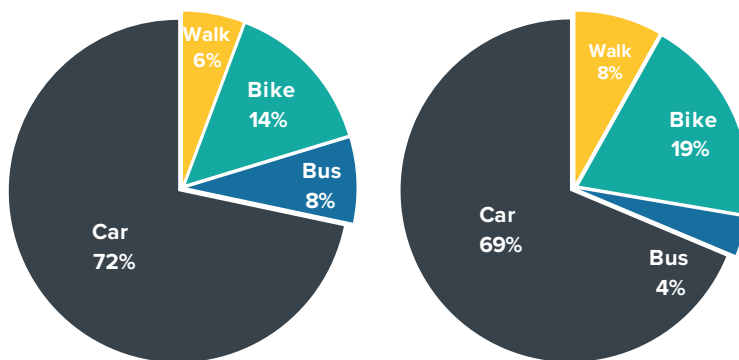
	# of trips	km traveled	tCO <sub>2</sub> e
Flights	516	949,611	100.6
Ferries	63	3,017	0.4
Trains	24	1,255	0.2
Cars/Taxis	321	29,460	7.2
Hotels	457 Nights		5.7

## COMMUTING

Currently, 31% of employees commute through low-emission transportation, such as biking, walking, or public transportation. Commuting emissions have decreased by 16% since 2016.

One very positive transportation-related change we have seen to date was a doubling of the number of staff who biked to work in 2016. In 2016, Carmanah installed a new bike storage facility and participated in Bike to Work Week. It is great for us to see that these efforts have led to continued changes in commuting patterns. We hope to continue to grow our fleet of cyclists through future programs.

Carmanah's commuting-related emissions are 37.1 tCO<sub>2</sub> per year, which is equal to the emissions from 10 cars on the road for one year. We will continue to promote low-emission transportation with the hopes of further reducing commuting-related emissions in 2018.



Previous (2016)

Current (2017)

Average kgCO <sub>2</sub> e/km	0.212
Low-Emission Commuting %	16.0%

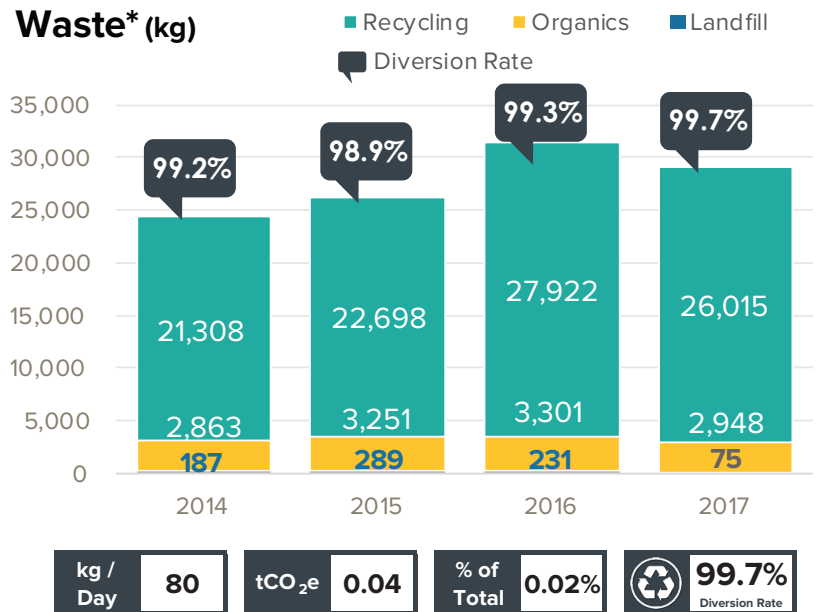
Average kgCO <sub>2</sub> e/km	0.202
Low-Emission Commuting %	31.3%



## WASTE

In 2017, Carmanah lived up to the first of the three R's (reduce, reuse, and recycle) and reduced the total waste generated by 8%. This included reductions in recycling, organics, and landfill waste.

In 2016, we upgraded our recycling stations at HQ to make them simpler to use and more visually appealing. Our recycling station is something that we at Carmanah are very proud of, and we hope that the education about recycling that is provided at work will trickle into our employees' home lives. In 2017, we had a waste diversion rate of 99.7%, with all organics, paper, glass, metals, plastics, cups, and drink containers recycled through our multi-stream recycling system. For a company our size, we are extremely proud of how insignificant the emissions related to our waste are!



## SUPPLY CHAIN REVIEW:

In 2017, Carmanah engaged an external consultant to assess our Victoria operations supply chain, product development processes, manufacturing, and delivery method. This included best practices and recommendations for product and packaging design, materials sourcing, shipping, and end-of-life disposal. This assessment focused on the M800 Series Marine Beacon and the R920 Rectangular Rapid Flashing Beacon: the main focuses in the investigation were material selection, supplier transparency, waste management, carbon mitigation through shipping, and end-of-life disposal.

Managing supply chain impacts is a challenging but important aspect of responsible business operations. The objective of supply chain sustainability is to create, protect, and grow long-term environmental, social, and economic value for all stakeholders involved in bringing products and services to market. Gathering data and increasing transparency are powerful tools for managing risks and understanding opportunities to improve quality and environmental performance. This analysis was the first step in understanding the best practices and areas for improvement in Carmanah's supply chain.

This assessment concluded that our main areas of improvement were in improving our material sourcing transparency, reducing product packaging, and providing customers with end-of-life information for our products.

Note: All manufacturing facilities of Carmanah products are ISO 9001 certified, RoHS Compliant, and have external environmental policies. Carmanah will also work with suppliers to encourage them to obtain ISO 14001 certification in 2018.

\* Waste data from 2014 to 2016 has been restated with corrected weights for organics and recycling. In previous reports, pickups of paper towel recycling from an organic waste service provider were incorrectly included as organic waste, rather than paper towel waste. To correct this, these pickup volumes were moved from organics to recycling, and the weight-to-volume ratio of the material was changed from 0.89 kg/L (Organics) to 0.17 kg/L (Paper towel). With this correction, organics weights have reduced and recycling weights have increased for the years 2014-2016 compared to previous reports. This correction had no effect on Carmanah's historical carbon footprint.



## DESIGN PHILOSOPHY

01

### MINIMUM SIZE

Products are designed to the minimum physical size and weight possible. Limiting size and weight reduces material and shipping costs, and makes product installation faster and easier.

02

### EFFICACY

This is the efficiency of capture, storage, and use of energy within products. Designing with efficacy in mind helps to improve performance and achieve a low physical size.

03

### DURABILITY

Carmanah's products are made to perform in an outdoor environment, often in remote locations. Designing a durable product provides added utility and less hassle to the end customer.

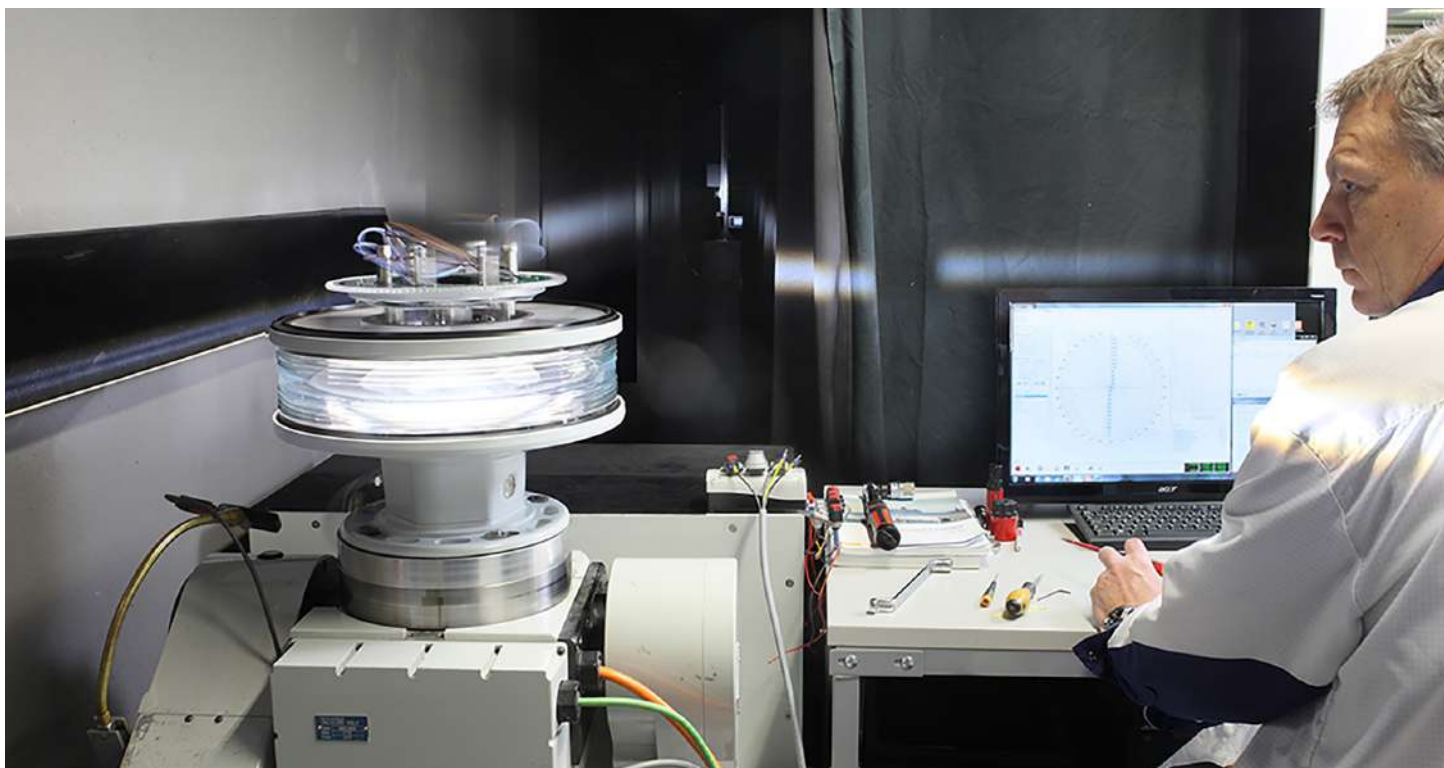
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### RECYCLABILITY

Products are designed to be fully disassembled at the end of life. All plastic components are marked as recyclable, and lead acid batteries are selected based on their ability to be recycled worldwide.

## END OF LIFE PRODUCT INSTRUCTIONS

All Carmanah products are up to the consumer to recycle/dispose of at the end of their usable lives. Through our assessment we realized that our customer-focused product documentation does not include sufficient end-of-life information, and therefore we have directed that all manuals be updated with end-of-life information over the next few years. We are working to include end-of-life information in all new product manuals from 2017 onwards. Product manuals are accessible online or can be requested through our sales and support teams.





## SUPPLIER TRANSPARENCY CODE

Through the supply chain review, completed in 2017, we determined that as a forward-thinking and sustainable company, we should expand our Corporate Code of Business Conduct to include a Supplier Code of Conduct, which formalizes the key principles under which suppliers to Carmanah and its global subsidiaries are required to operate.

The principals in the Supplier Code of Conduct (the Code) state Carmanah's expectations for its suppliers on identified business practices.

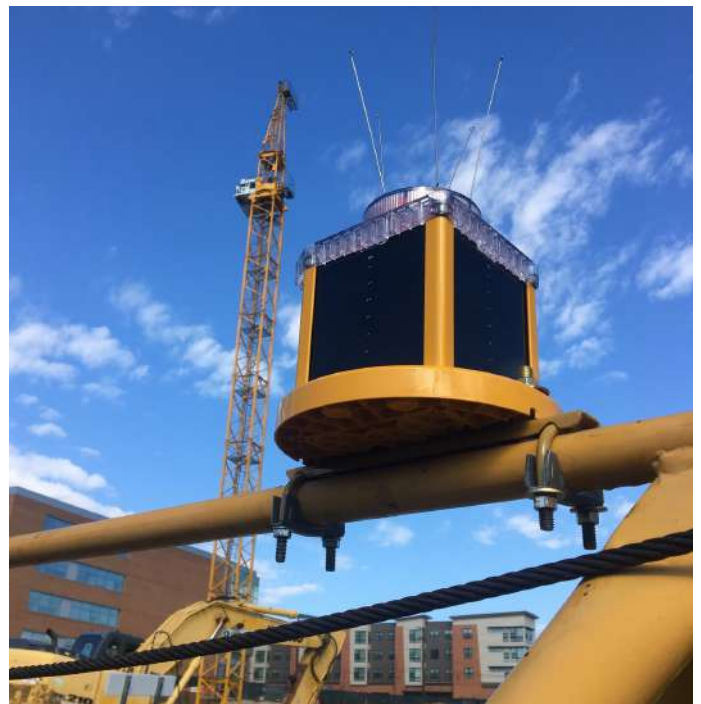
In selecting suppliers, Carmanah seeks to do business with reputable business partners who are committed to ethical standards and business practices compatible with Carmanah's. Carmanah strongly encourages suppliers to exceed the requirements of this Code and promote best practices and continuous improvement throughout their operations.

Carmanah expects its suppliers to act responsibly in all respects and to ensure that no abusive, exploitative, or illegal conditions exist in their supply chains. Carmanah requires that suppliers comply with all applicable laws and regulations, as well as the principles set out in the Code. One tenet of this Supplier Code of Conduct is that Carmanah suppliers must not use any type of involuntary or forced labour; this prohibits, among other things, slave labour or business practices that in any way rely on, or encourage, human trafficking. Where there is no local legal requirement, or if a local legal requirement is not as strict as the requirement included in this Code, Carmanah suppliers are required to follow the requirement in this Code.

Carmanah's suppliers are vital business partners, and together, the principles in our Supplier Code of Conduct provide us with an opportunity to better the lives of the people we touch. We expect to launch our Supplier Code of Conduct in 2018.

## LOOKING FORWARD

Tracking our Victoria office's carbon emissions was the first step in getting our house in order, followed by an assessment of our manufacturing and supply chain. These steps and the actions that will follow have inspired a stronger commitment towards expanding our impact to the edges of our circle of influence. Over the three years we have been reporting emissions so far, we have already seen internal behaviour changes, which are reflected in the lower overall emissions per full-time employee since the 2014 baseline. Over the next few years we will see this commitment to sustainability reverberate to our manufacturing, supply chain, subsidiary offices, distribution, customers, and value chain. We look forward to the learning process that will ensue, and the continuation of our environmental journey.







# People

## INITIATIVES

- Corporate donation matching programs exist for most fundraising initiatives.
- **Over \$33,000 donated to charity organizations since January 2016.**
- **Camosun award:** In 2016, Carmanah introduced the Carmanah Technologies Electronics and Computer Engineering Technology First Year Award. The award goes to a full-time, first-year student in the department of Electronics and Computer Engineering who has a high academic standing, demonstrates an aptitude for a career as an Engineering Technologist, and is supportive of his or her peers. We continued this award in 2017.
- **Science Fair award:** In 2016, Carmanah introduced the Carmanah Technologies Clean Technology Award at the 2016 Vancouver Island Regional Science Fair. This award is presented to an intermediate or senior exhibitor whose project is related to clean technology and shows a passion for renewable technology. The 2017 winner's project generated electricity through pedaling his bike.



## AWARDS

- **2016 VIATEC Employer of the Year award.**  
VIATEC (Victoria Innovation, Advanced Technology & Entrepreneurship Council) awarded Carmanah the Employer of the Year, based on a nomination, staff survey, and observation of work environment. This is an award we are more than honoured to accept.

*"These are the companies who never forget to pause and take the time to think about their staff and provide a positive work environment. This award is based on a company survey of staff and is the tech company most respected and appreciated by their staff."*



### DID YOU KNOW?

Carmanah collaborates with our local Bottle Depot to donate all proceeds from in-office bottles and cans to a local charity of choice. To increase our donation amounts, employees are encouraged to bring in their refundable containers from home. Our 2017 partner was the Mustard Seed Food Bank.





## OUR PEOPLE



### VICTORIA, BC, CANADA

Females  
**32%**

Males  
**68%**

Average age  
**40**

Average tenure  
**5 years**

*Checking out the 2017 solar eclipse.*



### SCHWERIN, GERMANY

Females  
**21%**

Males  
**79%**

Average age  
**45**

Average tenure  
**6 years**



### PORVOO, FINLAND

Females  
**27%**

Males  
**73%**

Average age  
**46**

Average tenure  
**14 years**





## CARMANAH SUPPORTS LOCAL OLYMPIAN-IN-TRAINING

In October 2017, Carmanah publicly announced a yearlong sponsorship of Lauren Babineau, a Victoria-based triathlete with big dreams of competing for Canada at the Olympics. Earlier in 2017, Babineau approached Carmanah to share the story of her personal battles with an eating disorder and wowed us with her willpower and determination in conquering and handling these hurdles while also pursuing triathlon at a world-class level. During our initial discussions with Babineau it became clear that she not only had Olympic dreams, but also was motivated to engage with young adults who might also be battling with eating disorders or other personal barriers. This allied us further, and we set about to find ways to help Babineau fulfill both her athletic and social outreach goals.

Carmanah's team found an outlet for Babineau's social outreach in Big Brothers Big Sisters Victoria (BBBS Victoria), who eagerly accepted Babineau as a volunteer leader for Go Girls!, one of their group mentoring programs. The program focuses on physical activity, balanced eating, and self-esteem for girls ages 9 to 14. Girls attend 10-week mentoring sessions loosely structured around four themes: physical activity, healthy eating, self-esteem, and communication skills. Babineau was a mentor for one of the evening programs in the fall 2017 semester.

In return for her work with BBBS Victoria and other future outreach activities, Carmanah is financially supporting Babineau's triathlon training, travel, and equipment costs. Triathlon, comprising the three separate disciplines of cycling, running, and swimming, is a big financial burden for aspiring competitors.

Carmanah's year-long sponsorship of Babineau continues into 2018 with the potential for other outreach activities before her triathlon training ramps up in the spring. Stay tuned for further updates about our combined Olympic goals and community outreach commitment.



*"Lauren Babineau is an admirable young woman who has had to conquer and manage a severe eating disorder to compete at a world-class level. Her story was so inspiring that we felt we should help—not just to support Lauren's athletic endeavours but also to help her inform and inspire young Victorians as a positive role model."*

*– John Simmons,  
Carmanah CEO*



Photo by Chek News

# GETTING TO KNOW LAUREN BABINEAU

Age: 29

Hometown: BELCARRA, BC

Occupation: ACCOUNT EXECUTIVE



What do you love most about the triathlon?

IT HIGHLIGHTS MY DEDICATION. MY DRIVE. I LIKE COMPETING. I LIKE WINNING. IT'S THRILLING. I LIKE THE FEELING OF ACCOMPLISHMENT AFTER EVERY WORKOUT. I LIKE IT BECAUSE I'M GOOD AT IT. I LIKE FEELING STRONG. I LIKE BEING STRONG. IT GIVES ME CONFIDENCE. I LIKE IMPROVING. I LIKE TO FACE OBSTACLES. I LIKE IT NOT BEING EASY. I LIKE HAVING TO WORK FOR IT. I LIKE HAVING MY MOTIVATION QUESTIONED. I LIKE FINDING NEW WAYS TO LOVE THIS SPORT OF TRIATHLON. IT'S CAUSED SOME OF THE HIGHEST ADRENALINE FILLED MOMENTS IN MY LIFE. I LIKE NOT RUSHING SOMETHING I WANT TO LAST FOREVER.

Where do you see yourself in five years?

DOING SPEAKING APPEARANCES FOR THE RECENT LAUNCH OF MY FIRST BOOK, MANAGING MY SELF-STARTED ATHLETIC MARKETING BUSINESS, QUALIFYING IN TRACK CYCLING FOR PARIS 2024.

What's the top activity on your bucket list?

JUST ONE!? THAT'S HARD... SOME OF MY TOP ACTIVITIES WOULD BE: CLIMB MT. KILIMANJARO, SCUBA DIVE THE GREAT BARRIER REEF, COMPLETE AN IRONMAN, LEARN TO SPEAK FRENCH, TAKE A SAILBOAT TRIP, AND TRY FROG LEGS.

What's your favourite place?

INTERNATIONALLY? BERMUDA. LOCALLY? WHISTLER.

What can't you live without?

MY FOAM ROLLER!

What's your favourite way to give back to the community?

VOLUNTEERING WITH THE GO GIRLS! PROGRAM. I WILL BE BACK AGAIN AND AGAIN!

What movie title best describes your life?

BRING IT ON.





## STAFF PARTICIPATION



## AND MORE!

In 2017, 64% of Victoria employees took advantage of our Health and Wellness subsidies, designed to encourage employees to live a healthy lifestyle and pursue continuous learning. The program motivates staff to participate in fitness-related and/or non-work-related educational activities. The usage of this program has increased by 8% since 2016 due to active promotion by management.





## 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; we always acknowledge and reward exceptional work.

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

- **VIATEC Employer of the Year (2016)**
- **Deloitte Fast 500 Technology List – Ranked 415 (2016)**
- **Greatest Overall Contributor – VIATEC Food Bank Challenge (Nov 2016)**
- **University of Victoria Co-Op Employer of the Year (2015)**
- **ACE Industry Partner of the Year (2015)**
- **Technology Excellence – Vancouver Island Eco Star Awards (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 2017 fiscal year.

All figures below, unless otherwise stated, are for Carmanah's continuing operations and exclude the operating results from the Company's Power business segment. The company completed the sale of the On-Grid division on April 3, 2017, and the sale of the Off-Grid division on August 1, 2017.

## FISCAL 2017 REVENUES AND PROFITABILITY

For the year ended December 31, 2017, we generated revenues of USD \$51.9 million, up USD \$4.2 million or 8.8% over 2016 revenues of USD \$47.7 million. The Signals segment generated revenues of USD \$48.0 million, up USD \$8.1 million or 20.3% over 2016 revenues of USD \$39.9 million. This growth included USD \$5.1 million or 12.7% from organic growth. The Illumination segment generated revenues of USD \$3.9 million, down USD \$3.9 million or 49.7% over 2016 revenues of USD \$7.8 million.

Gross margin percentage for the year was 41.6%, down 1.4%, over the same period in 2016.

Our total core operating expenses for the year were USD \$18.6 million, up from USD \$16.5 million in 2016. A majority of this increase was due to the same factors apparent in the fourth quarter of 2017. Net income for the year was USD \$1.4 million, down from USD \$2.9 million in fiscal 2016.

For the year ended December 31, 2017, Adjusted EBITDA\* was USD \$7.1 million or 13.6% of revenue, roughly comparable to the USD \$7.0 million, or 14.7% of revenue, reported in the same period in 2016.

*"2017 was a very active year for Carmanah during which we made significant progress towards our plan to increase focus and enhance our Signals segment leadership. We acquired two marine aids-to-navigation businesses that we are in the process of consolidating into our global marine business to expand our product platform and deliver targeted cost savings. These acquisitions, together with solid organic growth, helped to solidify our aids-to-navigation market leadership," said John Simmons, CEO. "And while we are pleased with our Signals business progress in 2017, our Illumination business remained challenging. During 2017, we streamlined our Illumination product offering and revamped our approach to the market. We are hopeful that these investments will help us reverse recent revenue declines and return this business to both growth and profitability. Early signs are encouraging, as our Illumination backlog entering 2018 stood at USD \$1.3 million, up from USD \$0.6 million a year earlier and USD \$0.3 million at the end of the third quarter of 2017."*

\* 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 2017 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 write offs, 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 three and twelve months ended December 31, 2017 for a more detailed discussion of these measures and their calculation.





Highlights for the year are provided below:

	Year ended December 31	
(US\$ thousands)	2017	2016
Revenue	51,939	47,742
Gross margin %	41.6%	43.0%
Core operating expenditures	(18,643)	(16,531)
Net income	1,392	2,917
Adjusted EBITDA*	7,084	7,020

\*Adjusted EBITDA is a Non-IFRS measure.

### FINANCIAL CONDITION AT DECEMBER 31, 2017, COMPARED TO DECEMBER 31, 2016

- Cash and cash equivalents of USD \$11.8 million, down USD \$10.1 million from USD \$21.9 million, primarily due to the acquisitions of EKTA and Vega, and our Substantial Issuer Bid.
- Working capital of USD \$21.2 million, down USD \$0.4 million from USD \$21.6 million.

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

2017 Financial Statements and Management's Discussion & Analysis are available on Carmanah's corporate website. To view these documents, visit: <https://carmanah.com/company/financial-reports>. Both documents are also filed on SEDAR ([www.sedar.com](http://www.sedar.com)). The financial information included in this release is qualified in its entirety and should be read together with the audited consolidated financial statements for the year ended December 31, 2017, including the notes thereto.

