



Cymat Technologies Ltd.
Management's Discussion and Analysis (“MD&A”)
As at October 31, 2022

December 30, 2022

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 the audited comparative consolidated financial statements of the Company for the year ended April 30, 2022, and the associated notes to the consolidated financial statements.

The Company prepares its unaudited interim consolidated 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 consolidated interim financial statements has been prepared in accordance with IAS 34, Interim Financial Reporting.

This MD&A is dated December 30, 2022 and all amounts herein are denominated in Canadian dollars, unless otherwise stated. This MD&A reflects the accounts of Cymat and its wholly-owned subsidiary, ALU-MMC Hungary, Zrt.

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, manufactures and sells 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 4 major markets: automotive, architecture, defense and general industrial markets seeking energy management systems.

Cymat markets architectural material under the trademark, “Alusion™” and energy management products under the “SmartMetal™” trademark.

2. Selected Financial Information

The following table presents selected financial information for the three-month periods ended October 31, 2022 and October 31, 2021.

	Three Months Ended October 31		Six Months Ended October 31	
	2022 (\$)	2021 (\$)	2022 (\$)	2021 (\$)
Interim Statements of Operations				
Revenue	1,049,261	385,845	2,152,634	1,332,176
Plant operating expenses	1,034,678	426,273	2,146,932	982,394
Research and material testing expense	39,140	85,120	115,666	115,855
Selling, general and administrative expenses	1,275,985	836,613	2,876,262	2,245,296
Income (loss) from operations	(1,300,542)	(962,159)	(2,986,226)	(2,011,367)
Net loss	(1,461,319)	(1,041,774)	(3,242,345)	(2,176,132)
Interim Statements of Cash Flows				
Cash used in operating activities	(909,658)	(1,096,450)	(1,768,822)	(2,404,609)

The following table presents selected quarterly financial information for the eight most recent quarters for the period ended October 31, 2022.

Selected Financial Information by Fiscal Quarter
All Items in \$ 000's, except Net Loss per Share

Three months ended:	Oct 31, 2022	Jul 31, 2022	Apr 30, 2022	Jan 31, 2022	Oct 31, 2021	Jul 31, 2021	Apr 30, 2021	Jan 31, 2021
Revenue	1,049	1,103	1,324	468	386	946	1,655	1,126
Plant operating expenses	1,035	1,112	1,051	295	426	556	708	657
Research and material testing expenses	39	77	32	33	85	31	32	31
SG&A expenses	1,276	1,600	1,415	1,291	837	1,409	860	432
Net Loss	(1,461)	(1,781)	(1,375)	(1,195)	(1,042)	(1,134)	(371)	(70)
Net Loss per Share	(0.02)	(0.03)	(0.02)	(0.02)	(0.02)	(0.02)	(0.01)	-
Operating cash flow	(910)	(859)	(1,201)	(713)	(1,096)	(1,308)	416	(280)

As at:	Oct 31, 2022	Jul 31, 2022	Apr 30, 2022	Jan 31, 2022	Oct 31, 2021	Jul 31, 2021	Apr 30, 2021	Jan 31, 2021
Cash & cash equivalents	1,183	2,213	2,466	3,586	4,047	5,232	5,018	226
Restricted cash	21	21	21	22	22	15	15	14
Working capital	1,538	2,396	2,599	3,528	3,979	4,819	3,511	(781)

3. Results of Operations

Comparison of the Three Months Ended October 31, 2022 and October 31, 2021

Revenue

Revenue for the second quarter of fiscal 2023 in the amount of \$1,049,000 represented an increase of \$663,000, or 172%, over revenue from the second quarter of the preceding year of \$386,000.

Revenue for the current quarter included sales of Alusion™ in the amount of \$923,000 compared to sales of Alusion™ in the amount of \$320,000 in comparative quarter of fiscal 2022. Several large orders shipped to Eastern Asia represented the majority of the Alusion™ sales for the quarter, with an order for a large American-based internet search engine company also contributing significantly to revenue. In the comparative quarter, repairs to one of the casting furnace linings and control systems, resulted in casting line down time that lasted for approximately half of that quarter. Supply chain interruptions extended the repair time beyond the typical timeframe.

Sales of SmartMetal™ for the second quarter of fiscal 2023 totalled \$126,000 as compared to sales of \$66,000 in the comparative quarter. Current quarter sales included sales of SmartMetal™ to an Asian Original Equipment Manufacturer (“OEM”) for under-belly blast protection on military personnel carriers as well as an order for protective material used in the French nuclear energy industry. SmartMetal™ sales in the comparative quarter were also for use in France’s nuclear sector.

Revenue from the sale of manufactured products is recognized at the point in time when control of the product is transferred to the customer. Based on the terms of the specific transaction, control typically transfers at a point along a continuum that is as early as the products’ departure from the Company’s warehouse to as late as the passing of inspection following the products’ arrival at a designated shipment location. Amounts received in advance of recognized revenues are recorded as deferred revenue.

Plant Operating Expenses

Plant operating expenses for the quarter ended October 31, 2022 were approximately \$1,035,000, an increase of \$609,000, or 143%, as compared to expenses of \$426,000 for the quarter ended October 31, 2021.

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 \$860,000 for the second quarter of fiscal 2023, as compared to \$327,000 for the second quarter of last fiscal year. Increased sales volume was part of the driver of the increased quarter-over-quarter expenses. Additional factors contributing to higher plant operating expenses included the addition of a second production shift which doubled the number of production personnel and increases in wages to combat labour shortages, increased raw material costs resulting from increased commodity prices and amplified by the strengthening of the US dollar and increased production line maintenance costs.

Plant operating expenses also includes factory overhead costs such as facility costs and utilities. These expenses totalled approximately \$79,000 for the second quarter of fiscal 2023 as compared to \$65,000 for the same quarter of fiscal 2022. Increased electricity usage accounted for the quarter-over-quarter increase in expenses.

Plant operating expenses also include depreciation expense of approximately \$96,000 for the three months ended October 31, 2022 and \$34,000 for the same period ended October 31, 2021.

Research and Material Testing Expenses

Research and material testing expenses for the second quarter of fiscal 2023 included net costs in the amount of \$39,000 as compared to \$85,000 for the second quarter of last fiscal year. Current quarter expenditures were primarily targeted towards enhancements of the foaming process. Expenses in the comparative quarter related primarily to the further refinement of a new aluminum foam in support of the Company's sandwich panel venture, and development of a new architectural aluminum foam.

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

SG&A expenses for the quarter ended October 31, 2022 were approximately \$1,276,000, as compared to an expense of \$837,000 for the same quarter ended October 31, 2021. The most significant expense increases included increased employee headcount and salary levels (\$95,000), higher commission expenses (\$87,000), higher stock-based compensation expenses (\$86,000) combined with higher option-based consulting expenditures (\$75,000), increased marketing and traveling expenses (\$36,000), increased information technology expenses (\$21,000) associated with system upgrades and a new managed services contract and higher legal and audit fees (\$17,000).

SG&A expenses also include depreciation of \$24,000 for the second quarter of fiscal 2023 and \$8,000 for the second quarter of fiscal 2022.

Foreign Exchange Loss

For the second quarter of fiscal 2023, there was a foreign exchange loss of \$53,000 as compared to a foreign exchange gain of \$8,000 for the second quarter of fiscal 2022. The effect of a strengthened US dollar on US denominated payables was the primary driver of the current quarter's loss.

Interest and Financing Expense

Interest and financing expense for the three months ended October 31, 2022, of \$107,000 (2021 - \$40,000), includes \$55,000 in royalty-based financing fees (2021 - \$15,000), \$46,000 of interest regarding the lease liability (2021 - \$21,000) and \$5,000 regarding the accretion of interest on the loan received through the federal government's Regional Relief and Recovery Fund (2021 - \$4,000).

Net Income (Loss)

The net loss for the three months ended October 31, 2022 of \$1,461,000 (2021 – \$1,042,000) includes the non-cash items of depreciation of approximately \$121,000 (2021 – \$43,000), share-based compensation expenses of approximately \$290,000 (2021 – \$204,000), option-based consulting fees of \$75,000 (2021 - \$Nil), and non-cash interest arising from the RRRF loan of \$5,000 (2021 - \$4,000). The comparative quarter also included a loss on the disposal of production equipment of \$42,000

Comparison of the Six Months Ended October 31, 2022 and October 31, 2021

Revenue

Revenue for the first half of fiscal 2023 in the amount of \$2,153,000 represented an increase of \$821,000, or 62%, over revenue from the first half of the preceding year of \$1,332,000.

Revenue for the current half-year included sales of AlusionTM in the amount of \$2,027,000 compared to sales of AlusionTM in the amount of \$1,074,000 in comparative portion of fiscal 2022. In the comparative period, repairs to one of the casting furnace linings and control systems, resulted in casting line down time that lasted for approximately half of the second quarter. Supply chain interruptions extended the repair time beyond the typical timeframe.

Sales of SmartMetalTM for the first two quarters of fiscal 2023 totalled \$126,000 as compared to sales of \$258,000 in the comparative quarter.

Revenue from the sale of manufactured products is recognized at the point in time when control of the product is transferred to the customer. Based on the terms of the specific transaction, control typically transfers at a point along a continuum that is as early as the products' departure from the Company's warehouse to as late as the passing of inspection following the products' arrival at a designated shipment location. Amounts received in advance of recognized revenues are recorded as deferred revenue.

Plant Operating Expenses

Plant operating expenses for the six months ended October 31, 2022 were approximately \$2,147,000, an increase of \$1,165,000, or 119%, as compared to expenses of \$982,000 for the six months ended October 31, 2021.

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 \$1,813,000 for the first two quarters of fiscal 2023, as compared to \$765,000 for the first half of last fiscal year. Increased sales volume was partly responsible for the increased comparative expenses. Additional factors contributing to higher plant operating expenses included the addition of a second production shift which doubled the number of production personnel and increases in wages to combat labour shortages, increased raw material costs resulting from increased commodity prices and amplified by the strengthening of the US dollar and increased production line maintenance costs.

Plant operating expenses also includes factory overhead costs such as facility costs and utilities. These expenses totalled approximately \$179,000 for the first half of fiscal 2023 as compared to \$149,000 for the same period of fiscal 2022. Increased electricity usage and a onetime facility maintenance charge from the landlord accounted for the increase in expenses.

Plant operating expenses also include depreciation expense of approximately \$154,000 for the six months ended October 31, 2022 and \$69,000 for the same period ended October 31, 2021.

Research and Material Testing Expenses

Research and material testing expenses for the first half of both fiscal 2023 and fiscal 2022 approximated \$116,000. Current year expenditures were applied targeted towards enhancements of the foaming process as well as the further refinement of a new aluminum foam in support of the Company's sandwich panel venture, and development of a new architectural aluminum foam. Prior year expenditures focused primarily on the new foam and brazing process developments.

Selling, General and Administrative Expenses ("SG&A")

SG&A expenses for the six months ended October 31, 2022 were approximately \$2,876,000, as compared to an expense of \$2,245,000 for the same period ended October 31, 2021. The most significant expense increases included increased employee headcount and salary levels (\$218,000), higher stock-based compensation expenses (\$107,000) partially offset by lower option-based consulting expenditures (\$45,000), higher commission expenses (\$102,000), higher cash-based consulting expenses (\$82,000), increased marketing and traveling expenses (\$75,000), increased information technology expenses (\$59,000) associated with system upgrades and a new managed services contract and higher legal and audit fees (\$25,000).

SG&A expenses also include depreciation of \$38,000 for the first half of fiscal 2023 and \$15,000 for the first half of fiscal 2022.

Foreign Exchange Loss

For the first six months of fiscal 2023, there was a foreign exchange loss of \$45,000 as compared to a foreign exchange loss of \$9,000 for the first half of fiscal 2022. The effect of a strengthened US dollar on US denominated payables was the primary driver of the current period's loss.

Interest and Financing Expense

Interest and financing expense for the six months ended October 31, 2022, of \$195,000 (2021 - \$114,000), includes \$113,000 in royalty-based financing fees (2021 - \$63,000), \$72,000 of interest regarding the lease liability (2021 - \$43,000) and \$9,000 regarding the accretion of interest on the loan received through the federal government's Regional Relief and Recovery Fund (2021 - \$8,000).

Net Income (Loss)

The net loss for the six months ended October 31, 2022 of \$3,242,000 (2021 – \$2,176,000) includes the non-cash items of depreciation of approximately \$194,000 (2021 – \$84,000), share-based compensation expenses of approximately \$972,000 (2021 – \$865,000), option-based consulting fees of \$172,000 (2021 - \$217,000), a loss on the disposal of production equipment of \$15,000 (2021 - \$42,000) and non-cash interest arising from the RRRF loan of \$9,000 (2021 - \$8,000).

4. Liquidity and Capital Resources

Sources and Uses of Cash

As at October 31, 2022, the Company had approximately \$1,183,000 of cash and cash equivalents on hand. For the six months ended October 31, 2021, the cash flow used by operating activities was approximately \$1,769,000 (2021 – used by operations \$2,405,000). For the current period, cash utilized by operating activities was the result of a net loss adjusted for items not involving cash of approximately \$1,880,000 (2021 – loss adjusted for non-cash items of \$959,000) and cash provided by changes in non-cash working capital balances of \$111,000 (2021 –\$1,446,000 used by changes in non-cash working capital).

For the six months ended October 31, 2022, cash used in investing activities of \$703,000 was the result of capital expenditures that included production line upgrades, the purchase of a drying oven, plant lighting upgrades, product display area renovations and laboratory equipment purchases. For the first half of the prior year, cash used by investing activities of \$106,000 was the result of the purchase of equipment (\$85,000) and costs of retiring the low-pressure casting equipment (\$21,000).

For the six months ended October 31, 2022, cash provided by financing activities in the amount of \$1,188,000 was the result of the exercise of warrants (\$768,000) and stock options (\$438,000), partially offset by building lease payments (\$18,000). For the first half of the preceding fiscal year, cash provided by financing activities in the amount of \$1,540,000 was the result of proceeds received from an equity private placement that was initiated in April 2021 (\$1,281,000), the exercise of employee stock options (\$228,000) and the exercise of warrants (\$79,000), partially offset by building lease payments (\$47,000).

Investments in Property, Plant and Equipment

Management maintains its capital expenditure with the goal of meeting expected production demands and to support research and development initiatives.

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.

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.

5. Investments and Capitalization

Cymat is listed on the TSX Venture Exchange, trading under the symbol CYM. Cymat is also listed on the OTCQB Exchange in the United States, trading under the symbol CYMHF.

The Company considers its capital to be its equity which consists of share capital, subscription receipts, contributed surplus, advisory options/warrants and warrants, net of the deficit. The Company's objective in managing capital is to ensure a sufficient liquidity position to finance its manufacturing operations, research and development activities, sales and administration expenses, working capital and overall capital expenditures. The Company makes every effort to manage its liquidity to minimize dilution to its shareholders when possible. The Company has funded its activities through public offerings and private placements of common shares and warrants, convertible debentures, promissory notes, royalty offerings, and grant contributions. The Company is not subject to externally imposed capital requirements and the Company's overall strategy with respect to capital risk management did not change during the period ended October 31, 2022.

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 December 30, 2022.

	Number of Securities
Common Shares	59,085,612
Employee/Consultant Stock Options	10,150,000
Warrants	<u>3,859,862</u>
Total Diluted Shares Outstanding	<u>73,095,474</u>

Share Capital

The Company is authorized to issue an unlimited number of common shares. At October 31, 2022, issued and outstanding common shares totalled approximately 59,085,612 shares.

In May 2021, the Company completed a private equity placement that had been initiated in the previous month, issuing a total of 7,719,725 equity units. The Each equity unit was priced at \$0.65 per unit, with a unit consisting of one Cymat common share and one half (1/2) of a common share purchase warrant. Each whole warrant entitles the holder to purchase one Cymat common share at a price of \$0.90 for a twenty-four (24) month period. In May 2021, the Company received gross proceeds in the aggregate amount of \$1,306,386 associated with the issuance of 2,009,832 equity units. Additionally, 5,709,893 equity units were issued related to the subscription receipts representing proceeds of \$3,711,430 received in the preceding month. In total, 7,719,725 common shares were issued as a result of this private placement. As compensation for services related to the private placement, the Company issued 770,000 advisory options/warrants as described in the below Note 16. The net proceeds were allocated between common shares and warrants using the residual valuation method, resulting in \$4,811,469 of net proceeds allocated to common shares.

In May 2021, the Company issued 150,000 common shares as the result of the exercise of warrants.

In May and June of 2021, the Company issued 925,000 common shares as the result of the exercise of employee stock options.

In September 2021, the Company issued 175,000 common shares as the result of the exercise of employee stock options.

In December 2021, the Company issued 1,521,984 common shares as the result of the exercise of warrants.

In January 2022, the Company issued 100,000 common shares as the result of the exercise of employee stock options.

In February 2022, the Company issued 350,000 common shares as the result of the exercise of employee stock options.

In March 2022, the Company issued 100,000 common shares as the result of the exercise of warrants.

In April 2022, the Company issued 100,000 common shares as the result of the exercise of employee stock options.

In July 2022, the Company issued 1,426,000 common shares as the result of the exercise of warrants.

In July 2022, the Company issued 2,135,000 common shares as the result of the exercise of employee stock options.

To date, 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 January 13, 2022, the aggregate number of common shares reserved for the issuance of stock options is 10,967,722.

In April 2021, 108,333 employee stock options with an exercise price of \$0.20 per share were exercised.

In May 2021, 200,000 employee stock options with an exercise price of \$0.20 were exercised and 75,000 employee stock options with an exercise price of \$0.205 were exercised.

In June 2021, 650,000 employee stock options with an exercise price of \$0.20 were exercised.

In June 2021, 2,635,000 stock options with an exercise price of \$0.79 were granted to certain directors, officers and employees with one third of the options vesting on the date of grant and each of the remaining third of the options vesting on each of the subsequent two grant anniversary dates.

In June 2021, 350,000 stock options with an exercise price of \$0.79 were granted to a consulting firm with vesting on the date of grant.

In September 2021, 75,000 employee stock options with an exercise price of \$0.205, 50,000 employee stock options with an exercise price of \$0.235 and 50,000 employee stock options with an exercise price of \$0.31 were exercised.

In January 2022, 100,000 employee stock options with an exercise price of \$0.205 were exercised.

In January 2022, 1,500,000 stock options with an exercise price of \$0.74 were granted to certain directors and officers with one third of the options vesting on the date of grant and each of the remaining third of the options vesting on each of the subsequent two grant anniversary dates.

In February 2022, 250,000 employee stock options with an exercise price of \$0.205 and 100,000 employee stock options with an exercise price of \$0.31 were exercised.

In April 2022, 100,000 employee stock options with an exercise price of \$0.205 were exercised.

In May 2022, 2,905,000 stock options with an exercise price of \$0.61 were granted to certain directors, officers and employees with one third of the options vesting on the date of grant and each of the remaining third of the options vesting on each of the subsequent two grant anniversary dates.

In May 2022, 250,000 stock options with an exercise price of \$0.61 were granted to a consulting firm with vesting on the date of grant.

In July 2022, 2,035,000 employee stock options with an exercise price of \$0.205 were exercised and 100,000 stock options issued to a consulting firm with an exercise price of \$0.21 were exercised.

Warrants

In May 2021, the Company completed a private equity placement that had been initiated in the previous month, issuing a total of 7,719,725 equity units. The Each equity unit was priced at \$0.65 per unit, with a unit consisting of one Cymat common share and one half (1/2) of a common share purchase warrant. Each whole warrant entitles the holder to purchase one Cymat common share at a price of \$0.90 for a twenty-four (24) month period. The net proceeds were allocated between common shares and warrants using the residual valuation method, resulting in \$18,847 of net proceeds allocated to warrants.

In May 2021, 150,000 warrants with an exercise price of \$5.25 per share were exercised.

In December 2021, 1,521,984 warrants with an exercise price of \$0.425 per share were exercised.

In March 2022, 100,000 warrants with an exercise price of \$0.425 per share were exercised.

In July 2022, 1,426,000 warrants with an exercise price of \$0.525 per share were exercised and 163,492 warrants expired unexercised.

Advisory Options/Warrants

As compensation for services related to the private placement completed in May 2021, the Company issued 770,000 advisory options/warrants. Each option entitles the holder to purchase an equity unit at a price of \$0.65 per unit, with a unit consisting of one Cymat common share and one half (1/2) of a common share purchase warrant. Each whole warrant will entitle the holder to purchase one Cymat common share at a price of \$0.90 until May 2023. The options have an expiry date of November 5, 2022. The advisory options/warrants were valued at \$91,667, the fair value of the services received.

6. Critical Accounting Policies and Estimates

Revenue recognition

Revenue from the sale of manufactured products is recognized at the point in time when control of the product is transferred to the customer. Based on the terms of the specific transaction, control typically transfers at a point along a continuum that is as early as the products' departure from the Company's warehouse to as late as the passing of inspection following the products' arrival at a designated shipment location. Amounts received in advance of recognized revenues are recorded as deferred revenue.

Accrued royalties

The Company issued promissory notes that included an embedded perpetual royalty that survived the maturity of the promissory notes. The royalties have been designated as a financial liability at fair value through profit or loss. Accordingly, the perpetual royalty is valued at the reporting date based on the most recent revenue projections. The change in estimated fair value of the royalty is recorded in income in the period in which the liability is recalculated.

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 appropriate discount rate for valuation of the expected cash flows associated with the note receivable, assumptions about the valuation of the conversion element and assumptions about the likelihood of conversion,
- 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 asset's fair value and the cost of disposal,
- 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 determination of whether a contract contains a lease, and if so, the determination of the appropriate discount rate and term of the lease to use in the measurement of the lease liability, 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.

Judgements

In the process of applying the Company's accounting policies, management has made judgements in assessing the primary economic environment underlying its determination that the functional currency of the consolidated entity is the Canadian dollar.

Impact of COVID-19

The Company has considered the impact of COVID-19 and the related market volatility in preparing its financial statements. While the specific areas of estimates and judgement as noted above did not change, the impact of COVID-19 resulted in the application of further judgement within those identified areas. Given the dynamic and evolving nature of COVID-19 and the limited recent experience of the economic and financial impacts of such a pandemic, changes to the estimates that have been applied in the measurement of the Company's assets and liabilities may arise in the future. Other than adjusting events that provide evidence of conditions that existed at the end of the reporting period, the impact of events that arise after the reporting period will be accounted for in future reporting periods.

Key elements of the financial statements and related disclosures that have been impacted by COVID-19 include:

- Revenue: Timing of some anticipated orders continues to be affected by the increased uncertainty resulting from pandemic-related supply chain interruptions.
- Inventory: Net realizable value for inventory was calculated using estimated selling prices and selling expenses in the context of the pandemic.
- Property, Plant and Equipment: In assessing impairment of regarding the non-financial assets of property, plant and equipment, the recoverable amount of each asset or cash generating unit was based on estimates of asset fair value less costs of disposal using management's best estimates of such amounts in the context of the COVID-19 pandemic.
- Accrued Royalties: Future cash flow estimates used in the valuation of the accrued royalty liability incorporated management's best estimates of anticipated amounts and timing of future sales incorporating management's expectations for the impact of COVID-19 on global SAF sales. The discount rate used in calculating the fair value of the royalty liability incorporated management's assessment of the additional risk presented by the COVID-19 pandemic.

Government assistance

Government assistance may be available to the Company through income tax investment and innovation tax credits, other programs providing innovation funding and relief programs associated with Covid-19. Funding is recognized when there is reasonable assurance that the Company has complied with the conditions attached to the funding arrangement and is recognized as the applicable costs are incurred. Research and product development funding is presented as a reduction in research and material testing costs expenses unless it is for reimbursement of an asset, in which case it is accounted for as a reduction in the carrying amount of the applicable asset. Where the Company receives government contributions that include terms for repayment, a financial liability is recognized and measured in accordance with the terms of IFRS 9.

7. Accounting Standards Issued But Not Yet Applied

At the date of approval of the financial statements, several new, but not yet effective, standards and amendments to existing standards, and interpretations have been published by the IASB. None of these standards or amendments to existing standards have been adopted early by the Company. Those standards and amendments are not expected to be relevant to the Company's financial statements.

8. Related Party Transactions

Interest and financing expense for the six months ended October 31, 2022 includes cash-based royalties in the amount of \$43,000 (2021 – \$24,000) regarding a related party.

9. Risks and Uncertainties

Interruption of Raw Material and Manufacturing Component Supply

Interruption of key raw materials and manufacturing supplies could significantly impact operations and our financial position. Interruption of supply could arise from conflict-related or health-crisis-related market shortages. Cymat attempts to purchase key raw materials and supplies well in advance of their anticipated use and, where possible, seeks multiple sources for such supplies.

Outbreak of Disease

A global outbreak of disease or similar public health threat could have a material adverse effect on the operations of Cymat. In March of 2020, the World Health Organization (“WHO”) declared COVID-19 to constitute a “Public Health Emergency of International Concern” and has categorized the outbreak as a pandemic. COVID-19 has been, and continues to be, highly disruptive to the global economy and has the potential to negatively impact Company sales, supply chains, labour force, manufacturing capabilities and ability to raise additional financing.

International Trade Barriers and Tariffs

Currently neither Cymat’s primary raw material supplies nor Cymat’s export of SAF have been affected by the recent import tariffs enacted by the United States and the subsequent retaliatory measures adopted by various world economies. However, these actions have increased the amount of volatility experienced by international trade. Further escalation of trade tensions has the potential to increase the landed cost of Cymat’s SAF for international customers, which could have a negative effect on Company sales.

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 to be valid and enforceable. 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, commodity price risks associated with aluminum-based raw materials, fluctuating currency exchange rates 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 reporting period ended October 31, 2022, that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting

11. Outlook

Although most local Covid-19 related restrictions have been lifted, reported contractions of the virus are on the rise in the northern hemisphere. Cymat management continues to monitor its production procedures and protocols to promote the continued health and safety of our employees, customers and suppliers as well as the community at large. Management continues to employ enhanced inventory and supply chain management strategies to mitigate potential supply chain risks, including holding higher levels of inventory for raw materials and key production consumables. The local labour market continues to experience a tightness that arose in conjunction with the pandemic. Management continues to closely monitors local labour market economics with the goal of maximizing employee retention. Additionally, the Company's production teammate cross-training program is on-going with the goal of increasing employee engagement and role flexibility.

Alusion™ – Cymat’s architectural aluminum foam – continues to constitute the main source of revenue and is expected to do so into the upcoming fiscal year. The pipeline of major Alusion™ construction projects remains significant despite the headwinds presented by rising inflation and interest rates, the resilience of the pandemic, and the risk of recession. Although the timing for some American façade orders has been pushed back, the United States is a key focus of current business development efforts as we look to expand our regional agent network on our home continent and the sales pipeline is starting to reflect these initiatives.

SmartMetal™ defence and security focused development initiatives that provide applications for blast mitigation, light-weighting and use in multi-threat composite panel systems are ongoing. In the recently completed quarter Cymat shipped the first of three underbelly blast mitigation kits ordered by an Asian military vehicle OEM with another two kits shipping prior to this calendar year’s end. An order for another three kits is expected to ship early in the new year. These kits are part of a low-rate initial production order for an Asian military force anticipated to eventually deploy up to 700 vehicles equipped with SmartMetal™ blast protection. This OEM is expected to market this vehicle to other military forces that currently operate previous generations of the same personnel/supply transportation vehicles.

The automotive industry continues to be a main focus of Cymat business development efforts. As announced earlier this month, Cymat commenced a second component development agreement with a global automotive manufacturer. This component will utilize SmartMetal™ to provide side impact protection to a battery enclosure for a new mid-sized electric vehicle (“EV”) platform. Initial annual vehicle volumes are forecast to be in the 50,000-vehicle range, expanding to several hundred thousand vehicles per year as more models are introduced on the platform. With the assistance of our design partner, Tesseract, Cymat expects to complete the design phase for this component by the end of the first calendar quarter of 2023. Cymat continues to engage with this OEM to identify areas in the design of future EV models where the incorporation of SmartMetal™ could be desirable.

Discussions are ongoing with several additional automotive OEM’s and Tier 1 manufactures regarding the use of SmartMetal™ in vehicle production. Cymat continues to upgrade its manufacturing and information systems infrastructure to evidence its high-volume manufacturing readiness.

The next phase of Cymat’s collaboration with Rio Tinto and the National Research Council of Canada on refinement of the process to manufacture brazed aluminum foam sandwich panels is set to begin in January.