



## **Management's Discussion and Analysis**

**For the Three and Nine Months Ended September 30, 2018**

Contact Information :

**dynaCERT Inc.**

501 Alliance Avenue, Suite 101

Toronto, ON M6N 2J1

Contact Person: Mr. Terrence MacDonald,  
CFO

Email: [info@dynacert.com](mailto:info@dynacert.com)

# **DYNACERT INC.**

## **Management's Discussion and Analysis**

**September 30, 2018**

---

### **MANAGEMENT'S DISCUSSION AND ANALYSIS THREE AND SIX MONTHS ENDED SEPTEMBER 30, 2018**

*The following Management Discussion and Analysis ("MD&A") of the financial condition and results of operations of dynaCERT Inc. ("dynaCERT" or the "Company") has been prepared by management as of November 29, 2018 and was reviewed and approved by the Audit Committee, and is intended to supplement and complement the condensed unaudited interim consolidated financial statements and notes thereto, prepared in accordance with International Accounting Standard 34 Interim Financial Reporting ("IAS 34") as issued by the International Accounting Standards Board ("IASB"), for the three and nine months ended September 30, 2018 (collectively, the "Financial Statements"). The following discussion of performance, financial condition and prospects should be read in conjunction with the audited consolidated financial statements for the year ended December 31, 2017 and the MD&A for the year ended December 31, 2017. The information provided herein supplements but does not form part of the financial statements. All amounts are stated in Canadian dollars unless otherwise indicated. Additional information related to the Company is available for view on SEDAR at [www.sedar.com](http://www.sedar.com).*

### **CAUTION REGARDING FORWARD LOOKING STATEMENTS**

*Certain statements contained in this document constitute forward-looking statements. When used in this document, the words "may", "would", "could", "will", "intend", "plan", "propose", "anticipate", and "believe", used by any of the Company's management, are intended to identify forward-looking statements. Such statements reflect the Company's forecasts, estimates and expectations, as they relate to the Company's views with respect to future events and are subject to certain risks, uncertainties, and assumptions. Many factors could cause the Company's performance or achievements to be materially different from any future results, performance or achievements that may be expressed or implied by such forward-looking statements. Given these risks and uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements. The Company does not intend and does not assume any obligation, to update any such factors or to publicly announce the result of any revisions to any of the forward-looking statements contained herein to reflect future results, events, or developments.*

# **DYNACERT INC.**

## **Management's Discussion and Analysis**

**September 30, 2018**

---

### **NATURE OF BUSINESS**

dynaCERT Inc. is domiciled in Canada with its registered head office at 501 Alliance Avenue, Suite 101, Toronto Ontario, M6N 2J1. The Company is listed on the TSX Venture Exchange (DYA), the Frankfurt DAX (DMJ) and the OTCQB (DYFSF).

dynaCERT is a growing energy sector Company that specializes in delivering Carbon Emission Reduction Technologies to the global diesel engine marketplace. Throughout our years in business, we have worked to provide a reliable and effective electrolysis unit that would generate hydrogen and oxygen on demand to: (a) address the growing requirements to reduce emissions; and (b) provide an increase in fuel economy.

The Company is engaged in the design, engineering, manufacturing, testing, and distribution of a transportable hydrogen generator aftermarket product, currently in use in the heavy Class 6-8 tractor trailer industry, the smaller Class 2-5 trucks, stationary power generation and off-road construction machinery, and targeted for use in refrigerated trailers and containers, mining and forestry industries, with potential for application in the ocean shipping and trans-continental rail industries. The system is a patent pending retrofit product that provides performance enhancements by injecting hydrogen and oxygen into the air intake manifold resulting in greater fuel efficiency and reduced fuel emissions. In 2014 the Company acquired the intellectual property (including all patents and patents pending) of the HydraGEN™ Technology.

In 2016, the Company commissioned a program within Canada to test and validate the HydraGEN™ Technology at University of Ontario Institute of Technology ("UOIT"), which verified the testing, under simulated road and traffic conditions, that trucks using the HG1 experienced up to 19.2% fuel consumption reductions. As well the HydraGEN™ Technology reduced greenhouse gas emissions by up to 40% for the tested Class 8 diesel truck engines. Particulate matter was reduced by up to 65%, significantly reducing black smoke being emitted into the environment by trucks using the HydraGEN™ units.

The independent testing with HG1 units now having the new DYA Smart ECU began in June 2017 at the North American-accredited PIT Group in Montreal, as described below in the section under Performance Testing and Certification Update. As reported in the news release dated November 20, 2017, the PIT Group report finds that the HydraGEN™ Technology HG1 unit provided a 5.9% improvement in fuel consumption. Testing also proved that emissions were reduced significantly - CO by 48.1%, THC by 50.0%, and NOx by 46.1%, all of which exceeded our estimates.

PIT wrote to dynaCERT in an email separate to the report: "...for any kind of automotive technology, 5.9 % fuel savings is a result to be envied".

The dynaCERT team has worked closely with NeuronicsWorks and technical consultants to finalize the electronic interface, design and manufacturing of the "DYA Smart ECU". Certain corresponding provisional and PCT patent applications have now been filed for worldwide coverage.

The "Smart ECU" has shown significant advantages and improvements over the older version of the ECU in several key areas: reading; collecting, storing and transmitting of data pertaining to fuel efficacy and emissions reduction; communicating with the engine's onboard computer; learning and altering the flow of gases produced; GPS capability; providing General Packet Radio Service (GPRS) capability for remote access and allowing for future tracking and monitoring of Carbon

# **DYNACERT INC.**

## **Management's Discussion and Analysis**

**September 30, 2018**

---

Credits. This will provide users with accurate data for which to promote and use the carbon credits to a competitive financial advantage.

### **Sales**

In early 2018 the Company focused its strategy on ensuring that its HydraGEN™ line of products was more robust and suitable for *dynaCERT's* targeted market segments. In conjunction with this strategy, the Company held the official product launch of its improved product line at the 2018 Truck World trade show in April in Toronto, the Smart Commercial Vehicle Conference in Dubai and TruxPro trade show in Abbotsford, BC.

The Company had a European product launch at the IAA Commercial Vehicles International Exhibition in Hanover, Germany, September 20 to 27, 2018. The International Automobile Exhibition, IAA, is the world's most important trade fair for mobility, transport and logistics. While all testing of the HydraGEN™ technology has been completed and the TUV report has been submitted to the KBA (German Transport Ministry) for their approval, we await the homologation certification stamp/seal before shipments can be made to the region.

During the three months ended September 30, 2018 the Company shipped units with a value of \$116,779. The Company recognizes revenue in accordance with IFRS 15 *Revenue from Contracts with Customers* which specifies a number of criteria that must be met in order to recognize revenue. As a result, in accordance with IFRS 15, Revenue of \$57,921 was recognized in relation to these shipments, with the balance recorded in deferred revenue.

### **Legal**

The Company has filed a Statement of Claim with the Ontario Superior Court of Justice to recover costs associated with the loss due to the defective components, the work related to the redesign, and the delays in income related to business interruption in the total amount of C\$47.7 million. Included in the amount claimed is \$46.8 million relating to the opportunity loss on potential sales of \$70.8 million to June 30, 2017. The Company recently received a Statement of Defense from RMF Design Inc. and is discussing appropriate next steps with counsel.

# **DYNACERT INC.**

## **Management's Discussion and Analysis**

**September 30, 2018**

---

### **BUSINESS DEVELOPMENTS**

#### **Government Support Programmes**

The Company is working with governmental representatives of Ontario and Quebec to have dynaCERT's products recognized for greenhouse gas emission reductions. As well, senior management attended Canadian Federal Government meetings with the objective of gaining support of its technology for federal ministries aiming to reduce their fuel consumption and to lower their net carbon emissions. And add something about Fed tax credit for Cleantech.

#### **Patent Status**

The Company currently has now seven new patent pending applications for different aspects of the HydraGEN™ technology. These are progressing thru the normal patent application process. The Company's R&D team has a number of other patent pending applications in progress.

#### **HG1**

dynaCERT has expanded the product offering for the HG1 line: an HG1-25 for the 5 to 10 litre diesel engines and a HG1-45 which targets the 10 to 15 litre diesel engines, the HG1-45-4C targeted for 40 to 60 litre engines, and the HG1-45-6C targeted to 60 to 90 litre engines. These units are now in production and are outfitted with the latest SMART ECU2 controller. The Company has initiated a Continuous Product Improvement (CPI) program that is focused on making enhancements to the manufacturing operation to improve product quality. When operating at capacity, it is anticipated the Company will be able to produce 6,000 HG1 units per month.

#### **HG2**

The HydraGEN™ HG2 is designed for use on diesel engines of truck classes 2-5, refrigerated trailers and containers, and also has applications such as off-road construction equipment and stationary power generators up to 300hp. There will be two models offered, a HG2-15 for the 1 to 3 litre diesel engines and a HG2-25 for the 3 to 5 litre diesel engines.

The HG2 models now use a newly-developed HG reactor design, a built-in water tank, a cooling system and the next generation SMART ECU2.

Bench scale testing has confirmed our engineering analysis that the HG2 unit, which is approximately 25% of the size of the HG1 unit, will produce, under normal operating conditions, H<sub>2</sub> gas flows suitable for diesel engines from 1-5 litres in displacement.

The Company continues stress testing the HG2 prototypes prior to commencement of their commercial production.

#### **Carbon Credits**

While in England at the London Stock Exchange Studios, in May 2018, the CEO of the Company met with the principle of "International Environmental Partners Limited" which is a Sustainability Advisor/Consultant, Carbon & Biomass trader with relevant knowledge and data of over 15,000 carbon credits form all over the world. As a result, dynaCERT has commenced working with these consultants to place its products in the front line of capturing certified Carbon Credits. The Company's patent pending "Smart ECU" can allow the receipt of allocated Carbon Credits through a European platform which is consistent with the requirements resulting from the Paris Accord. Management believes that this type of opportunity exists within Europe, Canada, India and Dubai

# **DYNACERT INC.**

## **Management's Discussion and Analysis**

**September 30, 2018**

---

where the Company is already working and is discussing with its consultants and regulatory bodies the methodology to employ in order to capture, verify and trade carbon credits.

### **PERFORMANCE TRIALS AND VERIFICATION UPDATE**

New trial programs were started in the quarter to further verify the HydraGEN™ technology to satisfy potential customers on their own transport, equipment and power generation systems in India, Europe, and parts of the USA. These programs are ongoing.

#### **India**

India testing at ARAI and iCAT was conducted under several phases over the course of 2018. The Company is now awaiting clarification by authorities in order to pursue next steps.

#### **European Homologation**

The KBA Homologation Certification process in cooperation with TUV NORD and TUV SUD in Germany continues and is now awaiting the Arbeitbetriebserlaubnis (ABE) as the final step in KBA Homologation.

The extremely positive TUV testing results include an 8.9% improvement in fuel consumption, an 8.7% reduction in CO<sub>2</sub>, an 88% reduction in NO<sub>x</sub>, a 52% reduction in Total Hydrocarbons (THC), a 54.5% reduction in Particulate Matter (PM) and a 74.3% reduction in Particulate Number.

#### **Marine**

The Company continues the process to obtain Marine Classification for Type Approval. A Risk Assessment report has been completed and received from Lloyds Register. The Risk Assessment defines the technical criteria that the new HG1 Marine unit is to meet for use at sea. The report has been submitted to Transport Canada for general review. The next step is to build the HG145M prototype for testing in Halifax. Obtaining Type Approval for the HydraGEN™ technology will facilitate marine vessels in Canada and be used for the basis for worldwide use, to use the HydraGEN™ technology on their diesel engines (propulsion and service engines) without additional local testing.

# **DYNACERT INC.**

## **Management's Discussion and Analysis**

**September 30, 2018**

---

### **QUARTER IN REVIEW**

The following is a summary of the significant events and transactions that occurred during the three months ended September 30, 2018 and for the subsequent period to the report date:

#### **Recent**

- On November 27, 2018 the Company announced that it had received subscriptions subsequent to September 30, 2018 for an aggregate of \$2,454,480 in respect of the proposed closing of the second tranche of its previously announced financing of up to \$3,000,000 of units. The Company also announced that it had applied to amend the terms of the financing by amending the units to include a full common share purchase warrant exercisable into one common share of the Company at a price of \$0.35 for a period of 24 months. Each unit previously included a one-half common share purchase warrant with each full warrant exercisable into one common share of the Company at a price of \$0.50 for a period of 24 months. The Company has also applied to increase the amount of the financing to \$3,454,480. All of the above are subject to approval by the TSX Venture Exchange.
- On November 27, 2018 the Company also announced that it had applied to amend the terms of the remaining 7,404,627 outstanding warrants such that all warrants will expire on December 1, 2020 and will have an exercise price of \$0.35. These warrants will be subject to a 30-day acceleration clause if, for any ten consecutive trading days during the unexpired term of such warrants, the closing price of the Company's shares is greater than \$0.50.
- On September 21, 2018, the Company announced that it had closed the first tranche of the previously announced financing with the issuance of 4,000,000 units at \$0.25 per unit for total proceeds of \$1,000,000.
- On September 18, 2018 the Company announced a brokered private placement of up to \$3 million of units at a price of \$0.25 per unit, with each unit consisting of one common share and one-half of one common share purchase warrant. Each whole warrant shall entitle the holder to purchase one common share of the company for a period of 24 months from the date of closing.
- On July 20, 2018 the Company announced that Colonel Yalon Farhi had resigned from the Board of Directors.
- On June 21, 2018 the Company announced that, after a successful trial program, it had received an order for 114 HG145 units, with deliveries to occur over the next 12 months.

# DYNACERT INC.

## Management's Discussion and Analysis September 30, 2018

---

### FINANCIAL INFORMATION

The following table presents a summary of select financial information for the current and comparable prior year quarters for the Company. These have been prepared in accordance with IAS 34, using accounting policies consistent with IFRS as issued by IASB, and are presented in Canadian dollars which is the presentation and functional currency of the Company.

	Three Months Ended September 30		Nine Months Ended September 30	
	2018 \$	2017 \$	2018 \$	2017 \$
Revenue	57,291	28,396	66,864	246,080
Cost of goods sold	36,991	9,642	42,375	102,580
Gross profit	20,930	18,754	24,489	143,500
Expenses	2,189,951	1,570,623	6,394,192	3,996,489
Net loss	2,169,021	1,551,869	6,369,703	3,852,989
Loss per common share - Basic and diluted	\$ 0.009	\$ 0.007	\$ 0.026	\$ 0.017

### Operating Expenses

Operating expenses have increased due to increased effort on business development and research and development. Total operating expenses before stock-based compensation were \$2,063,346 for the three months ended September 30, 2018 (2017 – \$1,184,676).

Research and development expenses incurred in the quarter were \$1,016,336 (2017 – 361,239) with the increase largely due to increased work on product engineering and technology, as well homologation testing in Europe.

Business development and promotion expense for the second quarter was \$61,834 (2017 - \$56,535).

Wages and benefits during the third quarter were \$549,659 which is consistent with the second quarter amount of \$553,322.

# DYNACERT INC.

## Management's Discussion and Analysis September 30, 2018

### SUMMARY OF QUARTERLY RESULTS

	September 30, 2018	June 30, 2018	March 31, 2018	December 31, 2017
Total assets	\$5,868,105	\$5,822,694	\$5,366,914	\$5,425,111
Working capital	1,734,782	2,992,451	2,437,031	2,317,392
Shareholders' equity	2,832,863	3,600,279	3,052,198	2,065,509
Total revenue	57,921	8,943	-	-
Gross profit	20,930	3,559	-	-
Operating expenses, excluding share-based compensation	2,063,346	1,378,279	1,352,883	2,146,707
Share-based compensation	126,605	71,595	1,401,485	623,538
Net loss	(2,169,021)	(1,446,315)	(2,754,368)	(2,770,245)
Basic and diluted loss per share	(0.009)	(0.006)	(0.012)	(0.012)

	September 30, 2017	June 30, 2017	March 31, 2017	December 31, 2016
Total assets	\$4,288,588	\$4,862,751	\$3,721,538	\$3,468,675
Working capital	3,567,430	1,931,167	1,468,875	2,049,773
Shareholders' equity (deficiency)	3,633,261	2,053,073	1,963,748	2,317,142
Total revenue	28,396	149,684	68,000	-
Gross profit	18,754	86,543	38,203	-
Operating expenses, excluding share-based compensation	1,184,676	1,422,085	531,482	918,338
Share-based compensation	385,947	-	472,299	2,536,642
Net loss	(1,551,869)	(1,335,542)	(965,578)	(3,454,980)
Basic and diluted loss per share	(0.006)	(0.006)	(0.004)	(0.021)

Quarterly results vary in accordance with the Company's research and development, financing and non-cash expenses such as share-based compensation. The Company's professional fees vary in each quarter depending on financing activities being undertaken.

Research and development expenditures vary depending on amount of work being done on product development and testing. To date the Company has expensed all research and development expenditures.

# DYNACERT INC.

## Management's Discussion and Analysis September 30, 2018

---

### SELECTED ANNUAL INFORMATION

Comparative information for annual periods from December 31, 2017, 2016 and 2015 has been presented in accordance with IFRS.

	December 31, 2017	December 31, 2016	December 31, 2015
Revenues	\$ 246,080	\$ -	\$ -
Gross profit	143,500	-	-
Operating expense	6,766,734	4,876,345	1,719,965
Net income (loss)	(6,623,234)	(4,876,345)	(1,710,825)
Basic and diluted loss per share	(0.028)	(0.023)	(0.01)
Total assets	5,425,111	3,468,675	1,216,249

### Results of Operations

The following discussion addresses the operating results and financial condition of the Company for the year ended December 31, 2017 compared with the year ended December 31, 2016. The MD&A should be read in conjunction with the Company's audited consolidated financial statements and the accompanying notes for the year ended December 31, 2017.

### Results of operations for the year ended December 31, 2017 as compared to the year ended December 31, 2016

The Company reported a net loss from operations for the year ended December 31, 2017 of \$6,623,234 as compared to a loss for the year ended December 31, 2016 of \$4,876,345. The most significant items accounting for the increased loss are expenditures on research and development, which increased to \$1,604,004 from \$841,395 in 2016. Share based compensation for the year was \$1,481,784, which was a decline of \$1,208,965 from the previous year amount of \$2,690,749. Business development and marketing expenses increased by \$233,386 to \$396,010 (2016 - \$162,624). This was primarily due to the Company commencing sales of the HydraGEN units and increased focus on developing dealers and customers.

General and administrative expenses also increased from \$370,988 in 2016 to \$1,516,109 in 2017 as the Company brought in additional management and consultants to assist with the ongoing development of the technology and the business development opportunities.

# **DYNACERT INC.**

## **Management's Discussion and Analysis September 30, 2018**

---

### **LIQUIDITY AND CAPITAL**

As at September 30, 2018, cash on hand was \$130,621 as compared to \$57,288 at June 30, 2018. There was also HST recoverable in the amount of \$122,716 at September 30, 2018 compared to \$221,209 at June 30, 2018.

At September 30, 2018 the Company had accounts payable and accrued liabilities of \$2,627,618 as compared to \$1,770,968 at June 30, 2018.

The Company raises capital, as necessary, to meet its needs and to take advantage of perceived opportunities.

#### *Going concern uncertainty*

At each reporting period, management assesses the basis of preparation of the financial statements. These financial statements have been prepared on a going concern basis in accordance with IFRS. The going concern basis of presentation assumes that the Company will continue its operations for the foreseeable future and be able to realize its assets and discharge its liabilities and commitments in the normal course of business. These financial statements do not include any adjustments to amounts and classifications of assets and liabilities that would be necessary should the Company be unable to continue as a going concern. Such adjustments could be material.

For the quarter ended September 30, 2018, the Company incurred a net loss of \$2,169,021 (2017 - \$1,551,869) and had negative operating cash flows of \$722,228 (2017 - \$2,227,608). The Company has an accumulated deficit of \$45,169,431 since inception (December 31, 2017 - \$38,799,728) and does not have sufficient cash and receivables as at September 30, 2018 to meet its expected obligations over the next twelve months. The Company's ability to continue its operations and to realize assets at their carrying values is dependent upon its ability to generate cash flows from operations and to complete negotiations to obtain and successfully close additional funding from debt financing, equity financings or through other arrangements. While the Company has been successful in arranging financing in the past, there can be no assurance the debt financing or any equity offering will be successful. These conditions indicate the existence of a material uncertainty that may cast significant doubt regarding the Company's ability to continue as a going concern. These consolidated financial statements do not reflect the adjustments to the carrying values of assets and liabilities and the reported expenses and balance sheet classifications that would be necessary were the going concern assumption deemed to be inappropriate. These adjustments could be material.

While the Company has been successful in obtaining financing to date, there can be no assurance that it will be able to do so in the future on terms favorable for the Company. The Company may need to raise additional capital to fund operations. This need may be adversely impacted by uncertain market conditions, approval by regulatory bodies, and adverse results from operations. The Company believes it will be able to acquire sufficient funds to cover planned operations through the next twelve months from anticipated revenue growth during fiscal 2018 and by securing additional financing through additional private placements if required. The outcome of these matters cannot be predicted at this time.

# DYNACERT INC.

## Management's Discussion and Analysis September 30, 2018

---

### TRANSACTIONS WITH RELATED PARTIES

The Company paid or accrued the following costs incurred on transactions with the directors and officers and companies controlled by them:

	Three Months Ended September 30		Nine Months Ended September 30	
	2018	2017	2018	2017
Rent	\$ 51,856	\$ 41,360	\$ 155,595	\$ 106,124
Consulting fees to directors	38,750	18,000	129,750	36,000
Leasehold improvements	-	-	-	102,778
	\$ 90,606	\$ 59,360	\$ 285,345	\$ 244,902

Accounts payable and accrued liabilities include amounts due to directors and officers in the amount of \$114,556. The advance from a director in the amount of \$65,000 is unsecured and has no terms of repayment.

### Key management compensation

Key management includes directors and the CEO, COO and CFO, who have authority and responsibility for planning, directing, and controlling the activities of the Company. The compensation paid to these key management personnel for the three and nine months ended September 30, 2018 and 2017 is outlined below:

	Three Months Ended September 30		Nine Months Ended September 30	
	2018	2017	2018	2017
Short-term benefits	\$ 131,908	\$ 215,600	\$ 433,336	\$ 566,785
Share-based compensation	-	-	916,052	141,930
	\$ 131,908	\$ 215,600	\$ 1,217,480	\$ 708,715

### OFF BALANCE SHEET ARRANGEMENTS

The Company is not a party to any off-balance sheet arrangements or transactions.

### PROPOSED TRANSACTIONS

The Company does not currently have any proposed asset or business acquisitions or dispositions.

### COMMITMENTS

The Company has commitments for the rent of its office premises and production facilities in Toronto, Canada in the amount of \$20,054 per month. The lease expires on November 1, 2020.

# **DYNACERT INC.**

## **Management's Discussion and Analysis**

**September 30, 2018**

---

### **CAPITAL MANAGEMENT**

The Company's shareholders' equity comprises its capital under management. The Company's objectives when managing capital are to safeguard the Company's ability to continue as a going concern in order to pursue the development of its mineral properties and to maintain a flexible capital structure that optimizes the costs of capital at an acceptable risk level.

The Company manages the capital structure and makes adjustments to it in light of changes in economic conditions and the risk characteristics of the underlying assets. To maintain or adjust the capital structure, the Company may attempt to issue new shares, issue new debt, acquire or dispose of assets.

In order to facilitate the management of its capital requirements, the Company prepares expenditure budgets that are updated as necessary depending on various factors, including successful capital deployment and general industry conditions. The Board of Directors does not establish quantitative return on capital criteria for management, but rather relies on the expertise of the Company's management to sustain future development of the business.

There have been no changes to the Company's approach to capital management during the quarter ended September 30, 2018. The Company is not subject to externally imposed capital requirements.

### **FINANCIAL INSTRUMENTS (MANAGEMENT OF FINANCIAL RISKS)**

#### **Credit risk**

Credit risk is the risk of financial loss to the Company if a counter party to a financial instrument fails to meet its payment obligations. The Company is exposed to credit risk with respect to its cash and cash equivalents and receivables.

The Company's credit risk is primarily attributable to cash and cash equivalents, and accounts receivable. Management believes that the credit risk concentration with respect to cash and cash equivalents is remote, as it maintains accounts with highly-rated financial institutions.

The Company is exposed to credit risk on its receivables. Credit risk related to accounts receivable is managed through dealing with reputable, financially strong dealers who we expect to have ongoing relationships with.

#### **Liquidity risk**

Liquidity risk is the risk that the Company will encounter difficulty in satisfying financial obligations as they become due. The Company manages its liquidity risk by forecasting cash flows from operations and anticipated investing and financing activities.

The ability to continue as a going concern is dependent on completing equity or debt financings and generating profitable operations in the future in order to meet liabilities as they come due and enable the Company to continue profitable operations.

#### **Market risk**

Market risk is the risk of loss that may arise from changes in market factors such as interest rates, foreign exchange rates and commodity prices. The Company is not exposed to any significant interest rate risk volatility.

# DYNACERT INC.

## Management's Discussion and Analysis September 30, 2018

---

### OUTSTANDING SHARE DATA as at November 29, 2018:

a) Authorized:

Unlimited number of shares, without par value

b) Issued and outstanding:

256,487,016 common shares

c) Outstanding incentive stock options:

As at November 29, 2018 and December 31, 2017, the following incentive stock options were outstanding:

Expiry Date	Number of Options		Exercise Price
	2018	2017	
March 4, 2018	-	1,300,000	0.12
July 15, 2019	1,476,000	2,026,000	0.10
September 19, 2019	1,000,000	1,000,000	0.58
February 26, 2020	1,990,000	2,725,000	0.15
December 11, 2020	4,880,000	5,130,000	0.10
July 13, 2021	500,000	500,000	0.10
November 30, 2021	500,000	500,000	0.40
December 16, 2021	3,550,000	3,550,000	0.80
March 13, 2022	450,000	450,000	0.71
March 24, 2022	300,000	300,000	0.94
October 23, 2022	1,218,000	1,218,000	0.58
January 31, 2023	4,475,000	-	0.50
April 5, 2023	238,096	-	0.50
July 27, 2019	500,000	-	0.25
August 17, 2023	200,000	-	0.25
October 19, 2023	746,000	-	0.25
	22,023,096	18,699,000	

d) Warrants:

As at November 29, 2018 and December 31, 2017, the following warrants were outstanding:

Expiry Date	Number of Warrants		Exercise Price
	2018	2017	
August 3, 2019 (note 1)	2,159,205	2,159,205	1.00
February 21, 2019 (note 2)	2,972,724	-	0.50
April 10, 2019 (note 2)	1,677,142	-	0.50
April 20, 2019 (note 2)	611,905	-	0.50
September 25, 2020	2,000,000	-	0.50
	9,420,976	2,159,205	

# **DYNACERT INC.**

## **Management's Discussion and Analysis**

**September 30, 2018**

---

- (1) The warrants include an acceleration provision to the effect that if at any time after four months and one day following the issuance of the warrants, the closing price of the common shares on the TSX Venture Exchange is greater than \$1.75 per common share for a period of 10 consecutive trading days, then the Company may give notice to the holder of the warrants following which the holder of the warrants shall have a period of 30 days to exercise the warrants, failing which the warrants will automatically expire.
- (2) The warrants include an acceleration provision to the effect that if at any time after four months and one day following the issuance of the warrants, the closing price of the common shares on the TSX Venture Exchange is greater than \$1.00 per common share for a period of 20 consecutive trading days, then the Company may give notice to the holder of the warrants following which the holder of the warrants shall have a period of 30 days to exercise the warrants, failing which the warrants will automatically expire.

On November 27, 2018 the Company announced that it had received subscriptions subsequent to September 30, 2018 for an aggregate of \$2,454,480 in respect of the proposed closing of the second tranche of its previously announced financing of up to \$3,000,000 of units. The Company also announced that it had applied to amend the terms of the financing by amending the units to include a full common share purchase warrant exercisable into one common share of the Company at a price of \$0.35 for a period of 24 months. Each unit previously included a one-half common share purchase warrant with each full warrant exercisable into one common share of the Company at a price of \$0.50 for a period of 24 months. The Company has also applied to increase the amount of the financing to \$3,454,480. All of the above are subject to approval by the TSX Venture Exchange.

On November 27, 2018 the Company also announced that it had applied to amend the terms of the remaining 7,404,627 outstanding warrants such that all warrants will expire on December 1, 2020 and will have an exercise price of \$0.35. These warrants will be subject to a 30-day acceleration clause if, for any ten consecutive trading days during the unexpired term of such warrants, the closing price of the Company's shares is greater than \$0.50.

# DYNACERT INC.

## Management's Discussion and Analysis

September 30, 2018

---

### RISKS AND UNCERTAINTIES

The reader is cautioned to keep these risk factors in mind and refrain from attributing undue certainty to any forward-looking statements which speak only as of the date of this report.

***We are subject to going-concern risk.***

At each reporting period, management of the Company assesses the basis of preparation of the financial statements. These financial statements included herein have been prepared on a going concern basis in accordance with IFRS. The going concern basis of presentation assumes that the Company will continue its operations for the foreseeable future and be able to realize its assets and discharge its liabilities and commitments in the normal course of business. These financial statements do not include any adjustments to amounts and classifications of assets and liabilities that would be necessary should the Company be unable to continue as a going concern. Such adjustments could be material.

***Demand for and supply of our products and services may be adversely affected by numerous factors, some of which we cannot predict or control. This could adversely affect our operating results.***

Numerous factors may affect the demand for and supply of our products and services, including: customer and competitor consolidation, declines in general economic conditions; and changes in environmental regulations that would limit our ability to sell products and services in specific markets;

***Increased raw material and energy costs could reduce our income.***

The primary raw materials are steel, plastics and electronic parts and components. However, the price of these materials can fluctuate under market conditions affecting the pricing of raw materials.

***Our sales and operating results are sensitive to global economic conditions and cyclicalities and could be adversely affected during economic downturns.***

Demand for our products is affected by general economic conditions and the business conditions of the industries in which we sell our products and services. Any future downturns in general economic conditions could adversely affect the demand for our products and services, and our sales and operating results.

***We may expand operations into certain international markets in which we may have limited experience or rely on business partners.***

We continually look to expand our products and services into certain international markets. As we expand into new international markets, we will have only limited experience in marketing and operating products and services in such markets and may also face regulatory issues in such markets. In other instances, we may rely on the efforts and abilities of foreign business partners in such markets. Certain international markets may be slower than domestic markets in adopting our products and services, and our operations in international markets may not develop at a rate that supports our level of investment.

# **DYNACERT INC.**

## **Management's Discussion and Analysis**

**September 30, 2018**

---

***Our inability to attract, retain and motivate key employees could harm current and future operations.***

In order to be successful, we must attract, retain and motivate executives and other key employees, including those in managerial, professional, administrative, technical, sales, marketing and information technology support positions. We also must keep employees focused on our strategies and goals. Hiring and retaining qualified executives, engineers and qualified sales representatives are critical to our future, and competition for experienced employees in these areas can be intense. The failure to hire or the loss of key employees could have a significant impact on our operations.

***We may not be able to generate sufficient cash flows to fund our operations and make adequate capital investments.***

Our cash flows from operations depend primarily on sales and sales margins. To develop new product and service technologies, support future growth, achieve operating efficiencies and maintain product quality, we must make capital investments in manufacturing technology, facilities and capital equipment, research and development, and product and service technology. In addition to cash used in operations, we have from time to time utilized external sources of financing. Depending upon general market conditions or other factors, we may not be able to generate sufficient cash flows to fund our operations and make adequate capital investments. In addition, a tightening of the credit markets may occur, which may limit our ability to obtain alternative sources of cash to fund our operations.

***Our ability to maintain effective internal control over financial reporting may be insufficient to allow us to accurately report our financial results or prevent fraud, and this could cause our financial statements to become materially misleading and adversely affect the trading price of our common stock.***

We require effective internal control over financial reporting in order to provide reasonable assurance with respect to our financial reports and to effectively prevent fraud. Internal control over financial reporting may not prevent or detect misstatements because of its inherent limitations, including the possibility of human error, the circumvention or overriding of controls, or fraud. Therefore, even effective internal controls can provide only reasonable assurance with respect to the preparation and fair presentation of financial statements. If we cannot provide reasonable assurance with respect to our financial statements and effectively prevent fraud, our financial statements could become materially misleading which could adversely affect the trading price of our common stock.

***We may have difficulty managing faster than anticipated product demand.***

As products are launched, sales may be more than we expect. During periods of quicker than anticipated expansion, we may have difficulty expanding the scope of our operations to match increased demand. In addition, we may be required to place more reliance on our strategic partners and suppliers, some of whom may not be capable of meeting our production demands in terms of timing, quantity, quality or cost. Difficulties in effectively managing the budgeting, forecasting and other process control issues presented by any rapid expansion could harm our business, prospects, results of operations or financial position.

# **DYNACERT INC.**

## **Management's Discussion and Analysis**

**September 30, 2018**

---

*New technologies could be introduced in the future that could render our products less economical or less competitive.*

New developments in technology may negatively affect the development or sale of some or all of our products or make our products uncompetitive or obsolete. Other companies are currently engaged in the development of products and technologies that are similar to, or may be competitive with, certain of our products and technologies.

*Our Common Share price may fluctuate.*

The stock market in general, and the market prices of securities of technology companies in particular, can be extremely volatile, and fluctuations in our Common Share price may be unrelated to our operating performance. Our Common Share price has been and could in the future be subject to significant fluctuations in response to many factors, including actual or anticipated variations in our results of operations, the addition or loss of customers, announcements of technological innovations, new products or services by us or our competitors, additions or departures of key employees, general market conditions, and other events or factors, many of which are beyond our control.