

# **Management Discussion & Analysis**

**Financial Years Ended  
September 30, 2017 and  
September 30, 2016**  
(expressed in Canadian Dollars)



January 29, 2018

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This Management Discussion and Analysis "MD&A" explains the material changes in BluMetric's financial condition and results of operations for the year ended September 30, 2017. The MD&A should be read in conjunction with the Company's audited consolidated financial statements and related notes for the year ended September 30, 2017 as well as the MD&A and audited consolidated financial statements and notes for the year ended September 30, 2016. The information provided in this document is not intended to be a comprehensive review of all matters concerning the Company.

This discussion and analysis of the financial condition and the results of operations contain forward-looking statements about expected future events and the financial and operating performance of the Company. These statements, which include descriptions of the Company's business strategy, potential variances impacting the Company's internal and external performance drivers, and the Company's ability to meet its ongoing working capital needs through the ensuing 12 months, are included in the "Selected Financial Information", "Liquidity", and "Business Outlook" sections which follow. These statements are not guarantees of future performance and are subject to risks and uncertainties that could cause actual results to differ materially from those in the forward-looking statements. This MD&A also makes reference to certain non-IFRS measures to assist users in assessing BluMetric's performance. Non-IFRS measures do not have any standard meaning prescribed by IFRS and are therefore unlikely to be comparable to similar measures presented by other issuers. These measures are identified and described under the section "Financial Terms and Definitions".

## **Business Overview and Strategy**

In 1977, BluMetric started by providing water and soil assessment services to its clients, primarily in the land development market. For over forty years, BluMetric, a Canadian company, has provided cost-effective and sustainable solutions to help its clients overcome their most difficult water related environmental and business challenges. The Company has evolved into a broad spectrum environmental solution provider setting a standard of care that follows water from its source to its return to the environment. BluMetric's strategy is to deliver a product, service or system that helps its clients successfully manage their water related environmental, health, and safety responsibilities. By building partnerships with its customers, BluMetric provides a long-term holistic approach to water management, differentiating itself from competitors that simply provide a single service or product.

BluMetric focusses its efforts in North America, a geographic region with significant growth potential in markets where BluMetric has had its greatest success. Operating from ten offices in North America, the Company has served hundreds of clients from the Panama Canal to the Arctic Circle. The business continues to stabilize and focus on value-added solutions for target industries and clients. In order to stay competitive, the Company will continue to develop strategic alliances and search for cutting-edge technologies that provide better products and services.

The BluMetric team of experts consists of highly experienced and motivated scientists, environmental specialists, engineers, occupational and industrial hygienists, environmental auditors, project managers, financial specialists, and support personnel.

## **Technology and Innovation**

Innovation is driven by client demands as they face more stringent environmental regulations or the emergence of a previously unknown contaminant. Finding a solution for a specific problem is a creative process that helps differentiate BluMetric from its competitors. Creating a commercial product that caters to those needs in the marketplace is innovative. A commercial product must satisfy the scientific aspect of the problem, but to be economically viable it must fill a significant demand in the marketplace. All potential new products or technologies go through a stage gate process to confirm the technology works and the potential market is of sufficient size to provide a return on investment. The following products and technologies, which represent 2017 initiatives, have been evaluated in light of these requirements.

**Ammonia Removal** – In the previous MD&A the problems associated with surplus ammonia in the environment and the resulting regulatory and political pressure were described. In 2017 these problems have persisted and public awareness and pressure has increased. As a result, there is continued and increased interest in BluMetric's ammonia removal systems.

MARS is the Company's primary ammonia removal system. This membrane-based system reduces ammonia by direct absorption. The design can cut capital costs of a traditional treatment plant by 40% and the operating costs are 50% lower than a standard activated sludge plant of comparable size. These potential savings differentiates BluMetric from its competitors.

During 2017 the Company continued to pilot-test its ammonia removal system with multiple clients, with specific focus on landfill leachate and mine wastewater. As a result of these efforts, BluMetric has secured orders for an ammonia removal system for a centralized waste treatment facility specializing in the treatment of landfill leachate and an order for the treatment of wastewater generated by a gold mine. The Company has also conducted pilot work with a large landfill management company for the treatment of ammonia and other emerging contaminants.

There are currently several kindred ammonia removal pilot test programs in place and planned for 2018, with focus on leachate, mining, and food processing wastewaters.

**Wastewater Treatment** - As stated in the previous MD&A, the Company has applied for patents for both MARS and CR3. During Q3 2017, the patent application for the MARS product was amended to consolidate it with the CR3 process. Interlocking this technology with the Company's existing patent (VDR) strengthens its position and affords greater coverage. Existing trademarks will continue to be protected with additional applications for trademark protection for the BluMod and BrewMod membrane products. Ongoing discussions with the US Patent Office indicate progress in securing a patent for MARS.

The commercialization of the COBRA, Activator, and VDR products has been completed and employee training is underway. Commercialization of the MARS, BluMod, and BrewMod series of products will continue into Q2 2018.

The commercialization of these products has the following advantages:

- Streamlines the quotation process
- Reduces the reliance on engineering for the development of budget proposals
- Increases the accuracy of the costing process
- Provides an efficient platform for sales training
- Delivers a concise and credible presentation to potential clients

**Cyanide** – In late 2016 mining regulators changed the cyanide limits for the effluent exiting the tailings ponds and mining facilities. Pilot testing has begun on a new treatment process and based on the results, a patent application has been generated. The process and patent application will continue to be refined in 2018.

**Continuing Research** - BluMetric continues to pursue new opportunities by conducting scientific research on various processes, economic research on the potential market size, and regulatory and political research on the market drivers. The following represent the three most critical endeavours for 2018.

1.) Emerging Contaminants - BluMetric has developed a method to remove PFOA, PFOS, and other emerging contaminants and suspected carcinogens, from contaminated groundwater. A full scale pilot incorporating this technology will come on line in Q2 of fiscal year 2018.

2.) Acid Mine Drainage and zero liquid discharge - A full scale pilot, with a technology partner in the oil, gas, and mining sector, was completed in Q3 of fiscal year 2017 and came on line in Q4 of fiscal year 2017. It will reduce the water footprint by removing dissolved solids and recycling the water.

3.) Enhanced Primary Treatment – EPT is an array of developing innovative products that reduce the load to the treatment plant by intercepting, removing, and recovering thermal and organic energy from wastewater.

BluMetric will continue to foster and develop strategic partnerships where these alliances either augment the Company's technologies or expand the Company's geographic reach.

## **Sales and Marketing**

BluMetric has returned to its business development strategy that has made it successful in the past. Understanding clients' environmental issues and preventing problems is key. Focus has been narrowed to key markets where the Company has the deepest skill sets. Satisfied clients provide repeat business as well as incredibly valuable word-of-mouth advertising to allied companies. The Company's sales approach is continuing to evolve with innovative products, channel-to-market reps, technology based partnerships, and license agreements.

In North America the focus is on these key markets:

- Mining
- Food and Beverage
- Industrial Wastewater
- Military
- Government (with specific expertise in Northern Canada)
- Commercial and Industrial Land Development/Redevelopment

**Mining** - Historically most of BluMetric's work in the mining sector has been at existing operations. In 2017 the Company experienced increased exposure with greenfield mining projects. As examples, the Company has been retained by a major base metals company to provide environmental permitting support for a proposed new mine in Northern Ontario, and is currently preparing the environmental chapter for a feasibility study for a proposed gold mine

in northern Manitoba. There is a significant amount of interest in mine water treatment solutions from mine developers. The Company's consulting experience, relationships with mine development consultants and experience providing mine water treatment systems for new and existing mines puts it in a good position to take advantage of the next growth cycle in new mine developments. Based on the level of activity, the Company believes that mining is entering its next upswing.

**Food & Beverage** – In 2017 this market saw increased activity in Ontario and Central America. BluMetric's systems are well suited to treat the varied wastewater streams generated from the production of snack foods, dairy products, processed meats, beer, and soft drinks. The COBRA and VDR systems are competitive due to their smaller footprint and lower capital investment, but their most attractive characteristic is their lower operating cost.

**Industrial** – In 2017 the bulk of the sales in this market included commercial sewage treatment for non-municipal applications, as evidenced by recent wins from a manufacturer in the Dominican Republic, as well as a land developer in Québec. During the later portion of 2017 this market expanded to include the treatment of high strength industrial wastes coming from landfills and chemical plants. Nutrient removal, specifically nitrogen, will be critical for a large portion of the Company's industrial clients in 2018 and the MARS product for ammonia removal will be a door opener in this market.

**Military** – Sales efforts are focused on the maintenance of our existing contracts, as well as the development of smaller scale products for future consideration by DND.

**Government (North)** - Sales effort here are led by a team, primarily out of the Kingston office, experienced in the logistical details required for Northern work. They continue to capitalize on their past experience and successful completion of major projects. Sales success is based on a great track record, the trust built with Northern clients and a physical presence in Yellowknife and Whitehorse. These three key factors differentiate BluMetric from its competitors and will support growth in 2018.

**Commercial and Industrial land development/redevelopment** - This continues to be one of the largest business groups and is driven by expanding development and redevelopment work in the Toronto market. Customers trust, coupled with exceptional work completed over decades in the GTA, differentiates BluMetric from its competitors.

## **Board of Directors**

The Board of Directors currently consists of six members, four of whom are independent. The independent directors reflect a wide range of senior experience in the management of publicly traded and privately held companies. The Board members have expertise in finance, operations, management, and governance for environmental companies, as well as other enterprises.

## **Executive Management**

The Senior Management team comprises: Dan Scroggins, Senior Vice President, Research and Innovations and Interim Chief Executive Officer; Vivian Karaiskos, Chief Financial Officer; Byron O'Connor, Senior Director, Engineering; and Tim Beckenham, Senior Director, Consulting Services.

This team is supported by well-qualified and experienced managers that lead business development, production, health and safety, operations and every other aspect of the corporation.

## **Our People**

The BluMetric team consists of approximately 165 experienced environmental professionals. They are experts in providing a comprehensive range of water related environmental services and engineered solutions, from contaminated site assessment and remediation to complete turn-key wastewater treatment systems.

Staffing levels fluctuate seasonally with the hiring of contract staff and students to meet peak demand periods. The Company strives to recruit and retain highly skilled employees, able to use their technical expertise to deliver creative solutions. BluMetric's employees are its greatest asset.

## **Diversity**

Diversity is inherent at BluMetric. Approximately 20% of the team were born outside of Canada from countries where day-to-day struggles can dwarf BluMetric's business challenges. BluMetric offices stretch from San Salvador to Yellowknife and its staff speak fourteen different languages and come from a wide range of cultural, ethnic, educational, religious, and political backgrounds. Women represent 45% of the workforce from welders and field service technicians to the top members of the executive team and Board of Directors.

In physics, strength comes from uniformity, but in business strength comes from diversity. BluMetric's goal is to capitalize on that strength while affording the team members the greatest opportunity to excel, grow, and contribute to business and society.

## Selected Financial Information

The following table shows selected consolidated financial data for BluMetric for the three most recently completed fiscal periods.

**For the years ended September 30, 2017, September 30, 2016 and September 30, 2015**

	<b>2017</b>	<b>2016</b>	<b>2015</b>
	<b>\$</b>	<b>\$</b>	<b>\$</b>
<b>Total revenue</b>	30,528,483	31,493,595	33,478,800
<b>Gross margin</b>	6,439,220	6,348,459	7,379,448
<b>Gross margin percentage of total revenue</b>	21%	20%	22%
<b>Total operating expenses</b>	5,413,175	4,927,183	5,604,440
<b>Net income</b>	334,367	588,365	1,015,590
<b>Weighted average number of shares outstanding - basic</b>	27,880,140	27,880,140	23,235,850
<b>Net income per share</b>	0.01	0.02	0.04
<b>Total assets</b>	10,728,957	12,887,742	14,742,961
<b>Working capital</b>	1,079,023	3,381,893	(1,799,504)
<b>Long term debt</b>	3,823,328	4,504,648	3,765,066
<b>Shareholders' equity</b>	2,362,147	2,022,090	1,364,692

## RESULTS

### Overall Annual Performance



The following are the Company's major achievements during the year:

- **Continued profitability** - The Company has successfully implemented margin improvement and cost reduction programs. There is a solid platform to continue to deliver sustained future growth.
- **Sales approach** – in 2017 BluMetric strengthened its focus and direction by establishing clearer regional and sector targets. The targets and assignment of responsibility in some instances were to capitalize on growing opportunities for work, such as government contracts. In other instances, moves were made to recognize the regional nature of the Company's business, such as in Quebec, and the need for regional leadership to facilitate success. In 2017 the Company implemented a Proposal to Project Delivery (P to D) project management system. This system has already improved delivery times and has led to improved margins on specific projects. An experienced sales director was added to the systems team and the sales approach was refocused specifically targeting the mining and food and beverage sectors.
- **Mining expertise** - BluMetric's business within the mining sector continued to grow in strength, both in terms of revenue generation and the delivery of complex engineering solutions as it moves beyond the assessment of problems to the development and implementation of remedial strategies. BluMetric earned its reputation for delivering a quality product and now counts several Fortune 25 mining companies as clients. In 2018 the Company will be fully engaged in detailed design for water collection systems and pumping systems at several projects for another major mining company. This design work for 2018 amounts to over \$2.0 million of design fees at industry established margins, and the Company is in discussions with its client about encompassing the design/build approach with some of these projects. Other projects for this mining client

that are currently entering the final stages of characterization will proceed to detailed design next year.

- **Government Northern Work** - Success was again achieved in the government sector at all tiers, but BluMetric's reputation for the delivery of integrated consulting services, particularly across the north, continued to gain traction. The Company is seen as a leading provider of consulting services ranging through hydrogeology, geomatics, industrial hygiene and large scale site remediation in a region differentiated by logistical and resource constraints, an area in which the Company has thrived. In 2017, BluMetric successfully completed a project for the Government of the Northwest Territories involving well installations at six communities across the territory. This \$600,000 project required logistics expertise and relied on an extensive network in the north. The Company is currently conducting a \$600,000 water demand strategy study for the Ontario Ministry of Environment and Climate Change (MOECC) which will provide a high level of visibility.
- **Risk Assessment** – The Company has a significant backlog of risk assessment work in the order of \$500,000 in professional fees for the Toronto office. There is tremendous potential in risk assessment in this major market.
- **MARS** – The Company has achieved substantial completion of a MARS for Harte Gold at a new mine in Northern Ontario and started design/build work for a mine water treatment system for an iron ore mine in Labrador.
- **International** – The Company continues to be successful with new projects in Central America and the Caribbean, with projects in El Salvador and the Dominican Republic.
- **Pilots** - The research and innovation group was contracted by one of the largest waste management companies in North America to design and construct a landfill leachate pilot system for one of their landfills in eastern Ontario. The pilot system has been constructed and will be commissioned in spring of 2018. The Company has also been contracted to implement full-scale treatment systems in Tennessee and Ohio for a major wastewater management company in the US. The Company was contracted to build and commission a pilot treatment system for the oil and gas sector at a facility in Edmonton.
- **Military** – Military projects continued to be delivered on time and on budget.

## Results of Operations

	Three Months Ended				Twelve Months Ended			
	Sept 30, 2017	Sept 30, 2016	Change	Change	Sept 30, 2017	Sept 30, 2016	Change	Change
	\$	\$	\$	%	\$	\$	\$	%
Revenue	7,586,788	7,258,418	328,370	5%	30,528,483	31,493,595	(965,112)	-3%
Gross profit	1,693,998	1,088,762	605,236	56%	6,439,220	6,348,459	90,761	1%
Gross margin %	22%	15%			21%	20%		
Operating Costs	1,579,687	1,053,101	526,586	50%	5,413,175	4,927,183	485,992	10%
EBITDA <sup>1</sup>	198,356	134,227	64,129	48%	1,403,768	1,876,092	(472,324)	-25%
Adjusted EBITDA <sup>2</sup>	195,489	187,720	7,769	4%	1,454,740	1,741,815	(287,075)	-16%
Net income	(53,783)	(86,774)	32,991	-38%	334,367	588,365	(253,998)	-43%
Weighted average common shares outstanc	27,880,140	27,880,140			27,880,140	27,880,140		
Net income per share	(0.00)	(0.00)			0.01	0.02		
Total assets					10,728,957	12,887,742	(2,158,785)	-17%
Working capital					1,079,023	3,381,893	(2,302,870)	-68%
Long term debt					3,823,328	4,504,648	(681,320)	-15%
Shareholders' equity					2,362,147	2,022,090	340,057	17%

Note 1: EBITDA is a non-IFRS measure (see "Financial Terms and Definitions") and is calculated as net income before interest expense, income taxes, depreciation, and amortization.

Note 2: Adjusted EBITDA is a non-IFRS measure ("see Financial Terms and Definitions") and is calculated as EBITDA before gain or loss on foreign exchange, stock based compensation, gain or loss on sale of property, plant and equipment, unrealized gains on investments held for sale and impairment of goodwill.

## Discussion of Results and Financial Condition for the Financial Year Ended September 30, 2017

This analysis compares the financial year ended September 30, 2017 with the financial year ended September 30, 2016.

### Revenue

During the financial year ended September 30, 2017, total revenue was \$30.5 million (September 30, 2016 - \$31.5 million), a decrease of approximately \$1.0 million (3%). The decrease is due in part to a large project in the prior year, and a slower than anticipated delivery on some newer projects towards the end of this fiscal period.

The Company is working toward increasing revenue from engineered solutions projects over the coming year and this initiative is supported by the addition of two dedicated sales staff and a streamlined proposal team.

The Company operates in three geographical areas, Canada (country of domicile), the United States, and focused international (primarily Central America).

Sales reported by client location based on origin of purchase (i.e. domicile of contracting party, not final destination of equipment) are as follows:

	For the three months ended September 30		For the twelve months ended September 30	
	2017	2016	2017	2016
	\$	\$	\$	\$
Canada	<b>7,033,985</b>	6,842,161	<b>29,822,688</b>	29,687,495
International	<b>542,607</b>	262,005	<b>662,825</b>	1,136,815
United States	<b>10,196</b>	154,252	<b>42,970</b>	669,285
	<b>7,586,788</b>	7,258,418	<b>30,528,483</b>	31,493,595

Gross margin for the financial year ended September 30, 2017 was \$6.4 million, or 21% (September 30, 2016 - \$6.3 million or 20%), which represents a slightly improved year over year performance.

Operating costs for the year ended September 30, 2017 were \$5.4 million, a \$500,000 increase from the prior year. Significant causes for the increase include the reversal of an impairment loss and a gain on sale of property in FY2016 compared to a loss on sale of property in FY2017, as well as increased consulting and professional fees.

Finance costs of \$691,678 for the year ended September 30, 2017 were significantly decreased from the \$813,068 reported a year earlier. This was due primarily to signing a new, more favourable banking arrangement at the end FY2016 with lower recurring monthly bank fees.

Net income for the year ended September 30, 2017 was \$334,367 compared with net income of \$588,365 in the previous year.

Shareholders' equity increased to \$2.4 million at September 30, 2017 from \$2.0 million at September 30, 2016. The improvement is a result of the income for the year offset by share based compensation impacting contributed surplus.

The Consolidated Statement of Financial Position as at September 30, 2017 showed working capital of \$1.1 million, compared to \$3.4 million reported a year ago. Two items have negatively impacted working capital as at September 30, 2017. The first relates to a mortgage on the Company's building at 3108 Carp Road coming due on July 16, 2018 and therefore being reclassified as a current liability. The second relates to the reclassification of the Company's five year term loan, which was required under IFRS as a result of a cross default provision in the Company's loan arrangement. See the Liquidity section for further details.

## EBITDA and Adjusted EBITDA (see "Financial Terms and Definitions")

	For the three months ended September 30		For the twelve months ended September 30	
	2017	2016	2017	2016
	\$	\$	\$	\$
Net income	(53,783)	(86,774)	334,367	588,365
Depreciation of property, plant and equipment	19,739	34,260	120,495	174,703
Amortization of intangible assets	64,306	64,306	257,228	299,956
Finance costs	168,094	122,435	691,678	813,068
EBITDA	198,356	134,227	1,403,768	1,876,092
Foreign exchange loss (gain)	1,541	31,853	1,038	(24,338)
Share-based compensation	7,554	21,640	5,690	69,033
Loss (gain) on disposal of property, plant and equipment	-	-	68,762	(172,876)
Realized gain on investment held for sale	(11,962)	-	(24,518)	(6,096)
Adjusted EBITDA	195,489	187,720	1,454,740	1,741,815

The Company recorded adjusted EBITDA of \$195,000 and \$1.5 million for the three and twelve months ended September 30, 2017, a decrease from the same periods in 2016 due largely to lower net income.

### Highlights Fourth Quarter 2017

Revenues in the fourth quarter of 2017 were \$7.6 million compared with \$7.3 million for the quarter ended September 30, 2016, an increase of \$300,000 or 5%. This was partially due to an increase in activity in a number of consulting projects, most specifically in government work. In addition, there was an increase in engineered solutions projects over the prior year quarter with new projects in the mining and food and beverage sectors.

Operating expenses increased to \$1.6 million in Q4 2017 from \$1.1 million a year earlier. This increase is due largely to an increase in bad debt expense, as well as increased consulting and professional fees.

The net loss for the quarter was \$53,783 compared with net loss of \$86,774 for the comparable quarter in the previous year.

## Quarterly Results

Quarterly financial information for the eight quarters ended September 30, 2017  
 (in 000's, except as otherwise indicated)

	<b>Q4 2017</b>	<b>Q3 2017</b>	<b>Q2 2017</b>	<b>Q1 2017</b>
	<b>Sept 30, 2017</b>	<b>June 30, 2017</b>	<b>March 31, 2017</b>	<b>Dec 31, 2016</b>
Revenue	7,587	7,434	7,219	8,288
Cost of sales	5,893	5,989	5,615	6,592
Gross profit	1,694	1,445	1,604	1,696
Gross margin %	22%	19%	24%	20%
Operating expenses	1,580	1,205	1,349	1,279
Finance costs	168	170	165	189
Net income (loss)	(54)	70	90	228
Weighted average common shares	27,880,140	27,880,140	27,880,140	27,880,140
Income (loss) per share	(0.00)	0.00	0.01	0.01
	<b>Q4 2016</b>	<b>Q3 2016</b>	<b>Q2 2016</b>	<b>Q1 2016</b>
	<b>Sept 30, 2016</b>	<b>June 30, 2016</b>	<b>Mar 31, 2016</b>	<b>Dec 31, 2015</b>
Revenue	7,258	8,378	7,920	7,938
Cost of sales	6,169	6,507	6,007	6,461
Gross profit	1,089	1,871	1,913	1,476
Gross margin %	15%	22%	24%	19%
Operating expenses	1,053	1,269	1,368	1,237
Finance costs	122	231	247	213
Net income	(87)	371	289	15
Weighted average common shares	27,880,140	27,880,140	27,880,140	27,880,140
Income (loss) per share	(0.00)	0.01	0.00	0.01

## Quarterly Trend Analysis

Historically, the Company's consulting projects have followed a seasonal pattern with the second and third quarters, ended March 31 and June 30 respectively, experiencing relatively lower levels of activity when compared to the balance of the year. This seasonality is in large part weather-related, as it is easier and more productive to conduct outdoor environmental investigations, site remediation, and construction-related projects in Canada during the summer. In addition, the December holiday period can have a significant impact on activity levels possible in that quarter (BluMetric's first quarter) depending on how it falls in the month.

#### **Q4 17 vs Q4 16**

For the fourth quarter of 2017 revenue was \$7.6 million compared to \$7.3 million in the fourth quarter of 2016. This was due to increased activity in project work across the Company. The net loss for the quarter was \$54,000 compared with net loss of \$87,000 for the same quarter in the previous year. While there was a \$600,000 improvement in gross margin, there was an offsetting increase in operating costs of \$527,000. The gross margin improvement is due to larger activity in engineered solutions projects, which typically have higher gross margins. The increase in operating costs is largely the result on an increase in the bad debt provision as well as increased consulting and professional fees.

#### **Q3 17 vs Q3 16**

For the third quarter of 2017 revenue was \$7.4 million compared to \$8.4 million in the third quarter of 2016. There was a decrease in engineered solutions to fewer active engineered solutions projects compared to Q3 of 2016 as well as the timing of several retrofit projects that started towards the end of Q3 2017. The sales cycle for engineered solutions projects is long and can range between 6 to 18 months. Subsequent to Q3 2017, the Company announced contract signings for these types of projects in excess of \$1.0 million. Consulting projects were impacted by a general slow-down in government programs, primarily due to delays in government procurement and funding allocation. Net income was \$70,000 for Q3 2017 compared to \$371,000 for Q3 2016. This is due largely due to lower margins from the consulting projects in Q3 2017. The quarter was also impacted by a \$69,000 impairment related to an office building that was sold subsequent to quarter end and was therefore written down to its net recoverable amount during the quarter.

#### **Q2 17 vs Q2 16**

For the second quarter of 2017 revenue was \$7.2 million compared to \$7.9 million in the second quarter of FY 2016. This \$700,000 decrease was caused partially by a decrease in projects related to parts and services, compared to the prior year quarter, which had some larger one time projects delivered. Net income for Q2 2017 was \$90,000 compared to \$289,000 in Q2 2016. This decrease is due primarily to lower overall revenue and margin from projects related to parts and service, engineered solutions and military. However with the consulting projects, while the revenue was lower quarter over quarter, the margin was higher for an overall net positive impact on income.

#### **Q1 17 vs Q1 16**

For the first quarter of 2017 revenue was \$8.3 million compared to \$7.9 million in the first quarter of FY 2016. The \$400,000 improvement reflected a \$700,000 increase from manufacturing and assembly projects offset by a decrease in revenue from engineered solutions projects of \$400,000. This decline is due to a slower-than-anticipated ramp-up of new engineered solutions projects. There was also a \$100,000 increase from the consulting projects. Net income for Q1 2017 was \$228,000 compared to \$15,000 for Q1 2016. This increase is almost entirely due to higher gross profit achieved by consulting projects.

## Liquidity

The Company's short-term credit facilities consist of an operating demand loan in the amount of \$2,500,000 with a \$500,000 sublimit for letters of credit. The facility carries a floating interest at prime plus 2.25%, is collateralized by a first ranking general security agreement over all of the Company's present and future assets, and is subject to margining based on the amounts of eligible accounts receivable. Each letter of credit must be 100% guaranteed in favour of the bank through a separate program provided by the Export Development Corporation. This replaces the Company's previous line of credit, which consisted of an operating line of credit in the amount of \$2,000,000 at a floating rate of prime plus 3.50%. At September 30, 2017, the effective interest rate under this facility was 5.45% (2016 – 6.20%).

The Company also has a corporate credit card facility in the amount of \$165,000.

As at September 30, 2017, the Company had drawn \$510,218 on its operating demand loan (September 30, 2016 \$949,691) and it had drawn \$199,211 in outstanding letters of guarantee (September 30, 2016 - \$ nil). The letters of guarantee expire on July 26, 2018.

The Company has certain covenants in accordance with its short-term credit facilities. As at September 30, 2017, the Company was in default of one of its covenants with respect to its fixed charge coverage ratio. The non-compliance was triggered by its mortgage on its office building at 3108 Carp Road coming due on July 16, 2018 and therefore being classified as a current liability as at September 30, 2017. The Company is arranging alternative financing with respect to this mortgage and expects to have a new agreement in place shortly

In addition to the above credit facilities, the Company entered into an agreement with a lending institution on September 12, 2016 for a secured five-year term loan in the amount of \$2,500,000. This loan bears interest at a rate of 10% and requires the Company to pay royalty fees on gross revenue beginning February 2018. The royalty rate is tiered and applies at a rate of 0.35% of gross revenue up to \$38,000,000, and then decreases to 0.15% of gross revenue in excess of that amount. As of September 30, 2017 \$106,254 (September 30, 2016 -\$nil) was accrued in other accruals and payables with respect to these royalties.

The Company has certain covenants in accordance with this term loan, as well as cross default provisions with the Company's credit under its short-term credit facility arrangement.

As of September 30, 2017, the Company was in compliance with its covenants under the term loan agreement. However, given the breach of the fixed charge coverage ratio covenant under its short-term credit facilities and the cross default provisions, the entire amount of the term loan has been included in the current portion of long-term debt. The Company has received a waiver from its lender of the cross default provision of the term loan. However, the Company is still required to re-classify the five year term loan at September 30, 2017 to current liabilities under IFRS.

In fiscal year 2018, the Company is actively pursuing a focused service strategy, improved cost control and the sale of non-core assets, as well as the pursuit of new revenue contracts. In addition, the credit and loan arrangements described above, which were concluded on

September 12, 2016, have provided the Company with additional capital to fund its growth initiatives. The Company has generated net earnings for the year ended September 30, 2017 as well as for the previous two fiscal years and anticipates having sufficient funds over the next twelve months to discharge its liabilities. Once the Company is able to secure alternative arrangements for the mortgage on its property or the underlying property is sold, it anticipates being able to meet all debt covenants. Nevertheless, there is no assurance that these ongoing initiatives will continue to be successful.

## **Business Outlook**

***The following comments include forward-looking information and users are cautioned that actual results may vary.***

The Company is targeting both organic revenue growth and growth through association with technology suppliers. BluMetric's focus will continue to be on improving project margins while reducing overhead costs.

The best opportunities for growth are on projects where the client's operating expenses can be reduced as a result of proposed solutions and where solutions help clients meet more stringent regulatory requirements.

## **Capital Resources**

The Company's future growth strategy contemplates investment in various technologies and processes requiring capital for prototyping purposes. Accordingly, the Company may opportunistically approach capital markets for additional equity funding if conditions are favourable.

## **Business Risks**

The Company is subject to risks and uncertainties in the normal course of business that could materially affect the financial condition of the Company. These risks and uncertainties include, but may not be limited to, the following:

- Macroeconomic risk of recession in key markets or the economy as a whole;
- Reliance on key clients;
- Failure to retain and develop key personnel;
- Competition from companies which are better-financed or have disruptive technologies;
- Major swings in currency valuations after setting the price of foreign contracts; and
- Cybersecurity threats.

## **Off-Balance Sheet Arrangements**

The Company has no off-balance sheet arrangements.

## Transactions with Related Parties

All related-party transactions are conducted under terms and conditions reflecting prevailing market conditions at the transaction date and are recorded at the amounts agreed upon by the parties.

## Proposed Transactions and Subsequent Events

As at September 30, 2017, the Company has its office property at 3108 Carp Road for sale. There are no other significant assets or business acquisitions or dispositions being considered by the Company.

## Inter-Corporate Relationships

BluMetric has one wholly owned subsidiary, BluMetric S.A. de C.V., located in El Salvador.

## Financial Instruments

The following table summarizes information regarding carrying values of the Company's financial instruments:

Classification	Measurement	2017		2016	
		Carrying value \$	Fair value \$	Carrying value \$	Fair value \$
Loans and receivables					
Cash	amortized cost	22,117	22,117	314,360	314,360
Short-term investments	amortized cost	-	-	100,000	100,000
Accounts receivable	amortized cost	4,731,687	4,731,687	4,547,825	4,547,825
Other assets	amortized cost	95,000	95,000	251,282	251,282
		<u>4,848,804</u>	<u>4,848,804</u>	<u>5,213,467</u>	<u>5,213,467</u>
Other financial liabilities					
Bank indebtedness	amortized cost	536,385	536,385	556,662	556,662
Trade and other payables	amortized cost	3,616,859	3,616,859	4,958,746	4,958,746
Advances	amortized cost	60,000	60,000	68,627	68,627
Contingent consideration	fair value	-	-	156,282	156,282
Long-term debt	amortized cost	3,823,328	3,823,328	4,504,648	4,504,648
Due to shareholders	amortized cost	55,502	55,502	55,502	55,502
		<u>8,092,074</u>	<u>8,092,074</u>	<u>10,300,467</u>	<u>10,300,467</u>

## Risk Management

The Company is exposed to various risks in relation to its financial instruments. The Company's financial assets and liabilities by category are summarized below. The main types of risk are credit risk, market risk and liquidity risk.

The Company's risk management is coordinated in close cooperation with the Board of Directors, and focuses on actively securing the Company's short to medium-term cash flows by

minimizing the exposure to financial markets. The Company does not actively engage in the trading of financial instruments for speculative purposes nor does it write options.

### Credit risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its obligations. The primary financial instrument that potentially exposes the Company to credit risk is accounts receivable.

The Company has credit evaluation, approval and monitoring processes intended to mitigate potential credit risks. The Company performs ongoing credit evaluations of new and existing customers' financial condition and reviews the collectability of its receivables in order to mitigate any possible credit losses.

The Company's management considers all financial assets, which are not impaired or past due for each of the September 30, 2017 and September 30, 2016 reporting dates are of good credit quality.

Accounts receivable that are past due and present a potential credit risk are as follows:

	<b>2017</b>	<b>2016</b>
	\$	\$
Past due 61 to 90 days	129,777	302,156
Past due greater than 90 days	844,914	877,070
Allowance for doubtful accounts	(168,877)	(115,724)
	<u>805,814</u>	<u>1,063,502</u>

The continuity of the allowance for doubtful accounts is as follows:

	<b>2017</b>	<b>2016</b>
	\$	\$
Balance - Beginning of year	115,724	766,801
Bad debt expense provision	303,512	284,686
Recoveries	(127,633)	(173,873)
Accounts written off	(122,726)	(761,890)
	<u>168,877</u>	<u>115,724</u>

At the end of the year, five customers (2016 - two customers) accounted for 36% (2016 - 32%) of accounts receivable.

## Liquidity risk

Liquidity risk is the risk the Company may not be able to meet its financial obligations as they come due. The Company currently settles all of its financial obligations out of cash and bank indebtedness. The ability to do so relies on the Company collecting its accounts receivable in a timely manner and by maintaining sufficient cash in excess of anticipated needs.

The following table outlines the liquidity risk associated with the Company's payment obligations as at September 30, 2017 and September 30, 2016, respectively.

	<b>2017</b>				
	<b>Total</b>	<b>Less than</b>	<b>4 - 12</b>	<b>1 - 5</b>	<b>Over 5</b>
	<b>\$</b>	<b>3 months</b>	<b>months</b>	<b>years</b>	<b>years</b>
		<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Trade and other payables	3,616,859	2,876,582	740,277	-	-
Advances	60,000	-	-	60,000	-
Long-term debt	3,823,328	2,459,783	998,846	364,699	-
Due to shareholders	55,502	-	-	55,502	-
	<b>7,555,689</b>	<b>5,336,365</b>	<b>1,739,123</b>	<b>480,201</b>	<b>-</b>
	<b>2016</b>				
	<b>Total</b>	<b>Less than</b>	<b>4 - 12</b>	<b>1 - 5</b>	<b>Over 5</b>
	<b>\$</b>	<b>3 months</b>	<b>months</b>	<b>years</b>	<b>years</b>
		<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Trade and other payables	4,958,746	3,860,275	786,335	312,136	-
Advances	68,627	-	8,627	60,000	-
Finance lease obligation	562	562	-	-	-
Long-term debt	4,504,648	20,864	125,655	3,995,429	362,700
Due to shareholders	55,502	-	-	55,502	-
	<b>9,588,085</b>	<b>3,881,701</b>	<b>920,617</b>	<b>4,423,067</b>	<b>362,700</b>

## Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates and interest rates, will affect the Company's net earnings or the value of its financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable limits, while maximizing returns.

- Interest rate risk

Interest rate risk is the risk the fair value or future cash flows of financial instruments will fluctuate because of changes in interest rates. As at September 30, 2017, the Company had \$22,117 in cash and \$536,385 in bank indebtedness, which were floating rate obligations. A 1% increase in interest rates during the reporting period would decrease net earnings and equity for the period by approximately \$5,000.

- Foreign currency risk

Currency risk is the risk the fair value or future cash flows of a financial instrument will fluctuate because of changes in currency exchange rates.

The Company operates internationally and is therefore subject to foreign currency risk as follows:

	2017		2016	
	CAD	US	CAD	US
	\$	\$	\$	\$
Cash	-	-	516,910	394,076
Accounts receivable	280,313	224,610	354,308	270,114
Bank indebtedness	26,167	20,967	-	-
Trade and other payables	2,346	1,880	250,262	190,792

The Company incurs expenses and earns revenues in Canadian and US dollars. To date the Company has not used foreign currency forward contracts or other hedging strategies to manage its foreign currency exposure.

A 10% strengthening of the US dollar against the Canadian dollar would have increased the net income and increased equity during the reporting period by approximately \$25,000.

### Capital management

The Company's objective is to maintain a capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. Management defines capital as comprising the Company's total shareholders' equity, credit facilities, advances and long-term debt. In order to maintain or adjust its capital structure, the Company may issue or repurchase share capital, or obtain or reduce long-term debt. To date, no dividends have been paid to the Company's shareholders.

There were no changes in the Company's approach to capital management during the year ended September 30, 2017 (2016 – no change).

### Summary of Outstanding Shares and Dilutive Instruments

The Company currently has the following shares and dilutive instruments outstanding:

Shares:	27,880,140 common shares
Warrants:	nil
Options:	1,177,375 options

## Financial Terms and Definitions

### Definition of Additional IFRS Measures

IFRS mandates certain minimum line items for financial statements and requires presentation of additional line items, headings, and subtotals when such presentation is relevant to an understanding of a company's financial position and performance. Because IFRS requires such additional GAAP measures, the measures are considered additional IFRS measures rather than non-IFRS measures. The Company believes that the measures defined here are useful for providing investors with additional information to assist them in understanding components of our financial results.

**Gross Profit.** Gross profit is calculated as gross revenue minus direct expenses and direct payroll costs. Direct expenses are certain costs incurred in the delivery of our services such as subcontractors, equipment, and other expenditures that are recoverable directly from clients. Direct payroll costs include the cost of salaries and related fringe benefits for employees. The monitoring of gross margin percentage levels ensures the Company is within the established acceptable range for the profitability of operations.

### Definition of Non-IFRS Measures

This Management Discussion and Analysis includes reference to and uses terms that are not specifically defined in IFRS and do not have any standardized meaning prescribed by IFRS. These non-IFRS measures may not be comparable to similar measures presented by other companies. The measures defined here are useful for providing investors with additional information to assist in understanding components of the financial results.

**EBITDA.** EBITDA represents net income before interest expense, income taxes, depreciation of property and equipment, and amortization of intangible assets. EBITDA assists measuring operating performance of the Company. There is no direct comparable IFRS measure for EBITDA.

**Adjusted EBITDA.** Adjusted EBITDA additionally excludes items that are significant and irregular (such as the sale of a building or goodwill impairment), non-cash based (such as share-based compensation), or non-operational in nature (such as foreign exchange gains and losses).

Management believes that Adjusted EBITDA as defined above is an important indicator of the Company's ability to generate liquidity through operating cash flow to fund future working capital needs, service outstanding debt and fund future capital expenditures and uses the metric for this purpose. Adjusted EBITDA is also used by investors and analysts for valuation purposes. The intent of the Adjusted EBITDA is to provide additional useful information to investors and analysts and the measure does not have any standardized meaning under IFRS. Adjusted EBITDA should therefore not be considered in isolation or used in substitute for measures of performance prepared in accordance with IFRS. Other issuers may calculate Adjusted EBITDA differently.

## **Management's Responsibility for Financial Reporting**

The consolidated annual financial statements of BluMetric Environmental Inc. and all the information in this Management Discussion and Analysis have been prepared by management, which is solely responsible for the integrity and fairness of the data presented, including the many amounts, which due to necessity, are based on estimates and judgments. The accounting policies followed in the preparation of these consolidated annual financial statements conform to International Financial Reporting Standards. When alternative accounting methods exist, management has chosen those that it deems most appropriate in the circumstances. Financial information presented throughout this report is consistent with that in the consolidated financial statements.

BluMetric maintains systems of internal accounting and administrative controls to provide reasonable assurance that the financial information is relevant, reliable and accurate and that transactions are authorized, assets are safeguarded and proper records are maintained.

The Board of Directors is responsible, principally through its Audit Committee, for ensuring that management fulfills its financial reporting responsibility.

## **Additional Information**

Additional information on the Company can be found at [www.blumetric.ca](http://www.blumetric.ca) and at [www.sedar.com](http://www.sedar.com).