



*Cymat Technologies Ltd.*  
*Management's Discussion and Analysis (“MD&A”)*  
*As at July 31, 2016*

September 22, 2016

The following discussion and analysis of Cymat Technologies Ltd. (“Cymat” or the “Company”) financial condition and results of operations should be read in conjunction with Cymat’s unaudited interim financial statements for the three month period ended July 31, 2016, and the audited financial statements for the year ended April 30, 2016, and the associated notes to the financial statements.

The Company prepares its unaudited interim financial statements in accordance with International Financial Reporting Standards (“IFRS”) as issued by the International Accounting Standards Board [“IASB”]. All financial information contained in this MD&A and in the unaudited interim financial statements has been prepared in accordance with IAS 34, Interim Financial Reporting.

This MD&A is dated September 22, 2016 and all amounts herein are denominated in Canadian dollars, unless otherwise stated.

The information below contains certain forward-looking statements that reflect the current view of Cymat with respect to future events and financial performance. Wherever used, the words “may”, “will”, “anticipate”, “intend”, “expect”, “plan”, “believe”, and similar expressions identify forward-looking statements. Any such forward-looking statements are subject to risks and uncertainties, and the Company's actual results of operations could differ materially from historical results or current expectations. The Company will review the forward-looking information in the preparation of the MD&A on a quarterly basis and, where appropriate, provide updated forward-looking statements based on the most current view of Cymat.

**1. Company Overview and Business of Company**

Cymat was incorporated on June 13, 2006 under the Business Corporations Act (Ontario) and is the successor to Duntroon Energy (formerly Cymat Corp.) which was incorporated on June 30, 1998 under the Business Corporations Act (Ontario).

Cymat develops innovative materials for industry. The Company has worldwide rights, through patents and licenses, to produce Stabilized Aluminum Foam (“SAF”). This ultra-light metallic foam is produced using a proprietary, versatile process in which gas is bubbled into molten-alloyed aluminum containing a dispersion of fine ceramic particles to create foam that is then cast into either flat panels or near-net shapes. The result is a material, which is recyclable, with a wide array of features including very low density, mechanical energy absorption, thermal and acoustic insulation, time and temperature insensitivity and has a relatively low cost of production. The technology is focused on producing products for 3 major markets: automotive, architecture and blast mitigation industries. Cymat markets architectural material under the trademark, “Alusion™” and automotive and blast mitigation products under the “SmartMetal™” trademark.

## 2. Summary of Operating Results

Select financial information for the three month periods ended July 31, 2016 and July 31, 2015:

	Three Months Ended July 31	
	2016	2015
	(\$)	(\$)
<b>Interim Statements of Operations</b>		
Revenue	872,532	257,148
Plant operating expenses	456,013	330,391
Research and material testing expense	1,028	1,284
Selling, general and administrative expenses	347,811	273,925
Income (loss) from operations	67,680	(348,452)
Net loss	(137,227)	(475,261)
<b>Interim Statements of Cash Flows</b>		
Cash used in operating activities	(205,912)	(207,155)

## 3. Results of Operations

### Comparison of the Three Months Ended July 31, 2016 and July 31, 2015

#### Revenue

Revenue for the quarter ended July 31, 2016 was approximately \$873,000, an increase of \$616,000, or 240%, from revenue for the quarter ended July 31, 2015, of \$257,000. Sales for the first quarter of fiscal 2017 include Alusion™ panel sales regarding large architectural projects of \$362,000 (BBVA Bank commercial building in Madrid and Princeton University auditorium) as compared to sales from similarly-sized architectural projects of \$162,000 for the same quarter of fiscal 2016.

Revenue from SmartMetal™ for the quarter ended July 31, 2016 included sales to Panhard General Defense of \$122,000 and sales related to a prototype military vehicle protection system of approximately \$116,000.

Cymat recognizes product revenue when rights and obligations to the product are transferred to Cymat's customers. Normally this transfer occurs when the products depart the Company warehouse; however this transfer can also occur upon the product arrival at a designated shipping location.

#### Plant Operating Expenses

Plant operating expenses for the quarter ended July 31, 2016 were approximately \$456,000, an increase of \$126,000, or 38%, as compared to the same expenses of \$330,000 for the quarter ended July 31, 2015.

Plant operating expenses include the direct operating expenses of labour, material, consumables, maintenance, freight and changes in inventory as well as manufacturing overhead costs. These direct operating expenses were approximately \$356,000 for the first quarter of fiscal 2017, as compared to \$239,000 for the first quarter of fiscal 2015, representing a 49% quarter-over-quarter increase. The higher costs were the result of the increase in sales.

Plant operating expenses also includes factory overhead costs such as rent and utilities. These expenses totalled approximately \$86,000 for the first quarter of fiscal 2017 as compared to similar expenses of \$77,000 for the same period of fiscal 2016. Increased consumption of electricity as the result of increased manufacturing activity was the driver of the higher expense.

Plant operating expenses also include depreciation and amortization expense of approximately \$14,000 for both of the three-month periods ended July 31, 2016 and July 31, 2015.

### **Research and Material Testing Expenses**

Research and material testing expenses consisted of depreciation expenses on lab and testing equipment. For the first quarters of fiscal 2017 and fiscal 2016, depreciation expenses were approximately \$1,000 in each period.

### **Selling, General and Administrative Expenses (“SG&A”)**

SG&A expenses for the quarter ended July 31, 2016 were approximately \$348,000, as compared to an expense of \$274,000 for the comparable quarter ended July 31, 2015. The primary contributors to the increased expenses were share-based employee compensation (\$52,000), travel (\$8,000) and increased shareholder communication costs (\$7,000) related to the annual shareholders meeting in June 2016.

SG&A expenses also include depreciation and amortization in the approximate amounts of \$1,000 for each of the first quarters of fiscal 2017 and 2016.

### **Interest and Financing Expense**

Interest and financing expense for the three months ended July 31, 2016, includes cash-based amounts of approximately \$130,000 which consisted of:

- \$84,000 in convertible debenture interest,
- \$45,000 in royalty-based financing fees (including \$17,000 payable to a related party) and
- \$1,000 interest on the repayable government contributions liability.

The expense for the quarter also includes a non-cash-based amount of \$72,000 which consisted of:

- accreted interest on the convertible debentures arising from the difference between the face value and the recorded value of the debentures.

Interest and financing expense for the three months ended July 31, 2015, includes cash-based amounts of approximately \$79,000 which consisted of:

- \$66,000 in convertible debenture interest,
- \$12,000 in royalty-based financing fees (including \$5,000 payable to a related party), and
- \$1,000 interest on the repayable government contributions liability.

The expense for the quarter also includes a non-cash-based amount of \$46,000 which consisted of:

- accreted interest on the convertible debentures arising from the difference between the face value and the recorded value of the debentures.

## Net Income (Loss)

A net loss of \$137,000 was recorded for the first quarter of fiscal 2017, compared to a net loss of \$475,000 for the same quarter of last year.

The net loss for the first quarter of fiscal 2017 includes the non-cash items of depreciation and amortization of approximately \$16,000 (fiscal 2016 – \$17,000), share-based compensation of approximately \$91,000 (fiscal 2016 – \$39,000 employee compensation plus \$5,300 in consulting fees), and non-cash interest of \$72,000 (fiscal 2016 - \$46,000) regarding the convertible debt.

## 4. Selected Quarterly Financial Information

The following tables present selected quarterly financial information derived from the Company's unaudited statements of operations and cash flows for the eight most recent quarters ended July 31, 2016. These operating results are not necessarily indicative of results to be achieved for any future period and should not be relied upon to predict future performance.

Selected Financial Information by Fiscal Quarter All items in \$ 000's, except Net Loss per Share								
Three months ended,	Jul 31, 2016	Apr 30, 2016	Jan 31, 2016	Oct 31, 2015	Jul 31, 2015	Apr 30, 2015	Jan 31, 2015	Oct 31, 2014
Revenue	873	522	332	244	257	256	581	625
Plant operating expenses	456	219	265	351	330	302	439	364
Research and material testing expenses	1	1	1	1	2	1	1	2
SG&A expenses	348	275	276	267	274	319	253	343
Net Loss	(137)	(147)	(386)	(505)	(475)	(528)	(230)	(175)
Net Loss per Share	(0.01)	(0.01)	(0.03)	(0.04)	(0.03)	(0.04)	(0.02)	(0.01)
Operating cash flow	(206)	(2)	(223)	(88)	(207)	(318)	(183)	(343)

## 5. Liquidity and Capital Resources

### Sources and Uses of Cash

As at July 31, 2016 the Company had approximately \$160,000 of cash and cash equivalents on hand. For the three months ended July 31, 2016, the cash flow used in operating activities was approximately \$206,000 (July 31, 2015 – used \$207,000). Cash utilized by operating activities was the result of a net loss adjusted for items not involving cash of positive \$83,000 (July 31, 2015 – negative \$342,000) and cash used by changes in non-cash working capital balances of \$289,000 (July 31, 2015 – \$135,000 provided by changes in non-cash working capital).

For the three month periods ended July 31, 2016, and July 31, 2015, there were no cash flows as the result of investing activities.

For the three months ended July 31, 2016, cash provided by financing activities was \$194,000, as the result of deposits received pertaining to an equity private placement closing subsequent to the period end of \$210,000 and proceeds from exercise of employee stock options of \$4,000, somewhat offset by repayments of government contributions in the amount of \$20,000. Financing activities for the three months ended July 31, 2015 were minimal.

## **Investments in Property, Plant and Equipment**

There was no capital expenditure for the quarters ended July 31, 2016 and 2015. Management maintains its capital expenditure with the goal of meeting expected production demands and with a reduced emphasis on investing in assets that are focused solely on R&D activities.

## **Licenses and technology rights**

Cymat controls the following patent elements related to its SAF which cover:

- the fundamental process to make foam, irrespective of final shape;
- the fundamental process to make foam as a shaped part or a flat panel; and
- the fundamental process to make shaped parts using displacement casting.

Some of these patents are controlled under a license from Alcan International Inc. [“Alcan”]; some have been acquired from Hydro Aluminum a.s. [“Hydro”]; and Cymat has developed others independently. The scope of patent protection provides Cymat with important cost advantages in the production of aluminum foams.

Cymat continues to develop and protect its intellectual property and its proprietary manufacturing processes. It is Cymat’s intention to continue to vigorously employ all legal remedies available to enforce its intellectual property rights.

## **Going Concern Uncertainty**

To date, the Company has financed its operations primarily through share and convertible debt issuances, investment tax credits, interest income, and collaborative co-development agreements. The Company has incurred significant operating losses and cash outflows from operations. As at July 31, 2016, the anticipated level of cash flows from operating activities for the next twelve months is not assured to be sufficient to sustain operations. The ability of the Company to continue as a going concern is dependent upon raising additional financing through borrowings or equity financing and ultimately achieving future profitable operations. The outcome of these matters is dependent on a number of items outside the Company’s control. As a result, there are material uncertainties that may cast significant doubt as to whether the Company will have the ability to continue as a going concern. These financial statements do not include any adjustments or disclosures that may result from the Corporation’s inability to continue as a going concern. If the going concern assumption were not found to be appropriate for these financial statements, adjustments might be necessary in the carrying values of assets and liabilities, the statement of financial position classifications and the reported expenses. Such adjustments could be material.

## 6. Investments and Capitalization

Cymat is listed on the TSX – Venture Exchange, trading under the symbol CYM.

The table below sets out the number of issued and outstanding common shares as well as the number of common shares associated with issued and outstanding convertible securities as at September 22, 2016.

	Number of Securities (Post Share Consolidation)
Common Shares	14,551,963
Convertible Debentures	12,871,250
Stock Options	2,543,861
Warrants	<u>13,021,250</u>
Total Diluted Shares Outstanding	<u>42,988,324</u>

### Share Capital

The Company is authorized to issue an unlimited number of common shares. At July 31, 2016, issued and outstanding common shares totalled approximately 14,551,963 shares.

In May 2016, the Company issued 24,477 common shares as the result of the exercise of employee stock options.

The Company has not paid dividends on its common shares and has no expectations of paying dividends in the near future.

### Stock Options

Under the terms of the stock option plan approved at the Annual General Meeting on June 7, 2016, the aggregate number of common shares reserved for the issuance of stock options is 2,910,392.

During the three months ended July 31, 2016, options were granted as follows:

- On June 7, 2016, the Company granted 970,000 options to certain directors, officers and employees at an exercise price of \$0.20, with 34% vesting upon grant, 33% vesting on the first anniversary of the grant date and 33% vesting on the second anniversary of the grant date.

During the year ended April 30, 2016, options were granted as follows:

- On June 19, 2015, the Company granted 447,859 options to certain directors, officers and employees at an exercise price of \$0.125, with one third vesting on June 19, 2015, on third vesting on June 19, 2016 and one third vesting on June 19, 2017.

In the three months ended July 31, 2016, 27,477 stock options were exercised. In fiscal 2016, 17,306 stock options were exercised.

## **Critical Accounting Policies and Estimates**

### **Revenue recognition**

Revenue from the sale of manufactured products is recognized when the rights and obligations associated with the products are transferred to the purchaser. Normally this transfer occurs upon the products' departure from the Company's warehouse; however based on the terms of the specific transaction, transfer can also occur upon the product arrival at a designated shipment location. Amounts received in advance of earned revenues are recorded as deferred revenue.

### **Convertible debentures**

The convertible debentures are accounted for as a compound financial instrument that contains both a liability component, represented by the loan, and an equity component, represented by the share purchase warrants and conversion feature. The Company has allocated the total proceeds of the issuance between the debt and equity components of the convertible debenture using the residual method. First the fair value of the debt component was calculated as the present value of the related cash flows using an appropriate discount rate. The remaining proceeds were allocated to the equity components of the convertible debt with this amount divided between the warrants and the conversion feature based on their relative fair values as calculated using the Black-Scholes option pricing model. The fair value of the debt portion is accreted to its face value through the recording of interest expense, calculated using the effective rate method, over the term of the convertible debentures.

### **Use of estimates**

The preparation of these financial statements in accordance with IFRS requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting periods. Actual amounts could differ from those estimates. Significant estimates include those used in:

- the measurement of the cost of finished goods inventory, including the allocation of costs of conversion and manufacturing overhead,
- allowance for doubtful accounts,
- the determination of the useful lives of long lived assets,
- the determination of the appropriate amount, if any, of the writedown in the carrying value of long term assets, including the estimation of the associated future cash flows and the appropriate discount rate used to estimate the recoverable amount,
- the valuation of the accrued royalties on the promissory notes, including the forecasted revenues and the appropriate discount rate to apply in the determination of present value,
- the valuation of the debt and equity components of the convertible debt, including the appropriate discount rate to apply in the determination of the fair value of the debt and the volatility and risk free rates used in the valuation of the warrants and conversion feature, and
- the measurement of the fair value of share-based compensation, including the volatility and risk free rates used in the option valuation models and the estimation of number of options expected to vest.

The Company's assessment of the recoverable amount of property, plant and equipment, and intangible assets is based on management's assessment of potential indicators of impairment and best estimates of likely courses of action by the Company. This assessment is subject to significant measurement

uncertainty. Material write-downs of these assets could occur if actual results differed from the estimates and assumptions used.

## **Judgments**

In the process of applying the Company's accounting policies, management has made judgments regarding the determination of whether there has been impairment in the carrying value of long term assets which has the most significant effect on the amounts recognized in the financial statements. The Company has also applied significant judgment in classifying the perpetual royalty related to promissory notes as a derivative liability.

## **7. Accounting Standards Issued But Not Yet Applied**

The IASB has issued a number of amendments to standards that are not yet effective for the fiscal period ending July 31, 2016. Accordingly these standards have not been applied by the Company in the preparation of these financial statements.

The following is a description of the new standards:

The IASB published IFRS 9 Financial Instruments which replaces IAS 39 Financial Instruments: Recognition and Measurement. IFRS 9 fundamentally rewrites the accounting rules for financial instruments. IFRS 9 introduces a new approach for financial asset classification, a more-forward looking expected loss model, and major new requirements on hedge accounting.

IFRS 9 divides all financial assets into two classifications – those measured at amortised cost and those measured at fair value. Classification is made at the time the financial asset is initially recognized when the entity becomes a party to the contractual provisions of the instrument. The transition guidance is complex and mainly requires retrospective application.

A new measurement category of 'fair value through other comprehensive income' is also included in IFRS 9. The Standard requires an entity to measure a financial asset at fair value through other comprehensive income if both of the following conditions are met:

- the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Most of the requirements in IAS 39 for the classification and measurement of financial liabilities have been carried forward unchanged to IFRS 9. Where an entity chooses to measure its own debt at fair value, IFRS 9 now requires the amount of the change in fair value due to changes in the issuing of the entity's own credit risk to be presented in other comprehensive income. An exception to the new approach is made where the effects of changes in the liability's credit risk would create or enlarge an accounting mismatch in profit or loss, in which case all gains or losses on that liability are to be presented in profit or loss. The requirements in IAS 39 related to derecognition of financial assets and financial liabilities have been incorporated unchanged into IFRS 9.

IFRS 9 will be effective for annual periods beginning on or after January 1, 2018. The Company does not anticipate early adoption of this standard and has not yet assessed its impact on the financial statements.

The IASB has published IFRS 15 Revenue from Contracts with Customers, the product of a major joint



project between the IASB and the US Financial Accounting Standards Board. The previous requirements of IFRS and US GAAP were not harmonized and often resulted in different accounting treatments for economically similar transactions. In response, the Boards developed new, fully converged requirements for the recognition of revenue under both IFRS and US GAAP.

IFRS 15 replaces IAS 18 Revenue, IAS 11 Construction Contracts and some revenue-related Interpretations; establishes a new control-based revenue recognition model; changes the basis for deciding whether revenue is to be recognized over time or at a point in time; provides new and more detailed guidance on specific topics; and expands and improves disclosures about revenue.

IFRS 15 applies to contracts with customers to provide goods or services, including construction contracts and licensing of intellectual property. It will not apply to certain contracts within the scope of other IFRSs such as lease contracts, insurance contracts, financing arrangements, financial instruments, guarantees other than product warranties, and non-monetary exchanges between entities in the same line of business to facilitate sales to third-party customers.

IFRS 15 will be effective for annual periods beginning on or after January 1, 2018. The Company does not anticipate early adoption of this standard and has not yet assessed its impact on the financial statements.

## **8. Related Party Transactions**

Interest and financing expense for the three months ended July 31, 2016, includes cash-based royalties in the amount of \$17,000 (July 31, 2015 – \$5,000) regarding a related party. The three months ended July, 31 2016, also includes interest in the amount of \$14,000 (July 31, 2015 - \$9,000) regarding convertible debentures that are payable to a related party.

## **9. Risks and Uncertainties**

### **Financial and Liquidity Risk**

The Company has not yet attained sufficient sales levels to completely support its operations. As at July 31, 2016, the anticipated level of cash flow from operations for the next twelve months is not assured to be sufficient to sustain the business. In addition to being able to successfully execute its business plan, which includes increased sales, it may be necessary for the Company to raise additional financing through either borrowings or equity financing. There can be no assurance that the Company will succeed in growing sales sufficiently or in completing additional financing.

### **Dependence on Key Personnel**

Cymat is dependent on key employees and believes that its future success will depend on its ability to attract and retain highly skilled engineering and production, managerial and marketing personnel. Competition for such personnel is intense and there is no assurance that the Company will be able to retain, attract or hire qualified personnel in the future. The loss of certain key employees, or the inability to hire and retain additional key employees could adversely impact the Company.

## **Proprietary Technology Protection**

Cymat's technology leadership is subject to the risks of patent infringement by competitors, and of competitors making technological breakthroughs, which may make the Company's products less attractive. An intellectual property management program is in place to protect Cymat's intellectual property and trade secrets. Cymat funds ongoing improvements to its proprietary manufacturing processes, which create new patent opportunities that enhance and may extend the period of the technological exclusivity. There is the risk that the Company's patents and trade secrets may not be held valid and enforceable, or be held to have a scope sufficiently broad to cover competitors' products or processes. There is also the risk that Cymat's products or process may infringe on other patents, which may limit the Company's ability to fully commercialize certain SAF applications. The cost of enforcing Cymat's patent rights in lawsuits or defending against infringement claims may be significant and could interfere with the Company's operations. For a more complete discussion please refer to the "License and Technology Rights" section above.

## **Government Regulation and Certification Requirements Imposed by Customers**

The use of SAF in certain applications may be subject to regulation by certain government bodies and to compliance with applicable laws, both inside and outside of Canada. In addition, industry users may impose significant certification, safety, quality control and other requirements. Compliance with these laws and regulations may be costly and time consuming, and failure to comply may have a material, adverse effect on the Company's business.

## **Other Risks**

The Company may be subject to a number of other risks that could materially and adversely affect Cymat's business, financial condition, liquidity or results of operations. Such risks include those associated with competing products, international markets, fluctuating currency exchange rates and the possibilities of trade restrictions and the ability of the Company to manage growth.

## **10. Management's Assessment of Disclosure Controls and Procedures**

Management is responsible for the design of internal controls over financial reporting to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the financial statements in accordance with accounting principles generally accepted in Canada. Overall, the Company believes its internal controls and procedures are effective in providing reasonable assurance that financial information is recorded, processed, summarized and reported in a timely manner.

Management is also responsible for the design and effectiveness of disclosure controls and procedures to provide reasonable assurance that material information related to the Company is made known to the Company's certifying officers.

There were no changes in the internal controls over financial reporting during the period ended July 31, 2016, that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting

## 11. Outlook

For the remainder of fiscal 2017, Cymat has expectations for the inclusion of Alusion™ in significant architectural projects including installations located in Europe, the United States and South America. The Alusion™ installations in the Mallorca Convention Center and the Fondazione Prada Museum in Milan continue to generate interest in the design community for the use of Alusion™, especially in the outer façade of buildings. Sales of Alusion™ are expected to continue to be the largest source of revenue for Fiscal 2017.

In the first quarter of fiscal 2017 Cymat began delivering on its first serial production military blast protection order. This initial order from Panhard for 250 SmartMetal™ vehicle blast mitigation kits, has the potential to generate additional sales. Based on further prototype and quoting activity in the military segment, Cymat expects significant future developments in SmartMetal™ blast mitigation applications for military/security vehicles. Cymat also continues to explore non-vehicular energy absorption applications for SmartMetal™ including the use of SmartMetal™ in the French nuclear energy industry for designs similar to that supplied in fiscal 2016 as well as additional applications involving the transport of radioactive material.

In the automotive sector, the Company continues to participate in discussions concerning the development of SmartMetal™ applications on several fronts including NVH applications and vehicle crash mitigation systems. Management remains convinced that SmartMetal™ has the potential to resolve the conflicting requirements within automotive design for increased vehicle crashworthiness while at the same time reducing vehicle weight.