Management Discussion & Analysis

Financial Years Ended
September 30, 2019 and
September 30, 2018
(expressed in Canadian Dollars)



January 23, 2020

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, 2019. The MD&A should be read in conjunction with the Company's audited financial statements and related notes for the year ended September 30, 2019 as well as the MD&A and audited consolidated financial statements and notes for the year ended September 30, 2018. 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 "Discussion of Results and Financial Condition for the Financial Year Ended September 30, 2019", "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-GAAP measures to assist users in assessing BluMetric's performance. Non-GAAP 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

BluMetric Environmental Inc. ("BluMetric" or the "Company"), a Canadian company, provides 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 solutions provider that follows water from its source to its return to the environment. BluMetric's strategy is to deliver a solution that will help its clients successfully manage their water related environmental, health, and safety responsibilities. BluMetric builds partnerships with its customers by providing a long-term holistic approach to water management. This degree of service differentiates BluMetric from competitors that simply provide a one size fits all product or service.

BluMetric focuses its efforts in North America. Operating from nine offices, the Company has served hundreds of clients from the Panama Canal to the Arctic Circle. BluMetric is proud to be a trusted provider of services to many of Canada's northern Indigenous communities; working side by side to make the environment a cleaner and safer place.

The BluMetric team of experts consists of highly experienced and motivated hydrogeologists, engineers, occupational and industrial hygienists, environmental auditors, environmental scientists, chemists, project managers, finance professionals, trades and support personnel.

Technology and Innovation

Innovation is driven by client demands as they face more stringent environmental regulations or the emergence of previously unregulated contaminants. Finding a solution for a specific problem is the creative process that differentiates BluMetric from its competitors. An innovative solution must be scientifically and economically viable. All potential new services, 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 reduction or treatment of emerging contaminants, such as Poly Fluorinated Compounds (PFCs) as well as the reduction of total dissolved solids (TDS), especially chloride, continues to be evaluated by the stage gate process.

Ammonia Removal – Ammonia is recognized as a significant nutrient contaminant responsible for the degradation of water quality. Government and public pressure has not abated and will continue to be the motive force behind the implementation of stricter effluent limits for the mining, landfill, and industrial markets. BluMetric's patented ammonia removal process, MARS, has been used in several full scale treatment systems in the mining and landfill sectors and has become an integral part in most of the proposals generated for these markets. This membrane-based process reduces ammonia by isolation and direct adsorption. Environmental compliance, reduced capital costs and reduced operational costs are the main advantages of the MARS process.

Cyanide – In late 2016 mining regulators changed the cyanide limits for the effluent exiting the tailings ponds and mining facilities. In close association with the Company's technology partners the pilot testing program was refined and continued in fiscal year 2019.

Emerging Contaminants – 1-4 Dioxane, poly fluorinated compounds (PFC), cobalt, selenium, arsenic, and antimony have emerged as contaminants of concern in the mining, landfill, and military markets. BluMetric, in conjunction with its technology partners, has developed processes to accomplish the following:

- Biologically destroy 1-4 Dioxane.
- Physically isolate and remove PFCs from wastewater, leachate, and groundwater.
- Physically and chemically remove emerging problematic metals from mining, leachate, and industrial wastewater.

The destruction of the PFCs removed by the physical steps noted above continues to be a challenge and will represent an area of focus for 2020.

Sales and Marketing

BluMetric's business development is focused on four key markets:

- Mining
- Military
- Commercial and Industrial (site remediation and wastewater)
- Government (with specific expertise in Northern Canada)

BluMetric uses a client-centric approach in business development which involves an emphasis on understanding the clients' environmental issues and then identifying and preventing potential problems. This approach allows BluMetric to provide an integrated solution for all of the client's environmental issues.

Environmental concerns are evaluated to determine if they are client specific or market driven. This evaluation helps select the appropriate course of action, identifies trends and allows BluMetric to be more pro-active to the future demands of the market.

The Company augmented its bench strength in the mining and commercial and industrial sectors to focus on the delivery of projects and the development of new opportunities.

Satisfied clients provide repeat business as well as incredibly valuable word-of-mouth advertising. BluMetric continues to actively leverage the successes of past projects to expand and diversify client relationships, strategic partnerships and service offerings.

Board of Directors

On November 4, 2019, Vijay Jog resigned from the 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.

Executive Management

The Senior Management team comprises: Scott MacFabe, Chief Executive Officer; Vivian Karaiskos, Chief Financial Officer; Tim Beckenham, Senior Director, Operations; and Wayne Ingham, Director, Strategic Business Development.

This team has extensive business and environmental experience and is well supported by highly qualified and experienced managers.

Our People

The BluMetric team consists of approximately 153 hydrogeologists, engineers, environmental scientists, industrial hygienists, project managers, skilled tradespeople, finance professionals and support personnel. They are experts in providing a comprehensive range of 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 who are able to use their technical expertise to deliver creative solutions to complex environmental issues.

Diversity

BluMetric is committed to the principles of diversity. The Company strives to create and support an inclusive work environment that respects and values the contributions of all employees and their individual differences. BluMetric's employees come from a wide range of cultural, ethnic, educational, religious, and political backgrounds. Women represent 48% of the workforce from welders and field service technicians to the top members of the executive team and Board of Directors.

To that end, BluMetric's goal is to capitalize on the strength derived from diversity 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 financial data for BluMetric for the three most recently completed fiscal years.

For the years ended September 30, 2019, September 30, 2018 and September 30, 2017

	2019	2018	2017
	\$	\$	\$
Total revenue	28,252,230	32,246,586	30,528,483
Gross margin	5,861,762	6,760,929	6,439,220
Gross margin percentage of total revenue	21%	21%	21%
Total operating expenses	4,899,743	5,670,222	5,413,175
Earnings before provision for income tax	479,207	543,580	334,367
Net earnings	350,918	2,659,198	334,367
Weighted average number of shares outstanding - basic	28,675,695	28,494,885	27,880,140
Earnings per share- basic and diluted	0.01	0.09	0.01
Total assets	12,452,982	14,522,893	10,728,957
Working capital	4,226,850	4,005,477	1,079,023
Non-current liabilities ¹	3,727,654	3,742,642	3,938,830
Shareholders' equity	5,588,963	5,237,735	2,362,147

¹- includes the demand loan for comparability with prior periods

Results of Operations

	Three Months Ended			Twelve Months Ended				
	September 30,	September 30,			September 30,	September 30,		
	2019	2018	Change	Change	2019	2018	Change	Change
	\$	\$	\$	%	\$	\$	\$	%
Revenue	6,626,168	8,562,502	(1,936,334)	-23%	28,252,230	32,246,586	(3,994,356)	-12%
Gross profit	1,421,875	1,820,278	(398,403)	-22%	5,861,762	6,760,929	(899,167)	-13%
Gross margin %	21%	21%			21%	21%		
Operating costs	1,274,470	1,477,188	(202,718)	-14%	4,899,743	5,670,222	(770,479)	-14%
EBITDA ¹	174,554	426,612	(252,058)	-59%	1,067,889	1,269,065	(201,176)	-16%
Earnings before provision for income tax	37,486	208,952	(171,466)	-82%	479,207	543,580	(64,373)	-12%
Income tax expense (recovery)	(1,784)	(2,115,618)	2,113,834	-100%	128,289	(2,115,618)	2,243,907	-106%
Net earnings	39,270	2,324,570	(2,285,300)	-98%	350,918	2,659,198	(2,308,280)	-87%
Weighted average common shares outstanding	28,675,695	28,675,695	-		28,675,695	28,494,885	180,810	
Earnings per share- basic and diluted	0.00	0.08	-		0.01	0.09	-	
Total assets Working capital Non-current liabilities¹ Shareholders' equity					12,452,982 4,226,850 3,727,654 5,588,963	14,522,893 4,005,477 3,742,642 5,237,735	(2,069,911) 221,373 (14,988) 351,228	-14% 6% 0% 7%

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.

Discussion of Results and Financial Condition for the Financial Year Ended September 30, 2019

The Company had a number of successes in the fiscal year ended September 30, 2019, while it continued to implement operational improvements and focus on key markets and service offerings.

Key highlights for the year include:

- U.S. Market Teaming Agreement with Brown and Caldwell –The Company partnered
 with a leading, 100% environmental American cleantech company in a mutually
 beneficial agreement. Through this teaming agreement, BluMetric will support its
 American partner in accessing new opportunities in Canada and will also allow BluMetric
 to service Canadian clients with a U.S. presence. Additionally, this teaming agreement
 provides a basis to expand BluMetric's reach for water technology solutions.
- BluMetric was ranked among Canada's top 75 defence companies, an accomplishment that confirms the Company's place as an important competitor in the Defence Market.
- The Company was awarded and launched a \$4.1 million contract with Seaspan Shipyards for the provision of highly specialized water purification systems aboard Royal Canadian Navy Joint Support Ships (JSS).
- Continued to apply an enhanced level of discipline in opportunity screening and selection process. This process has ensured a reduced risk profile for projects undertaken.
- Investments were made to support the development of new water treatment technology related to the production of clean water in remote settings. These investments will continue in response to the interest and demand identified in the mining sector and Indigenous communities throughout Canada. Creating cost-effective water solutions for governments and private industry opens up new revenue opportunities for BluMetric.
- BluMetric continued to build working relationships with several key Indigenous partners
 including forming a Joint Venture Alliance in northern Ontario, allowing greater access
 to opportunities particularly in the mining market. The Company successfully pursued
 opportunities to provide drinking water treatment systems in remote settings working
 with our indigenous partners.
- Successful in increasing the significance of clients in the mining industry as well as the commercial industrial sector in remote northern settings.
- Strength within the GTA continued with a rise in environmental site assessment, remediation and risk assessment projects within the commercial-industrial sector focused on land development.

During the financial year ended September 30, 2019, total revenue was \$28.3 million (September 30, 2018 - \$32.2 million), a decrease of approximately \$4.0 million (-12%). The decline is primarily explained by multiple one-time engineered solutions projects in 2018 that did not reoccur in fiscal year 2019 in both the mining and commercial-industrial markets (a

decline of approximately \$3.0 million). In addition, the Company experienced a decline in revenue from the Government market, both at the provincial and federal level. The reduction in federal government revenue (approximately \$1.0 million) is attributed to an election year and the timing associated with the renewal of the federal contaminated sites program. The reduction in provincial government revenue (approximately \$2.0 million) is attributed to the occurrence of several one-time large provincial and territorial assignments in fiscal year 2018, such as the undertaking of remedial projects as a result of fuel spills. These assignments are not predictable and vary from year to year. The Company continues to successfully pursue the standing offer contract mechanisms by which much of the work is assigned by the Government sector and is confident it will see a lift in revenue as opportunities arise. This was offset by an increase in revenue from the Military market (increase of approximately \$2.3 million), where the Company was awarded contracts for various equipment upgrades, as well as replacement kits for parts. These contracts are considered one time in nature.

Gross margin for the financial year ended September 30, 2019 was \$5.9 million, or 21% (September 30, 2018 - \$6.8 million or 21%).

Operating costs for the year ended September 30, 2019 were \$4.9 million, a \$770,000 decrease from the prior year. Operating costs in the prior year included \$250,000 in severance costs related to the Company's previous CEO representing salary, bonus and vacation. In addition, it included approximately \$230,000 in costs of the Company's El Salvador operations, which was sold in July 2018. The remainder of the decrease relates to the collection of past due invoices that had been previously deemed uncollectible as well as improved credit risk management resulting in lower bad debt expense (reduction of \$265,000 from the prior year), reduced consulting costs of approximately \$150,000 and other miscellaneous reductions. These were offset by an increase in salaries due to the introduction of a performance based incentive program for the Company's employees. This is a new program implemented during the year ended September 30, 2019 to drive employee behaviour that is consistent with the Company achieving its business goals of revenue growth and profitability.

Finance costs of \$482,812 for the year ended September 30, 2019 were decreased from \$547,127 reported a year earlier. This was primarily due to lower overall overdrafts on the Company's operating line of credit, the renegotiation of a mortgage at the end of Q2 2018 as well as decreased royalties from lower gross revenue compared to the prior year.

Earnings before the provision for income tax for the year ended September 30, 2019 were \$479,207 compared to \$543,580 in the previous year.

Net earnings for the year ended September 30, 2019 were \$350,918 compared to \$2.7 million for the year ended September 30, 2018. During the year ended September 30, 2018 the Company recognized a deferred income tax asset of \$2.1 million. The deferred income tax asset will be used to offset future taxable income and is comprised mainly of loss carry forwards which will expire between 2029 and 2034 and deductions for tax related to capital (CCA) and scientific research and development (SR&ED). Prior to the year ended 2018, the Company had not recognized deferred tax assets as it was not considered probable that taxable income

would be available on which to use the loss carryforwards and other deductible temporary differences.

Shareholders' equity increased to \$5.6 million at September 30, 2019 from \$5.2 million at September 30, 2018.

The Statement of Financial Position as at September 30, 2019 showed working capital of \$4.2 million, compared to \$4.0 million reported a year ago.

In the current year, the Company was in compliance with all its covenants.

EBITDA (see "Financial Terms and Definitions")

		For three months ended September 30		For twelve months ended September 30	
	2019	2018	2019	2018	
	\$	\$	\$	\$	
Net income	39,270	2,324,570	350,918	2,659,198	
Finance costs	109,919	134,138	482,812	547,127	
Income tax expense	(1,784)	(2,115,618)	128,289	(2,115,618)	
Depreciation and amortization	27,149	83,522	105,870	178,358	
EBITDA	174,554	426,612	1,067,889	1,269,065	

The Company recorded EBITDA of \$174,554 and \$1.1 million for the three and twelve months ended September 30, 2019.

The decline in EBITDA, both year over year and quarter over quarter, is mainly due to a decline in revenue and a corresponding decline in gross profit, offset by lower operating costs, excluding amortization and depreciation. See "Discussion of Results and Financial Condition for the Financial Year Ended September 30, 2019" and "Quarterly Results" for further information on the factors contributing to the variances.

Quarterly Results

Quarterly financial information for the eight quarters ended September 30, 2019 (in 000's, except as otherwise indicated)

	Q4 2019	Q3 2019	Q2 2019	Q1 2019
	Sep 30, 2019	Jun 30, 2019	Mar 31, 2019	Dec 31, 2018
Revenue	6,626	7,035	6,990	7,601
Cost of sales	5,204	5,738	5,508	5,940
Gross profit	1,422	1,297	1,481	1,661
Gross margin %	21%	18%	21%	22%
Operating expenses	1,274	1,170	1,197	1,259
Finance costs	110	115	122	135
Earnings before provision for income tax	37	12	162	267
Income tax expense (recovery)	(2)	3	50	78
Net earnings	39	10	112	189
Weighted average common shares- basic	28,675,695	28,675,695	28,675,695	28,675,695
Earnings per share - basic and diluted	0.00	0.00	0.00	0.01

	Q4 2018	Q3 2018	Q2 2018	Q1 2018
	Sep 30, 2018	Jun 30, 2018	Mar 31, 2018	Dec 31, 2017
Revenue	8,563	8,416	7,708	7,560
Cost of sales	6,743	6,763	6,091	5,889
Gross profit	1,820	1,653	1,616	1,671
Gross margin %	21%	20%	21%	22%
Operating expenses	1,477	1,459	1,311	1,422
Finance costs	134	128	136	149
Earnings before provision for income tax	209	65	169	101
Income tax expense (recovery)	(2,116)	-	-	-
Net earnings	2,325	65	169	101
Weighted average common shares- basic	28,675,695	28,650,735	28,391,778	28,263,869
Earnings per share - basic and diluted	0.08	0.00	0.01	0.00

Q4 19 vs Q4 18

Revenues, gross profit and gross margin in the fourth quarter of 2019 were \$6.6 million, \$1.4 million and 21% respectively. Total revenue declined by approximately \$1.9 million. Federal Government project revenue declined by approximately \$650,000. The fourth quarter typically has substantial revenue in this market due to a high level of field investigation activity in Canada's far north. However, the timing of the October federal election resulted in a temporary delay in the commitment of funds to such programs. In addition, Provincial and Territorial project revenue declined by approximately \$640,000 for Q4 2019 when compared with Q4 2018. The variance in revenue is attributed to the occurrence in Q4 2018 of several large site investigation and remediation projects related to emergency fuel spills in remote northern locations. Military revenue was lower in Q4 2019 compared to Q4 2018 due to the timing of completing water purification units under the Company's existing contracts. Further, during Q4 2018 notable revenue was recognized for the one-time ROWPU 90 day military sustainment kit project that continued up until Q2 2019. Despite a decline in quarter over quarter revenue, year over year revenue is up by a substantial \$2.3M for the military market. These declines were offset by an increase in Commercial sector revenue of approximately \$500,000, which is mainly a result of an increase in project activity in Q4 2019 on commercial water treatment projects and site assessment and remediation associated with land development activity both in Ontario and Quebec. Gross margin stayed consistent at 21%. Operating costs decreased favourably to \$1.3 million in Q4 2019 from \$1.5 million in Q4 2018. Earnings before provision for income tax were \$37,000 or \$171,000 lower than in the same quarter of last year. Net earnings were \$39,000 for the quarter ended September 30, 2019, compared to \$2.3 million in the same quarter of 2018. The Company recognized a deferred income tax asset in the fourth quarter of 2018 in the amount of \$2.1 million, which significantly increased net earnings for Q4 2018.

Q3 19 vs Q3 18

Revenues, gross profit and gross margin in the third quarter of 2019 were \$7.0 million, \$1.3 million and 18% respectively. Total revenue declined by approximately \$1.4 million primarily due to multiple one-time engineered solutions projects in 2018 that did not reoccur in fiscal year 2019. In addition, there was a decline in revenue from the Government market, particularly on the federal level, as a result of slower than usual spending in anticipation of the election in Q4 2019. Gross margin declined to 18% from 20% for Q3 2018. Operating costs decreased favourably to \$1.2 million in Q3 2019 from \$1.5 million in Q3 2018. Consistent with Q2 of 2019, this decrease is primarily due to cost savings resulting from the sale of the Company's El Salvador operations and improved credit risk management resulting in lower bad debt expense. Earnings before provision for income tax were \$12,000 or \$53,000 lower than in the same quarter of last year. Net earnings were \$10,000 for the period ended June 30, 2019, compared to \$65,000 in the same quarter of 2018. Overall for Q3 2019, the Company continued to focus on business development efforts.

Q2 19 vs Q2 18

Revenues, gross profit and gross margin in the second quarter of 2019 were \$7.0 million, \$1.5 million and 21% respectively. Total revenue declined by approximately \$700,000, primarily due to one-time projects that did not reoccur in fiscal year 2019. In addition, a number of mining sector projects were delayed in Q2 2019 due to weather and temporary delays on approvals. Gross margin was consistent at 21% for both periods. Operating costs decreased favourably to \$1.2 million in Q2 2019 from \$1.3 million in Q2 2018, primarily due to cost savings resulting from the sale of the Company's El Salvador operations and improved credit risk management resulting in lower bad debt expense. Despite lower gross profit in the quarter, earnings before provision for income tax were \$162,000, which is comparable with the same quarter of last year. Net earnings were \$112,000 for the period ended March 31, 2019, compared to \$169,000 in the same quarter of 2018.

Q1 19 vs Q1 18

Revenues, gross profit and gross margin in the first quarter of 2019 were \$7.6 million, \$1.7 million and 22% respectively. These results are consistent with the quarter ended December 31, 2017. Operating costs decreased to \$1.3 million in Q1 2019 from \$1.4 million in Q1 2018, primarily due to a severance of \$250,000 for the previous CEO of the Company that was recognized in Q1 2018. Earnings before provision for income tax were \$267,000 and net earnings were \$189,000 at December 31, 2018, compared to earnings before income tax and net earnings of \$101,000 in the same quarter of the previous year.

Summary of Cash Flows

Cach provided by (used in)	2019	2018
Cash provided by (used in):	\$	\$
Operating activities, before working capital	730,030	995,361
Operating activities, working capital	1,325,740	(2,064,019)
Operating activities, after working capital	2,055,770	(1,068,658)
Investing activities	(119,947)	67,777
Financing activities	(1,692,725)	978,764
Increase (decrease) in cash and cash equivalents	243,098	(22,117)
Cash and cash equivalents - beginning of year	_	22,117
Cash and cash equivalents - end of year	243,098	

Cash produced from operating activities of \$2.1 million in 2019 compares with cash used in operating activities of \$1.1 million in 2018. The majority of the \$3.0 million increase in cash produced from operating activities resulted from lower investment in working capital, specifically accounts receivable and unbilled revenue, partially offset by unfavourable changes in accounts payable.

In 2019, investing activities used cash of \$120,000, which compared to cash provided by investing activities of \$68,000 in 2018.

In 2019, cash used in financing activities amounted to \$1.7 million, compared to cash provided by financing activities of \$1.0 million in 2018. The higher cash used in 2019 was due largely to repayment of the Company's credit facility using cash generated from operations.

Liquidity

The Company's short-term credit facilities consist of an operating demand loan in the amount of \$2,000,000 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. For the period ended September 30, 2019, the effective interest rate under this facility was 6.2% (FY2018 – 5.95%).

The Company has certain covenants in accordance with its short-term credit facilities. As at September 30, 2019, the Company was in compliance with all its short-term credit facility covenants.

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

As at September 30, 2019, the Company had drawn \$77,055 on its operating demand loan (September 30, 2018 - \$1,596,475) and it had drawn \$nil in outstanding letters of credit (September 30, 2018 - \$206,635). The letters of credit expired on July 26, 2019.

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 at September 30, 2019, \$98,883 (FY2018 - \$112,954) was accrued in trade and other 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 short-term credit facility arrangement. As of September 30, 2019, the Company was in compliance with its covenants under the term loan agreement.

Business Outlook

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

In fiscal year 2019, the Company has aligned its sales and marketing team and will focus on obtaining new revenue contracts in key markets, efficiently implementing projects, improving cost control and completing the sale of its non-core assets.

The Company is targeting both organic revenue growth and growth through association with technology suppliers. The Company's focus will continue to be on improving margins on all company projects 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 these 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;
- Potential claims and litigations;
- Major swings in currency valuations after setting the price of foreign contracts; and
- Cybersecurity threats.

Critical Accounting Estimates and Judgements

The reader is referred to the detailed discussion on critical accounting estimates and judgements found in Note 2 of the Company's audited financial statements and related notes for the year ended September 30, 2019.

New Accounting Standards

Note 4 of the Company's audited financial statements and related notes for the year ended September 30, 2019 discusses IFRS standards and interpretations that became effective for the Company on October 1, 2018.

Off-Balance Sheet Arrangements

See contractual obligations section below for commitments related to equipment leases and leases related to properties occupied by the Company.

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.

The remuneration of key management personnel, including directors, during the period was as follows:

	2019 \$	2018 \$
Salaries ⁽¹⁾	1,040,033	1,196,429
Short-term benefits	104,563	78,248
Share-based compensation	43,449	45,479
	1,188,045	1,320,156

⁽¹⁾ For the year ended September 30, 2018, salaries includes \$250,000 pursuant to an employment contract with one of the Company's key management personnel whose term ended on November 30, 2017 (2019- \$nil).

Financial Instruments

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

			2019		2018
Instrument	Measurement	Carrying value \$	Fair value \$	Carrying value \$	Fair value \$
Assets					
Cash	amortized cost	243,098	243,098	-	-
Accounts receivable	amortized cost	3,839,265	3,839,265	5,307,302	5,307,302
Unbilled revenue	amortized cost	2,666,608	2,666,608	4,659,396	4,659,396
		6,748,971	6,748,971	9,966,698	9,966,698
Liabilities					
Bank indebtedness	amortized cost	-	_	1,596,475	1,596,475
Trade and other payables	amortized cost	2,995,982	2,995,982	3,622,792	3,622,792
Demand loan	amortized cost	901,052	901,052	949,758	949,758
Long-term debt	amortized cost	2,759,964	2,690,591	2,726,246	2,656,667
Advances	amortized cost	50,000	47,521	50,000	48,004
Due to shareholders	amortized cost	16,638	16,638	16,638	16,638
		6,723,636	6,651,784	8,961,909	8,890,334

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.

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. Unbilled revenue and contract assets represent work performed for clients that will be billed as accounts receivable typically within 1-3 months.

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, 2019 and September 30, 2018 reporting dates are of good credit quality.

The loss allowance for trade receivables, unbilled revenue and contracts assets as at September 30, 2019 and September 30, 2018 are as follows:

			2019
	Trade receivables \$	Contract assets \$	Unbilled revenue
Opening balance – calculated under IAS 39 Amounts restated through opening retained	429,055	-	-
earnings	(9,784)	18,110	34,813
Opening balance – calculated under IFRS 9	419,271	18,110	34,813
Bad debt expense provision	90,841	3,484	(5,272)
Recoveries	(84,373)	-	-
Accounts written off	(184,998)	-	<u>-</u>
Balance – End of year	240,741	21,594	29,541
			2018
	Trade receivables \$	Contract assets \$	Unbilled revenue
Opening balance – calculated under IAS 39	168,877	-	-
Bad debt expense provision	340,218	-	-
Recoveries	(42,979)	-	-
Accounts written off	(37,061)	-	
Balance – End of year	429,055	-	-

At the end of the year, five customers (2018 - five customers) accounted for 39% (2018 - 52%) 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. For the year ended 2019, the Company had the following balances available on its credit facilities: operating demand loan of \$2,000,000; and credit card facility of \$72,214.

The following table outlines the liquidity risk associated with the Company's payment obligations as at September 30, 2019 and September 30, 2018, respectively.

					2019
	Total \$	Less than 3 months \$	4 - 12 months \$	1 - 5 years \$	Over 5 years \$
Trade and other payables Finance Leases Demand loan Long-term debt Advances Due to shareholders	2,995,982 72,242 925,000 3,284,921 67,500 16,638	2,046,199 3,946 925,000 80,072 875	909,410 11,837 - 238,846 2,625	40,372 56,460 - 2,966,003 64,000 16,638	- - - - -
	7,362,283	3,056,092	1,162,717	3,143,473	
					2018
	Total \$	Less than 3 months \$	4 - 12 months \$	1 - 5 years \$	Over 5 years \$
Bank indebtedness Trade and other payables Demand loan Long-term debt Advances Due to shareholders	1,596,475 3,622,792 975,000 3,582,279 67,500 16,638	1,596,475 2,713,261 975,000 74,001 875	909,531 - 222,002 2,625	3,286,276 64,000 16,638	- - - - -
	9,860,684	5,359,612	1,134,158	3,366,914	_

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, 2019, the Company had its demand loan and operating line which are floating rate obligations. A 1% increase in interest rates during the reporting period would decrease net earnings and equity for the period by approximately \$13,000 (2018-\$16,000).

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. The table below shows the Company's cash and financial instruments held in USD and their Canadian dollar equivalent:

-		2019		2018
	CA	US	CA	us
	\$	\$	\$	\$
Accounts receivable	112,231	84,747	122,284	94,464
Bank indebtedness	(77,055)	(58,186)	(52,338)	(40,431)
Trade and other payables	(19,292)	(14,568)	(183,802)	(142,010)

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 net earnings and increased equity during the reporting period by approximately \$2,000 (2018-\$11,000).

Contractual Obligations

BluMetric has commitments for equipment and premises under operating leases as follows:

	Premises	Equipment	Total
	\$	\$	\$
Within one year	661,059	73,644	734,703
Between one and five years	912,203	138,750	1,050,953
After five years	-	-	-
	1,573,262	212,394	1,785,656

The operating leases relate to leases to premises occupied by the Company and equipment leases. There are no options to purchase at the expiry of the lease period.

BluMetric has principal repayment obligations under long-term debt balances as at September 30, 2019 as listed in the below table:

	\$
2020	64,797
2021	2,492,798
2022	14,029
2023	14,837
2024 and thereafter	173,503
	2,759,964

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, 2019 (2018 – no change).

Proposed Transactions and Subsequent Events

The property at 3108 Carp Road was sold on October 1, 2019. The transaction closed on December 19, 2019 and proceeds were used to extinguish the Company's demand loan. Apart from this, there were no significant assets or business acquisitions or dispositions being considered by the Company.

Summary of Outstanding Shares and Dilutive Instruments

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

Shares: 28,675,695 common shares

Options: 1,050,000 options

Inter-Corporate Relationships

There are no inter-corporate relationships for the year ended September 30, 2019.

Financial Terms and Definitions

Definition of Non-GAAP 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-GAAP measures may not be comparable to similar measures presented by other companies. The Company believes that the measures defined here are useful for providing investors with additional information to assist them 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. The Company uses this measure as part of assessing operating performance. There is no direct comparable IFRS measure for EBITDA.

Management's Responsibility for Financial Reporting

The 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 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 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 and at www.sedar.com.