

# dynaCERT INC. MANAGEMENT'S DISCUSSION & ANALYSIS

#### FOR THE SIX MONTHS ENDED JUNE 30, 2016

This management's discussion and analysis ("MD&A") of the financial condition and results of dynaCERT Inc. (the "Company") is prepared as of August 29, 2016 and should be read in conjunction with the interim consolidated unaudited financial statements for the period ended June 30, 2016 and the audited consolidated financial statements of the Company and the accompanying notes thereto for the period ended December 31, 2015. These financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") and are reported in Canadian dollars. Additional information about the Company can be found at www.sedar.com

# **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.

#### **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 (TSX.V – DYA).

The Company is engaged in the design, engineering, manufacturing, testing, distributing and installation of a transportable hydrogen generator aftermarket product, originally targeted for use in the heavy tractor trailer industry and now expanding this research and development into large stationary power generation, with potential for application in the shipping and rail fuel 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 technology behind the HydraGen<sup>TM</sup>.

Over the past year, the Company has initiated ongoing programs within Canada to further test and validate this technology and has aligned itself with companies globally to introduce and market the HydraGen<sup>TM</sup> product.

Preliminary marketing and testing of the HydraGen<sup>TM</sup> has resulted in expressions of interest from several unit purchasers. dynaCERT has established manufacturing and assembling facilities at its head office location, and had commenced manufacturing of the HydraGen<sup>TM</sup> in 2015.

## Highlights during the six months ended June 30, 2016

Foreseeing scaling up production for assembly of the HydraGen<sup>TM</sup>, the Company strategically secured a further production space of 7032 square fit adjacent to its current facility. dynaCERT is scheduled to occupy this expansion facility on October 1, 2016. This expansion will result in a modern facility with an expected production capacity of 2,000 units per month operating on a single shift basis. The company is pursuing funding through both federal and provincial government grant and loan programs.

As required by the Ontario Government's requirement for a validation process to ensure qualification under any of the Provincial or Federal Government's programs, an extensive schedule of third party testing was undertaken to validate and determine proper flow rates of its flagship HydraGen<sup>TM</sup> product for Class 8 trucks. These tests were completed at the University of Ontario Institute of Technology, a facility deemed an "Automotive Centre of Excellence" for both fuel savings and Carbon Emission Reductions. Two different Class 8 trucks with HydraGen<sup>TM</sup> units were placed on a Chassis dynamometer which produced extensive readings for various emissions and fuel efficacy. The Company, along with third party engineers, are reviewing and analyzing the data. A formal report will be completed soon.



As well, over the past several months the dynaCERT team has worked closely with RMF Design and Manufacturing along with technical consultants to finalize the electronic interface, design and development of the "Smart ECU". To date several patents are being processed for filing. The company is now entering in the final stages of development with anticipated delivery for assembly and product release targeted for the fall of this year.

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

The older version of the ECU has been phased out. Notwithstanding that, the Company has continued to work with several trucking firms in Ontario that have the HydraGen<sup>TM</sup> units and the older version of the ECU installed on their 2012-2016 transport trucks. These older ECU units were modified for manual collection of data, which has been instrumental in the development of algorithms for the new "Smart ECU". The trucks outfitted with these HydraGen<sup>TM</sup> units form part of the Purchase Order announced in Q2 2015 and will be upgraded with new Smart ECU once available to finalize the sale.

To support these initiatives, on January 28, 2016, the Company completed the non-brokered private placement (the "Offering") financing of 14,786,100 units at a price of \$0.10 per unit for aggregate proceeds of \$1,478,610. Each Unit consisted of one (1) common share in the capital of the Company and one half (1/2) common share purchase warrant (each, a "warrant"), being exercisable into one (1) common share at a price of \$0.25 for a two (2) year period from the date of issuance. The warrants include an acceleration clause to the effect that if at any time after four (4) months and one (1) day following the issuance of the private placement the closing trading price of the Company's common shares on the TSX Venture trade at \$0.25 or more for a period of ten (10) consecutive trading days, then the Company shall be entitled to notify the holders of warrants of its intention to force the exercise of the warrants. Upon receipt of such notice, the holders of warrants shall have thirty (30) days to exercise the warrants, failing which the warrants will automatically expire.



## **Results of Operations**

	•	Six months ended June 30, 2016	е	Six months ended lune 30, 2015
REVENUE	\$		\$	12,898
COST OF SALES				3,759
GROSS PROFIT		<u> </u>		9,139
OPERATING EXPENSES				
Amortization		11,432		39,882
Consulting and professional fees		384,476		158,313
Foreign exchange loss		56		3,457
General and administrative		216,972		54,956
Insurance		15,773		11,959
Interest		16,462		18,176
Research and development		210,871		71,989
Occupancy costs		25,830		20,207
Share based compensation		8,950	-	557,324
TOTAL OPERATING EXPENSES		890,823	-	936,263
LOSS FROM OPERATIONS AND COMPREHENSIVE LOSS	\$	890,823	\$_	927,123
Loss per share - basic and diluted (note 11)	\$_	-	\$_	-
Weighted average number of common shares outstanding	=	205,047,014	=	177,107,294

During the six months ended June 30, 2016, the Company's Shared based compensation was \$548,374 lower than same period last year. There were no stock options granted during the six months of 2016 as opposed to same period last year when, on February 27, 2015, the Company granted 3,925,000 options to directors, consultants and employees at an exercise price of \$0.15 per share.

The increase in Consulting and professional fees by \$226,163, with respect to the same period last year, reflects management's focus on getting to the market as soon as possible with a new "Smart ECU" on all units produced. This required several middle management employees to be hired at the beginning of 2016.

Also responding to management initiative to dedicate further resources to create awareness of the company and its flagship product HydraGen<sup>TM</sup>, there is an increased expense in the General and administrative category. This expense was up by \$162,016 as additional travel, advertising and promotion expenses were incurred, with the purpose to encourage accredited investors and new strategic partners to collaborate with dynaCERT.

As well during the first two quarters of 2016, Research and Development expenses increased by \$138,882 when compared with the first two quarters of 2015. As a necessity to develop the essential algorithms for the new ECU, modifications were made to the old ECU to manually collect the necessary data until the new ECU was available. The phasing out of the old ECU generated a \$65,000 inventory write off.



On the other hand, in the six months ended June 30, 2016 amortization costs were lower by \$28,450 in comparison to same period in 2015. This is because leasehold improvements were fully amortized by the end of 2015.

# Summary of Quarterly Results Quarter ended (unaudited)

	June 30, 2016	March 31, 2016	December 31, 2015	September 30, 2015
Revenue Net income (loss) for the period	\$ - (461,021)	\$ - (429,802)	\$ - (544,068)	\$ - (239,723)
Basic earnings (loss) per share	(0.00)	(0.00)	(0.00)	(0.00)
	June 30, 2015	March 31, 2015	December 31, 2014	September 30, 2014
Revenue	\$ -	\$ 12,898	\$ -	\$ -
				(460.551)
Net income (loss) for the period	(247,073)	(679,691)	(793,441)	(462,551)

The Summary of the quarterly unaudited reports for the last eight quarters does not show any specific trend(s).

## **Cash Flow**

	Six months ended June30, 2016		Six months ended June 30, 2015
CASH USED IN OPERATING ACTIVITIES			
Net loss for the period	\$ (890,823)	\$	(927,123)
Items not requiring an outlay of cash			
Depreciation of property and equipment	11,432		39,882
Accretion of Interest on promissory note	16,429		16,430
Share based compensation	8,950		557,324
	(854,011)		(313,487)
Changes in non-cash working capital			
Accounts receivable	(25,076)		6,772
Inventory	27,279		(68,803)
Prepaid expenses and deposits	(13,732)		5,209
Accounts payable and accrued liabilities	(520,519)		(23,260)
	(1,386,060)		(393,569)
CASH USED IN INVESTING ACTIVITIES			
Acquisition of property and equipment	(37,286)	_	(32,267)
	(37,286)		(32,267)
CASH PROVIDED BY FINANCING ACTIVITIES			
Proceeds from issuance of units	1,413,788		386,163
Proceeds from exercise of Warrants	-		40,825
Proceeds from exercise of Options	3,000		-
	1,416,788	_	426,988
NET INCREASE (DECREASE) IN CASH	(6,560)		1,152
CASH, beginning of period	925,919		1,954
CASH, end of the period	\$ 919,359	\$	3,106

Cash Used in Operating Activities during the six months ended June 30, 2016 increased by \$992,491 when compared to the same period in 2015. This variance is the direct result of a reduction in Share based compensation (no outlay of cash) of \$548,374 as well as the repayment of \$497,259 outstanding accounts payable (mainly from prior periods).



Cash provided by financing activities in the first two quarters of 2016 increased \$989,800 over the same period in 2015. This increase primarily reflects improved investor confidence as witnessed by the private placement conducted in January 2016 resulting in a capital raise of \$1,413,788 (gross \$1,478,610).

# Liquidity and capital resources

As at June 30, 2016, cash was \$919,359 as compared to \$925,919 at December 31, 2015. The Company has accounts receivable in the amount of \$37,892 which primarily represents HST receivable from the Government of Canada.

The Company raises capital, as necessary, to meet its needs and to take advantage of perceived opportunities. The ability of the Company to obtain adequate financing and to reach profitable levels of operations is dependent on the acceptance by the market of the current generation of the HydraGen<sup>TM</sup> product and establishing a market demand for it.

On January 28, 2016, the Company completed the non-brokered private placement (the "Offering") financing of 14,786,100 units at a price of \$0.10 per unit for aggregate proceeds of \$1,478,610. Each Unit consists of one (1) common share in the capital of the Company and one half (1/2) common share purchase warrant (each, a "warrant"), with each whole warrant being exercisable into one (1) common share at a price of \$0.15 for a two (2) year period from the date of issuance. The warrants include an acceleration clause to the effect that if at any time after four (4) months and one (1) day following the issuance of the private placement the closing trading price of the Company's common shares on the TSX Venture trade at \$0.25 or more for a period of ten (10) consecutive trading days, then the Company shall be entitled to notify the holders of warrants of its intention to force the exercise of the warrants. Upon receipt of such notice, the holders of warrants shall have thirty (30) days to exercise the warrants, failing which the warrants will automatically expire. The proceeds of the Offering will be used to fund working capital and manufacturing costs.

There are no assurances that the Company can continue to raise equity financing to fund its operations and no assurances that the Company will sell enough units to timely and significantly improve its cash flow position.

## Off-balance sheet arrangements

The Company has no significant off-balance sheet arrangements at this time.

# Transaction with related parties and key management personnel:

## Period ended June 30, 2016

- (a) The Company paid salary of \$60,000 to the CEO for the period ended June 30, 2016. Additionally, \$44,086 pertaining to consulting fees for 2014 and \$120,000 of salary pertaining to 2015 were also paid during the period.
- (b) The Company incurred in Directors fees of \$40,200. As well \$23,700 pertaining to outstanding director's fees for 2015 were paid during the period.
- (c) The Company paid \$99,000 for consulting fees to a corporation controlled by a director of the Company. This amount includes \$50,000 accrued and not paid during 2015.
- (d) On January 8, 2016, the CFO exercised 30,000 options with a strike price of \$0.10 as described in note 8(g)
- (e) The outstanding amounts of \$50,552 (re: lease improvements 2013) and \$35,787 (re: short term loan 2015) owed to two different companies controlled by two directors of dynaCERT, were repaid during the first quarter of the year.
- (f) The Company paid \$30,000 as compensation to the CFO of the Company.

#### Period ended June 30, 2015

- (a) The Company incurred fees of \$60,000 to James Payne in his role as CEO for the period ended June 30, 2015. The aforementioned fees of \$30,000 have been recorded in accounts payable, but have not been paid as of June 30, 2015.
- (b) The Board of Directors granted options to its directors and officers to acquire common shares. The Company expensed stock based compensation cost of \$324,380 for options issued to directors and officers. The Company expensed stock based compensation cost of \$4,779 for options issued to consultants who are related parties.



- (c) On February 27, 2015, Gordon J. Barr stepped down as the CFO. The Company has a business relationship with RLB LLP (Chartered Professional Accountants and Business Advisors), of which Gordon is a Partner of the firm. The company incurred fees of \$5,000 for the period ended June 30, 2015 for accounting fees paid to RLB LLP.
- (d) The Company paid \$20,650 as compensation to the other officer of the Company

#### **Subsequent Events**

There are no events to disclose subsequent to quarter end.

# **Going Concern**

The ability of the Company to continue as a going concern, to realize the carrying value of its assets and discharge its liabilities when due, and to complete its advancement to the manufacturing and sales phase of its development, is dependent on the Company's ability to continue to raise sufficient equity. The Company is confident that raising such additional equity is achievable and reasonable. In the past, the Company has repeatedly been able to raise capital equity as required, as shown in the following listing of capital raises.

- During the six-month period ended June 30, 2016, the Company received \$1,416,788 as additional capital.
- During the year ended December 31, 2015, the Company received \$1,935,268 in funds as additional capital.

#### Risk 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.

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 cyclicality, 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 international markets in which we may have limited experience or rely on business partners.

We continually look to expand our products and services into 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.

## 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 & 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, due to the recent economic downturn, there has been a tightening of the credit markets, 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.

#### MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

Management is responsible for the preparation of the consolidated interim unaudited financial statements relating to the Company, included in this management discussion and analysis (the "Financial Statements"). The Financial Statements of the Company for the six months ended June 30, 2016 have been prepared in accordance with IFRS.

The Board of Directors is responsible for ensuring that management fulfills its responsibilities for financial reporting. In furtherance of the foregoing, the Board has appointed an Audit Committee composed of three directors who are not members of management. The committee meets to discuss the results of their report prior to submitting the consolidated financial statements of the Company to the Board of Directors for their consideration and approval for issuance to the shareholders.

On the recommendation of the audit committee, the Board of Directors has approved the Company's financial statements for the three months ended June 30, 2016.

Date: August 29, 2016

#### **Additional information**

Additional information relating to dynaCERT Inc. is available on SEDAR at www.sedar.com.