
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549**

FORM 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 2021

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number: 001-36247

Meta Materials Inc.

(Exact Name of Registrant as Specified in its Charter)

Nevada
(State or other jurisdiction of
incorporation or organization)

74-3237581
(I.R.S. Employer
Identification No.)

1 Research Drive
Dartmouth, Nova Scotia
(Address of principal executive offices)

B2Y 4M9
(Zip Code)

Registrant's telephone number, including area code: (902) 482-5729

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$0.001 per share	MMAT	Nasdaq Capital Market

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company,” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes No

As of June 30, 2021, the registrant had 279,782,854 shares of common stock, \$0.001 par value per share, outstanding.

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PART I—FINANCIAL INFORMATION

Item 1. Financial Statements

META MATERIALS INC.
CONDENSED CONSOLIDATED INTERIM BALANCE SHEETS (UNAUDITED)

	As of June 30, 2021	As of December 31, 2020
Assets		
Current assets:		
Cash and cash equivalents	\$154,634,423	\$ 1,395,683
Restricted Cash	433,627	—
Grants receivable	407,523	327,868
Accounts receivable	207,760	22,833
Inventory	368,293	463,382
Prepaid expenses and other current assets	1,604,710	514,204
Assets held for sale	72,797,392	—
Due from related parties	57,658	—
Total current assets	230,511,386	2,723,970
Intangible assets, net	4,389,607	4,476,614
Property, plant and equipment, net	5,382,196	2,761,171
Operating lease right-of-use assets	2,994,424	270,581
Goodwill	217,613,966	—
Total assets	\$460,891,579	\$ 10,232,336
Liabilities and stockholders' equity (deficit)		
Current liabilities		
Trade and other payables	\$ 5,377,375	\$ 2,940,452
Due to related party	—	245,467
Current portion of long-term debt	1,349,274	290,544
Current portion of deferred revenues	1,453,556	1,239,927
Current portion of deferred government assistance	866,011	779,578
Preferred stock liability	77,906,354	—
Current portion of operating lease liabilities	279,832	150,802
Asset retirement obligations	21,937	—
Unsecured convertible promissory notes	—	1,203,235
Secured convertible debentures	—	5,545,470
Total current liabilities	87,254,339	12,395,475
Deferred revenues	681,625	804,143
Deferred government assistance	76,807	146,510
Deferred tax liability	219,962	318,054
Unsecured convertible debentures	—	1,825,389
Long-term operating lease liabilities	1,145,049	119,779
Funding obligation	859,828	776,884
Long-term debt	2,739,620	2,743,504
Total liabilities	92,977,230	19,129,738
Stockholders' equity (deficit)		
Common stock - \$0.001 par value; 1,000,000,000 shares authorized, 279,782,854 shares issued and outstanding at June 30, 2021, and \$Nil par value; unlimited shares authorized, 154,236,692 shares issued and outstanding at December 31, 2020	257,966	132,347
Additional paid-in capital	454,259,192	29,021,974
Accumulated other comprehensive income (loss)	133,946	(654,880)
Accumulated deficit	(86,736,755)	(37,396,843)
Total stockholders' equity (deficit)	367,914,349	(8,897,402)
Total liabilities and stockholders' equity (deficit)	\$460,891,579	\$ 10,232,336

Commitments and contingencies (note 21)

Subsequent events (note 22)

The accompanying notes are an integral part of these condensed consolidated interim financial statements

META MATERIALS INC.

CONDENSED CONSOLIDATED INTERIM STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS (UNAUDITED)

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2021	2020	2021	2020
Revenue:				
Product sales	1,953	—	24,000	1,922
Development revenue	622,367	210,344	1,196,623	648,761
Total Revenue	624,320	210,344	1,220,623	650,683
Cost of goods sold	706	1,336	1,106	2,160
Gross Profit	623,614	209,008	1,219,517	648,523
Operating Expenses:				
Selling & Marketing	298,871	153,962	695,465	324,528
General & Administrative	3,145,368	1,553,118	5,738,252	3,157,652
Research & Development	1,633,653	960,430	3,412,909	1,892,601
Total operating expenses	5,077,892	2,667,510	9,846,626	5,374,781
Other income (expense):				
Interest expense, net	(427,809)	(324,421)	(878,717)	(516,225)
(Loss) Gain on foreign exchange, net	(163,941)	(323,172)	(330,385)	256,673
(Loss) Gain on financial instruments, net	(535,170)	1,042,928	(40,540,091)	1,285,765
Other income, net	341,958	236,001	933,864	411,669
Total other income (expenses)	(784,962)	631,336	(40,815,329)	1,437,882
Loss before income taxes	(5,239,240)	(1,827,166)	(49,442,438)	(3,288,376)
Income tax recovery	57,847	10,425	102,526	54,347
Net loss	(5,181,393)	(1,816,741)	(49,339,912)	(3,234,029)
Other Comprehensive Income (Loss) net of tax				
Foreign currency translation gain (loss)	87,087	160,012	108,648	(159,248)
Fair value gain (loss) on changes of own credit risk	9,011	(388,332)	680,178	(365,208)
Total Other Comprehensive Income (Loss)	96,098	(228,320)	788,826	(524,456)
Comprehensive loss	(5,085,295)	(2,045,061)	(48,551,086)	(3,758,485)
Basic and diluted loss per share ⁽¹⁾	(0.03)	(0.01)	(0.27)	(0.03)
Weighted average number of shares outstanding - basic and diluted ⁽¹⁾	197,911,144	155,931,625	183,485,933	120,093,443

(1) Retroactively restated for the three and six months ended June 30, 2021 and 2020 for the Torchlight RTO (“Reverse Acquisition”) and CPM RTO (“Reverse Recapitalization”) as described in Note 3

The accompanying notes are an integral part of these condensed consolidated interim financial statements

META MATERIALS INC.

CONDENSED CONSOLIDATED INTERIM STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY (UNAUDITED) ⁽¹⁾

	Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income (loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount				
Balance, April 1, 2021	—	—	194,700,061	172,883	81,568,131	37,848	(81,555,362)	223,500
Net loss	—	—	—	—	—	—	(5,181,393)	(5,181,393)
Other comprehensive income	—	—	—	—	—	96,098	—	96,098
Exercise of stock options	—	—	235,199	235	64,291	—	—	64,526
Exercise of warrants	—	—	156,709	157	62,252	—	—	62,409
Effect of reverse acquisition	—	—	82,813,994	82,814	369,548,188	—	—	369,631,002
Shares issued in lieu of operating lease liability	—	—	1,832,989	1,833	2,780,135	—	—	2,781,968
Stock-based compensation	—	—	43,902	44	236,195	—	—	236,239
Balance, June 30, 2021	—	—	279,782,854	257,966	454,259,192	133,946	(86,736,755)	367,914,349
Balance, April 1, 2020	—	—	154,236,692	132,420	27,896,288	(360,015)	(27,202,872)	465,821
Net loss	—	—	—	—	—	—	(1,816,741)	(1,816,741)
Other comprehensive loss	—	—	—	—	—	(228,320)	—	(228,320)
Stock-based compensation	—	—	—	—	365,763	—	—	365,763
Balance, June 30, 2020	—	—	154,236,692	132,420	28,262,051	(588,335)	(29,019,613)	(1,213,477)

	Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income (loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount				
Balance, January 1, 2021	—	—	154,163,975	132,347	29,021,974	(654,880)	(37,396,843)	(8,897,402)
Net loss	—	—	—	—	—	—	(49,339,912)	(49,339,912)
Other comprehensive income	—	—	—	—	—	788,826	—	788,826
Conversion of promissory notes	—	—	20,391,239	20,391	23,635,974	—	—	23,656,365
Conversion of secured debentures	—	—	14,155,831	14,156	22,104,626	—	—	22,118,782
Conversion of unsecured debentures	—	—	5,105,338	5,105	5,764,370	—	—	5,769,475
Conversion of long-term debt	—	—	124,716	125	221,718	—	—	221,843
Conversion of payable to related party	—	—	150,522	151	225,835	—	—	225,986
Exercise of stock options	—	—	413,919	414	112,741	—	—	113,155
Exercise of warrants	—	—	238,806	239	93,755	—	—	93,994
Exercise of broker warrants	—	—	61,331	61	16,194	—	—	16,255
Effect of reverse acquisition	—	—	82,813,994	82,814	369,548,188	—	—	369,631,002
Shares issued in lieu of operating lease liability	—	—	1,832,989	1,833	2,780,135	—	—	2,781,968
Stock-based compensation	—	—	330,194	330	733,682	—	—	734,012
Balance, June 30, 2021	—	—	279,782,854	257,966	454,259,192	133,946	(86,736,755)	367,914,349
Balance, January 1, 2020	58,153,368	58,153	53,297,568	31,480	19,896,611	(63,879)	(25,785,584)	(5,863,219)
Net loss	—	—	—	—	—	—	(3,234,029)	(3,234,029)
Other comprehensive loss	—	—	—	—	—	(524,456)	—	(524,456)
Issuance of common stock, net	—	—	2,613,321	2,613	429,795	—	—	432,408
Issuance of warrants	—	—	—	—	149,994	—	—	149,994
Issuance of broker warrants	—	—	—	—	16,144	—	—	16,144
Conversion of deferred share units	—	—	522,596	523	(523)	—	—	—
Conversion of promissory notes	—	—	17,752,163	17,752	3,921,695	—	—	3,939,447
Conversion of preferred stock	(58,153,368)	(58,153)	58,153,368	58,153	—	—	—	—
Effect of reverse recapitalization	—	—	21,599,223	21,599	3,089,235	—	—	3,110,834
Stock-based compensation	—	—	298,453	300	759,100	—	—	759,400
Balance, June 30, 2020	—	—	154,236,692	132,420	28,262,051	(588,335)	(29,019,613)	(1,213,477)

(1) Retroactively restated from the earliest period presented for the Torchlight RTO ("Reverse acquisition") and CPM RTO ("Reverse Recapitalization") as described in Note 3

The accompanying notes are an integral part of these condensed consolidated interim financial statements

META MATERIALS INC.
CONDENSED CONSOLIDATED INTERIM STATEMENTS OF CASH FLOWS (UNAUDITED)

	Six Months Ended	
	June 30, 2021	June 30, 2020
	\$	\$
Cash flows from operating activities:		
Net loss	(49,339,912)	(3,234,029)
Adjustments to reconcile net loss to net cash used in operating activities:		
Non-cash finance income	—	(14,002)
Non-cash interest expense	742,174	378,485
Non-cash lease expense	160,437	—
Deferred income tax	(102,526)	(54,347)
Depreciation and amortization	1,173,884	1,197,123
Unrealized foreign currency exchange loss (gain)	230,837	(304,973)
Loss (gain) on financial instruments, net	40,540,091	(1,285,765)
Change in deferred revenue	18,302	(232,986)
Non-cash government assistance	(472,499)	(182,664)
Loss on debt settlement	19,253	—
Stock-based compensation	651,718	708,468
Non-cash consulting expense	12,009	43,673
Changes in operating assets and liabilities	758,381	(1,480,270)
Net cash used in operating activities	<u>(5,607,851)</u>	<u>(4,461,287)</u>
Cash flows from investing activities:		
Purchases of intangible assets	(274,579)	(46,977)
Purchases of property, plant and equipment	(3,040,296)	(538,893)
Proceeds from reverse takeover	146,954,733	3,072,136
Net cash provided by investing activities	<u>143,639,858</u>	<u>2,486,266</u>
Cash flows from financing activities:		
Proceeds from long-term debt	1,127,151	25,783
Repayments of long-term debt	(53,331)	(190,633)
Proceeds from government grants	223,384	198,286
Proceeds from unsecured promissory notes	13,963,386	—
Proceeds from secured convertible debentures	—	3,630,019
Proceeds from unsecured convertible debentures	—	693,784
Proceeds from issuance of common stock and warrants, net	—	598,546
Proceeds from stock option exercises	113,155	—
Proceeds from warrants exercises	93,993	—
Proceeds from broker warrants exercises	16,255	—
Net cash provided by financing activities	<u>15,483,993</u>	<u>4,955,785</u>
Net increase in cash, cash equivalents and restricted cash	153,516,000	2,980,764
Cash, cash equivalents and restricted cash at beginning of the period	1,395,683	407,061
Effects of exchange rate changes on cash, cash equivalents and restricted cash	156,367	3,931
Cash, cash equivalents and restricted cash at end of the period	<u>155,068,050</u>	<u>3,391,756</u>
Supplemental cash flow information		
Accrued purchases of property, equipment and patents	297,345	35,724
Right-of-use assets obtained in exchange for lease liabilities	1,730,743	—
Right-of-use assets and prepaid expenses recognized in exchange for common stock	2,149,381	—
Settlement of liabilities in common stock	52,063,432	—
Interest paid on debt	64,528	18,124

The accompanying notes are an integral part of these condensed consolidated interim financial statements

META MATERIALS INC.

NOTES TO CONDENSED CONSOLIDATED INTERIM FINANCIAL STATEMENTS (Unaudited)

1. Corporate information

Meta Materials Inc. (the “Company” or “META” or “Resulting Issuer”) is a smart materials and photonics company specializing in metamaterial research and products, nanofabrication, and computational electromagnetics. The Company’s registered office is located at 5700 West Plano Pkwy, Plano, Texas 75093 and its principal executive office is located at 1 Research Drive, Halifax, Nova Scotia, Canada.

On March 5, 2020, MMI and Metamaterial Technologies Inc. (“MTI”) completed a business combination by way of a three-cornered amalgamation pursuant to which MTI amalgamated with a subsidiary of Continental Precious Minerals Inc. (“CPM”), known as Continental Precious Minerals Subco Inc. (“CPM Subco”), to become “Metacontinental Inc.” (the “CPM RTO”). The CPM RTO was completed pursuant to the terms and conditions of an amalgamation agreement dated August 16, 2019 between CPM, MTI and CPM Subco, as amended March 4, 2020. Following the completion of the RTO, Metacontinental Inc. is carrying on the business of the former MTI, as a wholly-owned subsidiary of the CPM. In connection with the RTO, CPM changed its name effective March 2, 2020 from Continental Precious Minerals Inc. to Metamaterial Inc. (“MMI” or “Resulting Issuer”). The common stock of CPM were delisted from the TSX Venture Exchange on March 4, 2020 and were posted for trading on the Canadian Securities Exchange (“CSE”) on March 9, 2020 under the symbol “MMAT”.

For accounting purposes, the legal subsidiary, MTI, has been treated as the accounting acquirer and CPM, the legal parent, has been treated as the accounting acquiree. The transaction has been accounted for as a reverse recapitalization. Accordingly, these condensed consolidated interim financial statements are a continuation of MTI consolidated financial statements prior to March 5, 2020 and exclude the balance sheets, statements of operations and comprehensive loss, statement of changes in stockholder’s equity and statements of cash flows of CPM prior to March 5, 2020. See note 3 for additional information.

On December 14, 2020, the Company (formerly known as “Torchlight Energy Resources, Inc.” or “Torchlight”) and its subsidiaries, Metamaterial Exchangeco Inc. (formerly named 2798832 Ontario Inc., “Canco”) and 2798831 Ontario Inc. (“Calco”), entered into an Arrangement Agreement (the “Arrangement Agreement”) with Metamaterial Inc., an Ontario corporation headquartered in Nova Scotia, Canada (“MMI”), to acquire all of the outstanding common stock of MMI by way of a statutory plan of arrangement (the “Arrangement”) under the Business Corporations Act (Ontario), on and subject to the terms and conditions of the Arrangement Agreement (the “Torchlight RTO”). On June 25, 2021, the Company implemented a reverse stock split, changed its name from “Torchlight Energy Resources, Inc.” to “Meta Materials Inc.” and changed its trading symbol from “TRCH” to “MMAT”. On June 28, 2021, following the satisfaction of the closing conditions set forth in the Arrangement Agreement, the Arrangement was completed.

On June 28, 2021, and pursuant to the completion of the Arrangement Agreement completion, the Company began trading on the NASDAQ under the symbol “MMAT” while MMI common stock were delisted from the Canadian Securities Exchange (“CSE”) and at the same time, Metamaterial Exchangeco Inc., a wholly-owned subsidiary of META, started trading under the symbol “MMAX” on the CSE. Certain previous shareholders of MMI elected to convert their common stock of MMI into exchangeable shares in Metamaterial Exchangeco Inc. These exchangeable shares, which can be converted into common stock of META at the option of the holder, are similar in substance to common shares of META and have been included in the determination of outstanding common stock of META.

For accounting purposes, the legal subsidiary, MMI, has been treated as the accounting acquirer and the Company, the legal parent, has been treated as the accounting acquiree. The transaction has been accounted for as a reverse acquisition in accordance with ASC 805 *Business Combinations*. Accordingly, these condensed consolidated interim financial statements are a continuation of MMI consolidated financial statements prior to June 28, 2021 and exclude the balance sheets, statements of operations and comprehensive loss, stockholders’ equity and statements of cash flows of Torchlight prior to June 28, 2021. See note 3 for additional information.

Impact of COVID-19 on the Company’s Business

During March 2020, the COVID-19 outbreak was declared a pandemic by the World Health Organization. This has resulted in governments worldwide enacting emergency measures to combat the spread of the virus. In response, the Company’s management implemented a Work-From-Home policy for management and non-engineering employees in all of the Company’s locations for the remaining period of the year. Engineering staff continued to work on given tasks and follow strict safety guidelines. As of August 2021, the majority of the Company’s employees have returned to the workplace. Although the Company’s supply chain has slowed down, the Company is currently able to maintain inventory of long lead items and is working with its suppliers to optimize future supply orders

COVID-19 has impacted the Company’s 2020 and 2021 sales of its metaAIR® laser protection eyewear product. Worldwide restrictions on travel are significantly impacting the airline industry and purchasing of metaAIR eyewear has not been the primary spending focus of airline companies emerging from the financial impacts of COVID-19, however, the Company is pursuing sales in adjacent markets such as consumer, military and law enforcement. The situation is dynamic and the ultimate duration and magnitude of the impact of COVID-19 on the economy and financial effect specific to the Company cannot be quantified or known at this time.

2. Significant accounting policies

Basis of presentation—These unaudited condensed consolidated interim financial statements and related notes are presented in accordance with accounting principles generally accepted in the United States of America (“US GAAP”). The Company’s fiscal year-end is December 31.

These unaudited condensed consolidated interim financial statements do not include all of the information and notes required by US GAAP for annual financial statements. Accordingly, these unaudited condensed consolidated interim financial statements should be read in conjunction with the Company's audited consolidated financial statements and notes for the year ended December 31, 2020 and 2019, filed with the Securities and Exchange Commission ("SEC") on Form 8-K/A.

Functional and reporting currency—Items included in the condensed consolidated interim financial statements of each of the Company and its subsidiaries are measured using the currency of the primary economic environment in which the entity operates (the 'functional currency'). The condensed consolidated interim financial statements are presented in US Dollars, which is the Company's reporting currency.

- **transactions and balances** - Foreign currency transactions are measured into the functional currency using the exchange rates prevailing at the dates of the associated transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the measurement at quarter end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized in the statement of operations.
- **translation** - The results and financial position of all subsidiaries that have a functional currency different from the presentation currency are translated into the presentation currency as follows:
 - Company's assets and liabilities are translated at the closing rate at the date of the balance sheet;
 - Company's income and expenses are translated at average exchange rates;
 - Company's all resulting exchange differences are recognized in other comprehensive income, a separate component of equity.

Principles of consolidation - These condensed consolidated interim financial statements include all of the accounts of Torchlight Energy Resources Inc and its wholly owned subsidiaries: Torchlight Energy, Inc., Torchlight Energy Operating, LLC, Hudspeth Oil Corporation, and Torchlight Hazel LLC, as well as Metamaterial Exchangeco Inc., 2798831 Ontario Inc. ("Callco"), Metamaterial Inc., Metamaterial Technologies Canada Inc., Metamaterial Technologies USA Inc., Medical Wireless Sensing Limited, Lamda Guard Inc., Lamda Lux Inc., and Lamda Solar Inc. (the "Subsidiaries"). All intercompany balances and transactions have been eliminated upon consolidation.

Use of estimates - The preparation of the condensed consolidated interim financial statements in conformity with US GAAP requires management to make estimates and certain assumptions that affect the amounts reported in these condensed consolidated interim financial statements and accompanying notes. Actual results could differ from these estimates. Significant items subject to such estimates and assumptions include the useful lives of fixed assets; the valuation of financial instruments measured at fair value, lease liabilities and right-of-use assets, and stock-based compensation.

Assets Held for Sale - Assets held for sale are measured at the lower of their carrying amount or fair value less cost to sell. See Note 3 for further discussion of assets held for sale.

Goodwill - Goodwill represents the excess of the purchase price of all acquisitions over the estimated fair value of the net assets acquired. The Company evaluates goodwill for impairment at least annually or more frequently whenever events or changes in circumstances indicate that the asset may be impaired, or in the case of goodwill, the fair value of the reporting unit is below its carrying amount. When impairment indicators are identified, the Company compares the reporting unit's fair value to its carrying amount, including goodwill. An impairment loss is recognized as the difference, if any, between the reporting unit's carrying amount and its fair value, to the extent the difference does not exceed the total amount of goodwill allocated to the reporting unit.

Cash and cash equivalents - The Company considers all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents.

Inventory - Inventory is measured at the lower of cost and net realizable value. Cost is determined using the first-in, first-out method (FIFO) for all inventory. Inventory consumed during research and development activities is recorded as a research and development expense.

Long-lived assets - Long-lived assets, such as property, plant and equipment, and intangible assets subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If circumstances require a long-lived asset or asset group be tested for possible impairment, the Company first compares undiscounted cash flows expected to be generated by that asset or asset group to its carrying amount. If the carrying amount of the long-lived asset or asset group is not recoverable on an undiscounted cash flow basis, an impairment is recognized to the extent that the carrying amount exceeds its fair value. Fair value is determined through various valuation techniques including discounted cash flow models, quoted market values and third-party independent appraisals, as considered necessary.

Leases - The Company is a lessee in several noncancellable operating leases for buildings. The Company accounts for leases in accordance with ASC topic 842, Leases. The Company determines if an arrangement is or contains a lease at contract inception. The Company recognizes a right-of-use (ROU) asset and a lease liability at the lease commencement date.

For operating leases, the lease liability is initially and subsequently measured at the present value of the unpaid lease payments at the lease commencement date. For finance leases, the lease liability is initially measured in the same manner and date as for operating leases and is subsequently measured at amortized cost using the effective-interest rate method.

The ROU asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for lease payments made at or before the lease commencement date, plus any initial direct costs incurred less any lease incentives received. The ROU asset is subsequently measured throughout the lease term at the carrying amount of the lease liability, plus initial direct costs, plus (minus) any prepaid (accrued) lease payments, less the unamortized balance of lease incentives received. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

Government grants and assistance - Government grants are recognized at their fair value in the period when there is reasonable assurance that the conditions attaching to the grant will be met and that the grant will be received. Grants are recognized as income over the periods necessary to match them with the related costs that they are intended to compensate. When the grant relates to an asset, it is recognized as income over the useful life of the depreciable asset by way of government assistance.

The Company also receives interest-free repayable loans from the Atlantic Canada Opportunities Agency (“ACOA”), a government agency. The benefit of the loan at a below-market rate of interest is treated as a government grant, measured as the difference between proceeds received and the fair value of the loan based on prevailing market interest rates. The fair value of the components, being the loan and the government grant, must be calculated initially in order to allocate the proceeds to the components. The valuation is complex, as there is no active trading market for these items and is based on unobservable inputs.

Revenue recognition – The Company’s revenue is generated from product sales as well as development revenue. The Company recognizes revenue when it satisfies performance obligations under the terms of its contracts, and control of its products is transferred to its customers in an amount that reflects the consideration the Company expects to receive from its customers in exchange for those products or services.

Revenue from the sale of prototypes and finished products is recognized at the point in time when control of the asset is transferred to the customer, generally on delivery of goods. The Company considers whether there are other obligations in the contract that are separate performance obligations to which a portion of the transaction price needs to be allocated. In determining the transaction price for the sale of prototypes, the Company considers the effects of variable consideration, the existence of significant financial components, non-cash consideration and consideration payable to the customer (if any).

Revenue from development activities is recognized over time, using an input method to measure progress towards complete satisfaction of the research activities and once confirmation of milestone achievement has been received from the customer.

Deferred revenue - consist of fees invoiced or paid by the Company’s customers for which the associated performance obligations have not been satisfied and revenue has not been recognized based on the Company’s revenue recognition criteria described above.

Deferred revenue is reported in a net position on an individual contract basis at the end of each reporting period and is classified as current in the consolidated balance sheet when the revenue recognition associated with the related customer payments and invoicing is expected to occur within one year of the balance sheet date and as long-term when the revenue recognition associated with the related customer payments and invoicing is expected to occur more than one year from the balance sheet date.

Fair value measurements - The Company uses valuation approaches that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible. The Company determines fair value based on assumptions that market participants would use in pricing an asset or liability in the principal or most advantageous market. When considering market participant assumptions in fair value measurements, the following fair value hierarchy distinguishes between observable and unobservable inputs, which are categorized in one of the following levels:

- Level 1 inputs: Unadjusted quoted prices in active markets for identical assets or liabilities accessible to the reporting entity at the measurement date.
- Level 2 inputs: Other than quoted prices included in Level 1 inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the asset or liability.
- Level 3 inputs: Unobservable inputs for the asset or liability used to measure fair value to the extent that observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at measurement date.

Fair value option - Under the Fair Value Option Subsections of ASC Subtopic 825-10, Financial Instruments – Overall, the Company has the irrevocable option to report most financial assets and financial liabilities at fair value on an instrument-by-instrument basis, with changes in fair value reported in the statement of operations. Any changes in the fair value of liabilities resulting from changes in instrument-specific credit risk are reported in other comprehensive income.

Research and development - Research and development activities are expensed as incurred.

Basic and diluted earnings (loss) per share – Basic earnings (loss) per common share is computed by dividing net income (loss) available to common shareholders by the weighted average number of common stock outstanding during the period. Diluted earnings (loss) per common share gives effect to all dilutive potential common stock outstanding during the period including stock options, deferred stock units (“DSUs”) and warrants which are calculated using the treasury stock method, and convertible debt instruments using the if-converted method. Diluted EPS excludes all dilutive potential stock if their effect is anti-dilutive.

Stock based compensation – The Company recognizes compensation expense for equity awards based on the grant date fair value of the award. The Company recognizes stock-based compensation expense for awards granted to employees that have a graded vesting schedule based on a service condition only on a straight-line basis over the requisite service period for each separately vesting portion of the award as if the award was, in substance, multiple awards (the “graded-vesting attribution method”), based on the estimated grant date fair value for each separately vesting tranche. For equity awards with a graded vesting schedule and a combination of service and performance conditions, the Company recognizes stock-based compensation expense using a graded-vesting attribution method over the requisite service period when the achievement of a performance-based milestone is probable, based on the relative satisfaction of the performance condition as of the reporting date.

For stock-based awards granted to consultants and non-employees, compensation expense is recognized using the graded-vesting attribution method over the period during which services are rendered by such consultants and non-employees until completed.

The measurement date for each tranche of employee awards is the date of grant, and stock-based compensation costs are recognized as expense over the employees’ requisite service period, which is the vesting period. The Company estimates grant date fair value of award using the Black-Scholes option pricing model and estimates the number of forfeitures expected to occur. See Note 14 for the Company’s assumptions used in connection with option grants made during the periods covered by these consolidated financial statements.

Tax payments made on behalf of employees to tax authorities in order to satisfy employee income tax withholding obligations from the vesting of shares under the Company’s stock-based compensation plans are classified as a financing activity in the Statement of Cash Flows.

Income taxes – Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss carry forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance is established to reduce deferred tax assets if it is more likely than not that the related tax benefits will not be realized.

Authoritative guidance for uncertainty in income taxes requires that the Company recognize the financial statement benefit of a tax position only after determining that the relevant tax authority would more likely than not sustain the position following an examination. Management has reviewed the Company’s tax positions and determined there were no uncertain tax positions requiring recognition in the consolidated financial statements. Company tax returns remain subject to Federal and State tax examinations. Generally, the applicable statutes of limitation are three to four years from their respective filings.

Recently adopted accounting pronouncements

ASU 2019-12 – Income Taxes (ACS 740)

Effective January 1, 2021, the Company adopted ASU 2019-12 on a prospective basis. The new standard was issued in December 2019 with the intent of simplifying the accounting for income taxes. The accounting update removes certain exceptions to the general principles in ASC 740 *Income Taxes* and provides simplification by clarifying and amending existing guidance. The adoption of this ASU did not have a material impact on our consolidated financial statements.

ASU 2020-09 – Debt (ACS 470)

In October 2020, the FASB issued ASU 2020-09, Debt- Debt (Topic 470): Amendments to SEC Paragraphs Pursuant to SEC Release No. 33-10762 (“ASU 2020-09”). The amendments in ASU 2020-09 amend rules focused on the provision of material, relevant, and decision-useful information regarding guarantees and other credit enhancements and eliminate prescriptive requirements that have imposed unnecessary burdens and incentivized issuers of securities with guarantees and other credit enhancements to offer and sell those securities on an unregistered basis. The adopted amendments relate to the financial disclosure requirements for guarantors and issuers of guaranteed securities registered or being registered in Rule 3-10 of Regulation S-X, and affiliates whose securities collateralize securities registered or being registered in Rule 3-16 of Regulation S-X. The amendments in ASU 2020-09 are effective for public business entities for annual periods beginning after December 15, 2020. The Company has evaluated the provisions of ASU 2020-09 and noted no material impact to our consolidated financial statements or disclosures from the adoption of this ASU.

ASU 2020-10 – Codification improvements

In October 2020, the FASB issued ASU 2020-10, Codification Improvements, which updated various codification topics by clarifying or improving disclosure requirements to align with the SEC’s regulations. The amendments in ASU 2020-10 are effective for annual periods beginning after December 15, 2020, for public business entities. The Company adopted ASU 2020-10 on January 1, 2021 and its adoption did not have a material effect on the Company’s financial statements and related disclosures.

3. Reverse take-over transaction (Torchlight RTO)

Arrangement

As discussed in note 1, on December 14, 2020, Meta Materials Inc. and its subsidiaries, Metamaterial Exchangeco Inc. and 2798831 Ontario Inc. (“Callco”) entered into an Arrangement Agreement with Torchlight Energy Resources, Inc. to acquire all the outstanding common stock of MMI. On March 12, 2021, MMI’s annual general and special meeting was held and MMI’s securityholders approved the Arrangement and on June 11, 2021, approvals were obtained from Torchlight shareholders through a special meeting.

On June 25, 2021, Torchlight effected a reverse stock split of its Common Stock, at a ratio of two-to-one, changed its name from “Torchlight Energy Resources, Inc.” to “Meta Materials Inc.” and declared a dividend, on a one-for-one basis, of stock of Series A Non-Voting Preferred Stock to holders of record of Company Common Stock as of June 24, 2021.

On June 28, 2021, following the satisfaction of the closing conditions set forth in the Arrangement Agreement, the Arrangement was completed. The stock of Company Common Stock, previously traded on the NASDAQ under the ticker symbol “TRCH,” commenced trading on the NASDAQ under the ticker symbol “MMAT”.

Securities conversion

Pursuant to the completion of the Arrangement, each common share of MMI that was issued and outstanding immediately prior to June 28, 2021 was converted into the right to receive 1.845 newly issued stock of common stock, par value \$0.001 per share of the Resulting Issuer or stock of Canco, which are exchangeable for stock of the Resulting Issuer at the election of each former MMI stockholder. In addition, all of MMI’s outstanding options, deferred share units and other securities exercisable or exchangeable for, or convertible into, and any other rights to acquire MMI Common Stock were exchanged for securities exercisable or exchangeable for, or convertible into, or other rights to acquire Resulting Issuer Common Stock. Immediately following the completion of the RTO, the former security holders of MMI owned approximately 70% of the Resulting Issuer Common Stock, accordingly, the former shareholders of MMI, as a group, retained control of the Resulting Issuer, and while Torchlight was the legal acquirer of MMI, MMI was deemed to be the acquirer for accounting purposes.

Reverse acquisition

Pursuant to ASC 805 *Business combination*, the transaction was accounted for as a reverse acquisition since: (i) the shareholders of MMI owned the majority of the outstanding common stock of the Company after the share exchange; (ii) a majority of the directors of the Company are also directors of MMI; and (iii) the previous officers of the Company were replaced with officers designated by MMI. The Company and MMI remain separate legal entities (with the Company as the parent of MMI). These condensed consolidated interim financial statements are those of MMI prior to June 28, 2021 and exclude the balance sheets, results of operations and comprehensive loss, statements of cash flows and stockholders’ equity of Torchlight prior to June 28, 2021.

Had the business combination occurred on January 1, 2021, the impact for the six months ended June 30, 2021 would have been an increase to revenue by \$5,977 and an increase in loss by \$6,768,457 (June 30, 2020 – increase to revenue by \$130,097 and an increase to loss by \$6,993,115). These pro forma amounts exclude the interest and fair value impacts of the pre-existing debt owing from MMI to Torchlight. The impact of the business combination on the post-acquisition period was not significant.

Measuring the Consideration Transferred

The accounting acquirer issued no consideration for the acquiree. Instead, the accounting acquiree issued its 196,968,803 common stock to the owners of the accounting acquirer. However, the acquisition-date fair value of the consideration transferred by the accounting acquirer for its interest in the accounting acquiree is based on the number of equity interests the legal subsidiary would have had to issue to give the owners of the legal parent the same percentage equity interest in the combined entity that results from the reverse acquisition. Accordingly, the consideration transferred of \$436,214,719 was based on the following calculation:

- The assumption that MMI would have issued 44,885,634 shares to Torchlight in order for MMI shareholders to own approximately 70% of the outstanding Combined Company Stock at a share price of \$7.96, the closing share price of MMI on June 28, 2021 to equal \$357,289,644.
- Adding the fair value of deemed issuance of Torchlight options and warrants that were outstanding at the time of acquisition.
- Adding the estimated fair value of the obligation created through the Series A Non-Voting Preferred Stock to distribute additional consideration to the previous shareholders based on the proceeds of the acquired Oil and Gas (O&G) assets.

- Deducting the estimated fair value of the previously existing unsecured promissory notes issued by MMI to Torchlight of \$11,000,000 plus interest. These notes were effectively settled pursuant to the close of the Arrangement.

The fair value of the number of equity interests calculated in that way can be used as the fair value of consideration transferred in exchange for the acquiree. The assets and liabilities of the legal acquiree are measured and recognized in the consolidated financial statements at their pre-combination carrying amounts.

Presentation of Condensed Consolidated Financial Statements Post Reverse Acquisition

The condensed consolidated interim financial statements reflect all of the following:

- a) the assets and liabilities of the legal subsidiary (the accounting acquirer) recognized and measured at their pre-combination carrying amounts
- b) the assets and liabilities of the legal parent (the accounting acquiree) recognized and measured in accordance with ASC 805 *Business Combinations*.
- c) the retained earnings and other equity balances of the legal subsidiary (accounting acquirer) before the business combination

- d) the amount recognized as issued equity interests in the condensed consolidated interim financial statements determined by adding the issued equity interest of the legal subsidiary (the accounting acquirer) outstanding immediately before the business combination to the fair value of the legal parent (accounting acquiree). However, the equity structure (that is, the number and type of equity interests issued) reflects the equity structure of the legal parent (the accounting acquiree).

All references to common stock, options, deferred share units, and warrants as well as per share amounts have been retroactively restated to reflect the number of stock of the legal parent (accounting acquiree) issued in the reverse acquisition.

The Company believes that information gathered to date provides a reasonable basis for estimating the fair value of assets acquired and liabilities assumed, however the Company is waiting for additional information necessary to finalize these fair values, including updated valuations for Oil and natural gas properties and the Preferred stock liability included as part of the consideration. Therefore, the provisional measurements of fair value set forth below are subject to change. The Company expects to complete the purchase price allocation as soon as practicable but no later than one year from the acquisition date. The following table summarizes the preliminary allocation of the purchase price to the assets acquired on a relative fair value basis:

	Amount (\$)
Fair value of deemed issuance of MMI's stock – Common Stock	82,814
Fair value of deemed issuance of MMI's stock – Additional paid in capital	357,206,830
Fair value of Torchlight's outstanding warrants – Additional paid in capital	2,943,370
Fair value of Torchlight's outstanding options – Additional paid in capital	9,397,988
Total Effect on Equity	369,631,002
Effective settlement of notes payable by MMI to Torchlight ¹	(11,322,637)
Preferred stock liability ²	77,906,354
	<u>436,214,719</u>
Net assets (liabilities) of Torchlight:	
Cash and cash equivalents	146,954,733
Other assets	501,424
Oil and natural gas properties ²	72,797,392
Accounts payable	(1,630,859)
Other liabilities	(21,937)
Goodwill ³	217,613,966
	<u>436,214,719</u>

1 Notes receivable/Payable

Notes receivable or payable represent unsecured promissory notes previously issued by MMI to Torchlight between September 20, 2020 to February 18, 2021 for proceeds of \$11,000,000 plus interest. These notes have been eliminated upon acquisition and subsequent consolidation. (note 7)

2 Oil and natural gas properties and preferred stock liability

On June 11, 2021, Torchlight's stockholders approved an amendment to its Articles of Incorporation to increase the authorized number of stock of Torchlight's preferred stock, par value \$0.001 per share ("Preferred Stock"), from 10,000,000 shares to 200,000,000 shares. In addition, Torchlight's Board of Directors formally declared the Preferred Dividend and set June 24, 2021 as the Dividend Record Date.

On June 25, 2021, the Company declared a dividend, on a one-for-one basis, of stock of Series A Non-Voting Preferred Stock (the "Series A Preferred Stock") to holders of record of Torchlight's common stock as of June 24, 2021. This preferred stock entitled its holders to receive certain dividends based on the net proceeds of the sale of any assets that are used or held for use in the Company's oil and gas exploration business (the "O&G Assets"), subject to certain holdbacks. Such asset sales must occur prior to the earlier of (i) December 31, 2021 or (ii) the date which is six months from the closing of the Arrangement, or such later date as may be agreed between the Company and the individual appointed to serve as the representative of the holders of Series A Preferred Stock (the "Sale Expiration Date"). The Series A Preferred Stock will automatically be cancelled once the entitled dividends have been paid.

Pursuant to the Arrangement, the Company has reclassified the O&G Assets as assets held for sale since: (i) Management has committed to a plan to sell the assets; (ii) The assets are available for sale in their present condition as of June 30, 2021; (iii) The sale is probable and is expected to close within 1 year; and (iv) The selling price is reasonable in relation to the asset's current fair value.

The Preferred stock liability is calculated as the estimated net proceeds from the sale the "O&G Assets" in addition to \$5 million in expected costs associated with maintaining and selling the assets.

3 Goodwill

Goodwill is attributed to the difference between, the total consideration calculated above and deemed to be transferred by the accounting acquirer (MMI) and, the total net assets of the accounting acquiree (Torchlight). Based on the market value of Metas Stock on June 28, 2021, this resulted in total "consideration" being transferred to Torchlight of approximately \$436 million. Further, the net assets of Torchlight acquired by MMI has been provisionally estimated to be approximately \$219 million. The difference between the \$436 million of consideration deemed to have been transferred and the \$219 million of net assets acquired results in goodwill of approximately \$218 million. Torchlight is delivering a NASDAQ listed legal entity in

good standing that will provide the Company with ready access to significant capital sources in the future to fund its growth plans. The acquired goodwill will continue to be assessed for impairment in future periods.

4. Related party transactions

As of June 30, 2021 and December 31, 2020, receivables due from a related party (Lamda Guard Technologies Ltd, or “LGTL”) were \$57,658 and \$nil, respectively. On March 16, 2021, MMI converted an amount of \$290,230 owing to LGTL into 81,584 MMI common stock for a price per share of CA\$4.51. The conversion price of CA\$4.51 per share represented a 10% premium to the CA\$4.10 closing price of MMI stock on the CSE at the close of business on March 12, 2021. MMI has recognized \$225,986 in common stock in the condensed consolidated interim statements of changes in stockholders’ equity at fair value at the time of conversion and recorded the difference of \$64,245 between the fair value of the common stock and the carrying value of the extinguished liability as a loss on debt settlement in the condensed consolidated interim statements of operations and comprehensive loss.

As of June 30, 2021 and December 31, 2020, related party payables were \$Nil and \$245,467 due to LGTL, respectively.

5. Inventory

Inventory consists of photosensitive materials, lenses, laser protection film and finished eyewear, and is comprised of the following:

	June 30, 2021	December 31, 2020
	\$	\$
Raw materials	281,065	378,265
Supplies	14,786	14,414
Work in process	72,442	69,381
Finished goods	—	1,322
Total inventory	368,293	463,382

6. Property, plant and equipment, net

Property, plant and equipment consist of the following:

	Useful life (years)	June 30, 2021	December 30, 2021
		\$	\$
Computer equipment	3-5	187,131	163,856
Computer software	1	263,549	256,554
Manufacturing equipment	2-5	7,932,152	6,645,986
Office furniture	5-7	108,408	99,234
Enterprise Resource Planning software	5	215,987	210,254
Assets under construction	N/ A	2,545,012	424,393
		11,252,239	7,800,277
Accumulated depreciation and impairment		(5,870,043)	(5,039,106)
		5,382,196	2,761,171

Depreciation expense was \$362,054 and \$393,351 for the three months ended June 30, 2021 and 2020, respectively, and \$723,827 and \$812,046 for the six months ended June 30, 2021 and 2020, respectively.

Property, plant and equipment is pledged as security under a General Security Agreement (a “GSA”) signed in favor of the Royal Bank of Canada (“RBC”) on July 14, 2014, which is related to the Company’s corporate bank account and credit card and includes all property, plant and equipment and intangible assets.

7. Unsecured convertible promissory notes

	Six months ended June 30, 2021			Year ended December 31, 2020		
	\$			\$		
	Bridge loan (a)	Torchlight (b)	Total	Bridge loan (a)	Torchlight (b)	Total
Beginning balance	538,020	665,215	1,203,235	—	—	—
Issued	3,963,386	10,000,000	13,963,386	378,042	1,000,000	1,378,042
Interest accrued	17,804	329,965	347,769	2,698	12,701	15,399
Fair value loss (gain)	19,163,417	333,947	19,497,364	139,609	(354,839)	(215,230)
Unrealized fair value loss (gain) due to own credit risk	—	(5,554)	(5,554)	—	14,132	14,132
Unrealized foreign currency exchange gain	—	(258,480)	(258,480)	—	(23,849)	(23,849)
Foreign currency translation adjustment	(26,262)	257,544	231,282	17,671	17,070	34,741
Conversion to common stock	(23,656,365)	—	(23,656,365)	—	—	—
Elimination pursuant to Torchlight RTO (note 3)	—	(11,322,637)	(11,322,637)	—	—	—
Ending balance	—	—	—	538,020	665,215	1,203,235

- a) In November 2020, Meta entered into a commitment letter (the “Commitment Letter”) with a shareholder of MMI, pursuant to which the shareholder will provide up to CA\$5,500,000 in debt financing (the “Bridge Loan”) to fund MMI’s continued operations while MMI worked toward completion of the Proposed Transaction with Torchlight. Pursuant to the Commitment Letter, MMI was able to draw up to CA\$500,000 monthly beginning in November 2020. The Bridge Loan bore interest at the rate of 8% per annum, payable monthly in arrears. The principal amount and any accrued but unpaid interest was due and payable on the 10th business day after the closing of the Proposed Transaction, or on November 29, 2022, if the Transaction did not close before that date. At the option of the holder, the Bridge Loan, or any portion of the Bridge Loan and accrued but unpaid interest was convertible into MMI Common Stock at a conversion price of CA\$0.50 per share, subject to customary adjustments. MMI had the option to repay the Bridge Loan in whole or in part, without penalty, at any time on or after March 28, 2021.

MMI elected to measure the financial instrument at fair value. MMI subsequently remeasured the instrument on December 31, 2020 and recorded fair value loss of \$139,609 in the statements of operations. There was no change in instrument specific credit risk.

On February 16, 2021, the total Bridge Loan of \$4,361,930 of principal and accrued interest was converted at CA\$0.50 per share into 20,391,239 common stock, in accordance with the terms of the bridge financing. MMI has remeasured the instrument as of the conversion date and recognized a non-cash realized fair value loss of \$19,163,417 and the full amount of \$23,656,365 was reclassified into the condensed consolidated interim statements of changes in stockholders’ equity.

- b) On September 15, 2020, MMI entered into a non-binding Letter of Intent (the “LOI”) with Torchlight pursuant to which Torchlight loaned MMI three unsecured convertible promissory notes totaling \$11,000,000. These Unsecured Convertible Promissory Note bore interest at 8% annually, with principal and interest due and payable on the maturity date. If MMI and Torchlight had not entered into a Definitive Agreement, or the Definitive Agreement is terminated, then the Unsecured Convertible Promissory Notes and all accrued and unpaid interest were convertible at the option of the holder into common stock of the Company at the conversion prices set out below. The Company may to repay all or part of the Unsecured Convertible Promissory Notes, plus any accrued and unpaid interest, without penalty on or after 120 days from the note issuance date.

	Tranche 1	Tranche 2	Tranche 3
Face value of notes issued	\$500,000	\$500,000	\$10,000,000
Issuance date	September 20, 2020	December 16, 2020	February 18, 2021
Maturity date	September 20, 2022	December 16, 2022	February 18, 2022
Interest rate	8%	8%	8%
Conversion price	CA\$0.35	CA\$0.62	CA\$2.80

The conversion option was a foreign currency embedded derivative as the note was denominated in USD and the conversion price was in Canadian dollars. MMI elected to measure the financial instrument at fair value. MMI subsequently remeasured the instrument on March 31, 2021 and recorded fair value gain of \$197,527, of which \$5,554 was a gain recorded in other comprehensive income relating to instrument specific credit risk and \$191,973 was a gain recorded in the statements of operations.

As part of the closing of the Arrangement, the promissory notes were remeasured at fair value and a fair value loss of \$525,920 was recorded in the statements of operations and comprehensive loss. The notes were considered part of the consideration transferred (see note 3) and were eliminated upon acquisition and subsequent consolidation. In addition, the related accumulated fair value losses in OCI of \$9,011 were recycled to the statements of operations and comprehensive loss.

8. Secured convertible debentures

	Six months ended June 30, 2021 \$	Year ended December 31, 2020 \$
Beginning balance	5,545,470	—
Issued	—	3,630,019
Interest accrued	121,860	508,757
Interest paid	(64,528)	(285,154)
Fair value loss	16,408,482	511,699
Fair value loss—own credit	—	865,280
Foreign currency translation adjustment	107,498	314,869
Conversion to common stock	(22,118,782)	—
Ending balance	<u>—</u>	<u>5,545,470</u>

On April 3, 2020, MMI issued CA\$5,000,000 in Secured Debentures to BDC Capital Inc. (“BDC”), a wholly owned subsidiary of the Business Development Bank of Canada. The Secured Debentures mature on October 31, 2024, and bear interest at a rate of 10.0% per annum, payable monthly in cash. In addition to the cash interest, the Secured Debentures accrued a non-compounding payment in kind (“PIK”) of 8% per annum. The PIK may get reduced by up to 3% (reduced to as low as 5% per annum) upon meeting certain conditions. BDC may elect to have the PIK paid in cash.

The Secured Debentures and the PIK are convertible in full or in part, at BDC’s option, into MMI common stock at any time prior to their maturity at a conversion price of CA\$0.70 (the “Conversion Price”) or MMI may force the conversion of Secured Debentures if MMI’s common stock are trading on the CSE on a volume-weighted average price greater than 100% of the Conversion Price (i.e. greater than CA\$1.40) for any 20 consecutive trading days with a minimum daily volume of at least 100,000 Common Stock.

MMI elected to measure the financial instrument at fair value. MMI subsequently remeasured the instrument on December 31, 2020 and recorded a fair value loss of \$1,376,979, of which \$511,699 was recorded in other comprehensive income relating to instrument specific credit risk and \$865,280 was recorded in the statements of operations.

The secured debentures were subject to a covenant clause, whereby MMI is required to maintain a working capital ratio of no less than 3:1. Working capital ratio excluded deferred revenue and deferred government assistance from current liabilities. MMI did not fulfil the ratio as required in the contract and consequently, the secured debentures were reclassified as a current liability as at December 31, 2020.

On March 3, 2021, MMI forced the conversion of the Secured Debentures pursuant to the terms of the agreement with BDC. The total debentures balance of \$3,910,954 was converted at CA\$0.70 per share into 14,155,831 common stock. MMI remeasured the liability as of the conversion date and recognized a non-cash realized fair value loss of \$16,408,482 and the full amount of \$22,118,782 was reclassified into the condensed consolidated interim statements of changes in stockholders’ equity. All security interests held by BDC on assets of MMI were immediately discharged.

In addition, the accumulated losses in OCI of \$511,699 were recycled to the statements of operations and comprehensive loss.

9. Unsecured convertible debentures

Unsecured convertible debentures (the “Unsecured Debentures”) consist of the following:

	Six months ended June 30, 2021 \$	Year ended December 31, 2020 \$
Beginning balance	1,825,389	585,267
Issued	—	693,784
Interest accrued	23,660	147,304
Fair value loss	3,914,931	189,708
Fair value loss due to own credit risk	—	154,347
Foreign currency translation adjustment	5,495	54,978
Conversion to common stock	(5,769,475)	—
Ending balance	<u>—</u>	<u>1,825,389</u>

On December 10, 2019, an agreement was signed to convert an existing CA\$250,000 short-term loan into an Unsecured Debenture, and also during December 2019, MMI issued an additional CA\$500,000 in Unsecured Debentures to the same investor, under the same terms.

During the year ended December 31, 2020, MMI issued an additional CA\$950,000 in Unsecured Debentures to individuals and companies under the same terms as previous issues.

The Unsecured Debentures bear interest at a fixed rate of 1% per month, compounding monthly and have a maturity date of April 30, 2025. Each Unsecured Debenture is convertible at the option of the holder into MMI common stock at a price of CA\$0.70 per share. Following completion of the RTO, MMI may elect to repay the outstanding amounts owing under the Unsecured Debentures in cash or in stock at conversion price of CA\$0.70 upon meeting certain conditions or the holder can convert the Unsecured Debentures at CA\$0.70 or the Unsecured Debentures can be converted at maturity at the greater of 80% of 10 day volume-weighted average price of the Resulting Issuer’s common stock or the closing price on the preceding trading day less the maximum permitted discount by the exchange.

MMI elected to measure the financial instrument at fair value. MMI subsequently remeasured the instrument on December 31, 2020 and recorded a fair value loss of \$344,055, of which \$154,347 was recorded in other comprehensive income relating to instrument specific credit risk and \$189,708 was recorded in the statements of operations.

On February 16, 2021, MMI converted \$1,439,103 of principal and accrued interest of Unsecured Debentures at CA\$0.70 per share into 5,105,338 common stock in accordance with the terms of their debt instruments. MMI has remeasured the liability as of the conversion date and recognized a non-cash realized fair value loss of \$3,914,931 and the full amount of \$5,769,475 was reclassified into the condensed consolidated interim statements of changes in stockholders’ equity.

In addition, the accumulated losses in OCI of \$154,347 were recycled to the statements of operations.

10. Long-term debt

	June 30, 2021 \$	December 31, 2020 \$
ACOA Business Development Program (“BDP”) 2012 interest-free loan ¹ with a maximum contribution of CA\$500,000, repayable in monthly repayments commencing October 1, 2015 of CA\$5,952 until June 1, 2023. Loan repayments were temporarily paused effective April 1, 2020 until January 1, 2021 as a result of the COVID-19 outbreak. As at June 30, 2021, the amount drawn down on the loan, net of repayments, is CA\$160,715 (2020 - CA\$178,571).	107,965	129,384
ACOA Atlantic Innovation Fund (“AIF”) 2015 interest-free loan ^{1,2} with a maximum contribution of CA\$3,000,000. Annual repayments, commencing June 1, 2021, are calculated as a percentage of gross revenue for the preceding fiscal year, at Nil when gross revenues are less than CA\$1,000,000, 5% when gross revenues are less than CA\$10,000,000 and greater than CA\$1,000,000, and CA\$500,000 plus 1% of gross revenues when gross revenues are greater than CA\$10,000,000. As at June 30, 2021, the amount drawn down on the loan is \$CA3,000,000 (2020 - CA\$3,000,000).	1,628,440	1,458,954
ACOA BDP 2018 interest-free loan ^{1,3} with a maximum contribution of CA\$3,000,000, repayable in monthly repayments commencing June 1, 2021 of CA\$31,250 until May 1, 2029. As at June 30, 2021, the amount drawn down on the loan, net of repayments, is CA\$3,000,000 (2020 - CA\$3,000,000).	1,397,318	1,285,307
ACOA BDP 2019 interest-free loan ¹ with a maximum contribution of CA\$100,000, repayable in monthly repayments commencing June 1, 2021 of CA\$1,400 until May 1, 2027. As at June 30, 2021, the amount drawn down on the loan is CA\$62,165 (2020 - CA\$62,165).	45,166	30,138
ACOA Regional Relief and Recovery Fund (“RRRF”) 2020 interest-free loan with a maximum contribution of CA\$390,000, repayable on monthly repayments commencing April 1, 2023 of CA\$11,000 until April 1, 2026. As at June 30, 2021, the amount drawn down on the loan is CA\$390,000 (2020 - \$Nil).	103,163	—
Shareholder loan bearing no interest. The loan proceeds are provided as collateral to a letter of credit and are recorded as restricted cash. The loan is repayable upon any reduction of the letter of credit. In the event that the bank draws on the collateral or the collateral has not been returned in full by December 31, 2021, then the outstanding balance of collateral will be considered a demand promissory note with 1% interest charge per month compounded monthly beginning January 1, 2022.	806,842	—
CAIXA Capital loan bearing interest at 6-month EURIBOR rate plus 4% interest spread. The loan principal and interest are fully repayable on January 15, 2025. On March 12, 2021, the principal loan balance with outstanding interest totaling \$209,506 (EUR 171,080) was converted into MMI common stock at \$3.87 per share ⁴ . Pursuant to the conversion, CAIXA Capital was issued 67,597 MMI common stock.	—	130,265
	4,088,894	3,034,048
Less: current portion	1,349,274	290,544
	<u>2,739,620</u>	<u>2,743,504</u>

¹ The Company was required to maintain a minimum balance of positive equity throughout the term of the loan. However, on November 14, 2019, ACOA waived this requirement for the period ending June 30, 2019 and for each period thereafter until the loan is fully repaid.

² The carrying amount of the ACOA AIF loan is reviewed each reporting period and adjusted as required to reflect management’s best estimate of future cash flows, discounted at the original effective interest rate.

³ A portion of the ACOA BDP 2018 loan was used to finance the acquisition and construction of manufacturing equipment resulting in \$425,872 was recorded as deferred government assistance, which is being amortized over the useful life of the associated equipment. The Company recorded the amortization expense for the six months ended June 30, 2021 of \$73,306 (six months ended June 30, 2020—\$66,729) as government assistance in the condensed consolidated interim statements of operations and comprehensive loss.

⁴ MMI has recognized the common stock issued in the consolidated statements of changes in stockholders’ equity at fair value at time of conversion to be \$221,842 and recorded the difference of \$88,763 between the fair value of the common stock and the carrying value of the long-term debt as loss on debt settlement in the condensed consolidated interim statements of operations and comprehensive loss.

11. Capital stock

Common stock

Authorized: 1,000,000,000 common stock, \$0.001 par value.

All references to numbers of common stock and amounts in the condensed consolidated interim statements of changes in stockholder's equity and in the notes to the condensed consolidated interim financial statements have been retroactively restated to reflect as if the Torchlight RTO had taken place as of the beginning of the earliest period presented. The numbers of common stock issued pre-CPM RTO have been multiplied by the 2.75 CPM conversion ratio and the 1.845 Torchlight conversion ratio while the numbers of common stock issued post-CPM RTO have been multiplied by the 1.845 Torchlight conversion ratio. In addition, the amounts of common stock issued pre-CPM RTO were calculated by multiplying the number of stock by 0.001, 2.75 CPM conversion ratio and the 1.845 Torchlight conversion ratio and the difference were recognized in additional paid in capital while the amounts of common stock issued post-CPM RTO were calculated by multiplying the number of stock by 0.001 and the 1.845 Torchlight conversion ratio and the difference were recognized in additional paid in capital.

During the six months ended June 30, 2021, the Company converted unsecured convertible promissory notes of \$23,656,365, secured convertible debentures of \$22,118,782, unsecured convertible debentures of \$5,769,475 into common stock. The Company remeasured the financial liabilities at fair value as of respective conversion dates and recognized a non-cash realized loss of \$39,486,830. The Company subsequently reclassified the remeasured liabilities into equity and recognized \$39,652 in common stock and \$51,504,970 in additional paid in capital. The number of stock issued was calculated as the total outstanding principal and interest of each liability multiplied by the conversion price stated in each respective instrument's agreement.

During the six months ended June 30, 2021, the Company converted long-term debt of \$133,080 and due to related party of \$295,419 into common stock. The Company recorded the common stock issued at fair value using the Company's share price at the time of conversion. The Company recognized \$276 in common stock and \$447,553 in additional paid in capital. The resulting net loss calculated as the difference between the fair value of common stock and the carrying value of the liabilities of \$19,330 was recorded in other income in the condensed consolidated interim statements of operations and comprehensive loss. The number of stock issued was calculated as the total outstanding principal and interest of each liability multiplied by the agreed upon conversion price.

During the six months ended June 30, 2021, the Company issued 286,292 common stock at CA\$0.58 per stock as compensation in exchange for a fairness opinion obtained with respect to the Torchlight RTO. The Company paid CA\$90,000 in cash in 2020 and agreed to settle the remaining CA\$90,000 in common stock. The Company recognized the share-based payment in trade and other payables in 2020 until the stock were issued in 2021.

During the six months ended June 30, 2021, and pursuant to the Torchlight acquisition, the Company recognized \$357,289,644 in equity as the fair value of 82,813,994 common stock that was deemed to have been issued to Torchlight as part of the Torchlight RTO (note 3).

Warrants

Prior to completion of the CPM RTO on March 5, 2020, every two warrants had the right to purchase one MTI common stock for CA\$2.475 per share.

Pursuant to the completion of the RTO on March 5, 2020, MTI warrants were adjusted such that one warrant has the right to purchase one MMI Common Stock for CA\$0.90 per share.

On June 28, 2021 and pursuant to the completion of Torchlight RTO, each MMI warrant was converted into 1.845 META warrants and the exercise price was updated to be CA\$0.49. Also, as part of the Torchlight RTO, Torchlight outstanding warrants of 853,278 underwent a reverse stock split at a ratio of 2-1 resulting in warrants of 426,639 and for an amount being recorded at \$2,943,370 in additional paid in capital as part of the consideration transferred.

The following table summarizes the changes in warrants of the Company:

	Six months ended June 30, 2021		Year ended December 31, 2020	
	Number of warrants ¹ #	Amount ¹ \$	Number of warrants ¹ #	Amount ¹ \$
Balance, beginning of period	3,046,730	402,883	1,590,866	132,299
Issued	—	—	1,455,864	166,916
Adjustment to 2019 warrants	—	—	—	103,668
Exercised	(238,806)	(35,603)	—	—
Fair value of deemed issuance to Torchlight	426,639	2,943,370	—	—
Balance, end of period	3,234,563	3,310,650	3,046,730	402,883

¹ All references to numbers of warrants have been retroactively restated to reflect as if Torchlight RTO had taken place as of the beginning of the earliest period presented. The numbers of warrants issued pre-CPM RTO have been divided by 2, multiplied by the 2.75 CPM conversion ratio and the 1.845 Torchlight conversion ratio. There were no warrants issued post CPM RTO except for Torchlight warrants.

Broker warrants

Prior to completion of the CPM RTO on March 5, 2020, every MTI broker warrant had the right to purchase one MTI common stock for CA\$1.70 per share.

Pursuant to the completion of the RTO on March 5, 2020, each MTI broker warrant was converted into 1.845 MMI warrants, and the exercise price was updated to be CA\$0.62.

On June 28, 2021, and pursuant to the completion of the Torchlight RTO, each MMI warrant was converted into 1.845 META warrants and the exercise price was updated to be CA\$0.34.

The following table summarizes the changes in broker warrants of the Company:

	Six months ended June 30, 2021		Year ended December 31, 2020	
	Number of warrants ¹ #	Amount ¹ \$	Number of warrants ¹ #	Amount ¹ \$
Balance, beginning of period	97,542	16,144	—	—
Issued	—	—	97,542	16,144
Exercised	(61,331)	(10,892)	—	—
Balance, end of period	36,211	5,252	97,542	16,144

¹ All references to numbers of broker warrants have been retroactively restated to reflect the number of stock of the legal parent (accounting acquiree) issuable following the reverse acquisition. The numbers of broker warrants issued pre-CPM RTO have been multiplied by the 2.75 CPM conversion ratio and the 1.845 Torchlight conversion ratio. There were no broker warrants issued post CPM RTO.

The fair value of warrants and broker warrants issued were estimated using the Black-Scholes option pricing model with the following inputs and assumptions:

	Six months ended June 30, 2021	Year ended December 31, 2020
Risk free interest rate	0.45% - 0.86%	0.80% - 1.43%
Expected volatility	93%	134%
Expected dividend yield	0%	0%
Expected forfeiture rate	0%	0%
Common stock price	7.96	1.70
Exercise price per common stock	\$0.85 - \$2.80	\$1.70 - \$2.475
Expected term of warrants	2.20 - 3.90 years	2 years

12. Stock-based payments

DSU Plan

Each share option is convertible at the option of the holder into one common stock of the Company.

On March 28, 2013, the Company implemented a Deferred Stock Unit (DSU) Plan for its directors, employees and officers. Directors, employees and officers are granted DSUs of the Company with immediate vesting as a form of compensation. Each unit is convertible at the option of the holder into one common stock of the Company. Eligible individuals are entitled to receive all DSUs (including dividends and other adjustments) no later than December 1 of the first calendar year commencing after the time of termination of their services.

On March 5, 2020 and pursuant to the CPM RTO, each MTI DSU was converted into 2.75 MMI DSUs.

On June 28, 2021 and pursuant to the Torchlight RTO, each MMI DSU was converted into 1.845 META DSUs.

The following table summarizes the change in outstanding DSUs of the Company:

	Six months ended June 30, 2021 # ¹	Year ended December 31, 2021 # ¹
Outstanding, beginning of period	3,455,224	3,977,820
Converted into common stock	—	(522,596)
Outstanding, end of period	3,455,224	3,455,224

Information concerning units outstanding is as follows:

Issue price	June 30, 2021 Number of units # ¹	December 31, 2020 Number of units # ¹
CA\$0.27	3,348,675	3,348,675
CA\$0.51	106,549	106,549
	3,455,224	3,455,224

¹ All references to numbers of DSUs have been retroactively restated to reflect as if the Torchlight RTO had taken place as of the beginning of the earliest period presented. The numbers of DSUs issued pre-CPM RTO have been multiplied by the 2.75 CPM conversion ratio and the 1.845 Torchlight conversion ratio. There were no DSUs issued post-CPM RTO.

Employee Stock Option Plan

Each stock option is convertible at the option of the holder into one common stock of the Company.

The Company has an Employee Stock Option Plan [the "Plan"] for directors, officers, and employees. Unless otherwise determined by the Board of Directors, 25% of the options shall vest and become exercisable on the first anniversary of the grant date and 75% of the stock issuable under the Plan shall vest and become exercisable in equal monthly installments over the three-year period commencing immediately after the first anniversary of the grant date. The option exercise price will not be less than the fair market value of a share on the grant date, as determined by the Board of Directors, taking into account any considerations which it determines to be appropriate at the relevant time. The exercise price of the stock options is equal to the market price of the underlying stock on the date of the grant. The contractual term of the stock options is 10 years and there are no cash settlement alternatives for the employees.

During the year ended December 31, 2020, the Company's existing MTI options were converted at a ratio of 2.75 MMI options for each MTI option pursuant to the CPM RTO. Also, as part of the CPM RTO, 1,291,500 stock options were issued to executives and directors of CPM. Additionally, and subsequent to the completion of the CPM RTO, the Company granted 13,402,080 options to employees and directors, 898,515 of which vested upon grant date and 12,503,565 of which vest over 1-4 years. Subsequent to the completion of the CPM RTO, 2,589,457 stock options were forfeited as a result of employee departures and 2,090,866 options expired unexercised.

During the six months ended June 30, 2021, the Company's existing MMI options were converted at a ratio of 1.845 META options for each MMI option pursuant to the Torchlight RTO. Also, as part of the Torchlight RTO, Torchlight outstanding options of 3,000,000 underwent a reverse stock split at a ratio of 2-1 resulting in outstanding options of 1,500,000 and an amount of \$9,397,988 was recorded in additional paid in capital as part of the consideration transferred.

Total stock-based compensation expense included in the condensed consolidated interim statements of operations was as follows:

	Three months ended June 30,		Six months ended June 30,	
	2021	2020	2021	2020
Selling & Marketing	9,690	18,523	20,959	37,651
General & Administrative	104,727	230,085	348,617	522,222
Research & Development	110,507	117,156	282,142	148,595
	<u>224,924</u>	<u>365,764</u>	<u>651,718</u>	<u>708,468</u>

The following table summarizes the change in outstanding stock options of the Company:

	Weighted Average exercise price per stock option \$	Six months ended June 30, 2021 Number of options # ¹	Weighted Average exercise price per stock option \$	Year ended December 31, 2020 Number of options # ¹
Outstanding, beginning of period	CA\$0.33	24,477,507	CA\$0.33	14,502,303
Issued to CPM executives and directors pursuant to CPM RTO		—	CA\$0.19	1,291,500
Granted		—	CA\$0.34	13,402,080
Exercised	CA\$0.34	(413,917)		—
Forfeited	CA\$0.34	(33,825)	CA\$0.34	(2,627,510)
Expired		—	CA\$0.27	(2,090,866)
Fair value of deemed issuance to Torchlight	US\$1.75	1,500,000		—
Outstanding, end of period	CA\$0.44	<u>25,529,765</u>	CA\$0.33	<u>24,477,507</u>

Below is a summary of the outstanding options as at June 30, 2021:

Exercise price \$	Number outstanding # ¹	Number exercisable # ¹
CA\$0.34	23,102,653	13,562,029
CA\$0.15	558,112	558,113
CA\$0.19	369,000	369,000
US\$2.00	1,125,000	1,125,000
US\$1.00	375,000	375,000
	<u>25,529,765</u>	<u>15,989,142</u>

Below is a summary of the outstanding options as at December 31, 2020:

Exercise price \$	Number outstanding # ¹	Number exercisable # ¹
CA\$0.34	23,550,394	9,636,758
CA\$0.15	558,113	558,113
CA\$0.19	369,000	369,000
	<u>24,477,507</u>	<u>10,563,871</u>

¹ All references to numbers of stock options have been retroactively restated to reflect as if the Torchlight RTO had taken place as of the beginning of the earliest period presented. The numbers of stock options issued pre-CPM RTO have been multiplied by the 2.75 CPM conversion ratio and the 1.845 Torchlight conversion ratio. The numbers of stock options issued post CPM RTO have been multiplied by the 1.845 Torchlight conversion ratio.

The weighted average remaining contractual life for the stock options outstanding as at June 30, 2021 was 7.52 (December 31, 2020 – 8.36) years. There were 1,500,000 and 13,402,080 stock options granted with a weighted-average grant date fair value of \$6.27 and \$0.39 per share respectively during the six months ended June 30, 2021 and the year ended December 31, 2020.

The fair value of options granted was estimated at the grant date using the following weighted-average assumptions:

	Six months ended June 30, 2021	Year ended December 31, 2020
Dividend yield [%]	—	—
Volatility	84%	52%-134%
Risk-free interest rate	0.73%	0.73%
Expected term (in years)	1 year	7.48 years

The expected life of the stock options is based on historical data and current expectations and is not necessarily indicative of exercise patterns that may occur. The expected volatility reflects the assumption that the historical volatility over a period similar to the life of the options is indicative of future trends, which may not necessarily be the actual outcome.

13. Income taxes

The Company estimates its annual effective income tax rate in recording its quarterly provision for income taxes in the various jurisdictions in which it operates. Statutory tax rate changes and other significant or unusual items are recognized as discrete items in the quarter in which they occur.

The Company's effective tax rate for the three and six months ended June 30, 2021 and 2020 differs from the statutory rates due to valuation allowance as well as different domestic and foreign statutory tax rates.

The Company recorded the following deferred tax recovery for the three and six months ended June 30, 2021 and 2020 as follows:

	Three months ended June 30,		Six months ended June 30,	
	2021	2020	2021	2020
Deferred tax recovery	57,847	10,425	102,526	54,347

The Company has not yet been able to establish profitability or other sufficient significant positive evidence, to conclude that its deferred tax assets are more likely than not to be realized. Therefore, the Company continues to maintain a valuation allowance against its deferred tax assets.

14. Net loss per share

The following table sets forth the calculation of basic and diluted net loss per share during the periods presented:

	Three months ended June 30,		Six months ended June 30,	
	2021	2020	2021	2020
Numerator:				
Net loss	(5,181,392)	(1,816,741)	(49,339,912)	(3,234,029)
Denominator:				
Weighted-average shares, basic	197,911,144	155,931,625	183,485,933	120,093,443
Weighted-average shares, diluted	197,911,144	155,931,625	183,485,933	120,093,443
Net loss per share				
Basic	(0.03)	(0.01)	(0.27)	(0.03)
Diluted	(0.03)	(0.01)	(0.27)	(0.03)

The following potentially dilutive shares were not included in the calculation of diluted shares above as the effect would have been anti-dilutive:

	Three months ended June 30,		Six months ended June 30,	
	2021	2020	2021	2020
Convertible debt	—	7,918,988	—	7,918,988
Options	25,529,765	22,905,604	25,529,765	22,905,604
Warrants	3,270,774	3,144,272	3,270,774	3,144,272
DSUs	3,455,224	3,455,224	3,455,224	3,455,224
	<u>32,255,763</u>	<u>37,424,088</u>	<u>32,255,763</u>	<u>37,424,088</u>

15. Additional cash flow information

The net changes in non-cash working capital balances related to operations consist of the following:

	Six months ended June 30, 2021	Six months ended June 30, 2020
	\$	\$
Grants receivable	(74,552)	95,718
Inventory	104,540	(146,872)
Other receivables	(37,092)	15,148
Prepaid expenses	(135,402)	68,185
HST receivable	5,830	108,901
Trade payables	514,644	(1,620,827)
Due from (to) related party	(17,839)	(523)
Operating lease Right-of-use Asset	408,201	—
Operating lease liabilities	(9,949)	—
	<u>758,381</u>	<u>(1,480,270)</u>

16. Fair value measurements

The Company uses a fair value hierarchy, based on the relative objectivity of inputs used to measure fair value, with Level 1 representing inputs with the highest level of objectivity and Level 3 representing the lowest level of objectivity.

The fair values of cash and cash equivalents, restricted cash, grants and accounts receivables, due from (to) related parties and trade and other payables are classified at level 1 as they approximate their carrying values due to the short-term nature of these instruments. The current portion of long-term debt has been included in the below table.

The fair values of convertible promissory notes secured convertible debentures and unsecured convertible debentures are classified at level 3 as they were accounted for under the fair value option election of ASC 825 and the estimated fair value was computed using significant inputs that are not observable in the market.

The fair value of assets held for sale and preferred stock dividends are classified at level 3 as they are assessed on provisional basis until the company has additional information necessary to finalize those fair values. The company expects to complete the purchase price allocation as soon as practicable but no later than one year from the acquisition date (note 3).

The fair values of the funding obligation, operating lease liabilities, and long-term debt are classified at Level 3 in the fair value hierarchy as each instrument is estimated based on unobservable inputs including discounted cash flows using the market rate, which is subject to similar risks and maturities with comparable financial instruments as at the reporting date.

Carrying values and fair values of financial instruments that are not carried at fair value are as follows:

Financial liability	June 30, 2021		December 31, 2020	
	Carrying value \$	Fair value \$	Carrying value \$	Fair value \$
Funding obligation	859,828	625,413	776,884	571,839
Operating lease liabilities	1,424,881	1,076,063	270,581	270,641
Long-term debt	4,088,894	3,326,454	3,034,048	2,734,931

17. Revenue

Revenue is disaggregated as follows:

	Three months ended June 30,		Six months ended June 30,	
	2021	2020	2021	2020
Product sales	1,953	—	24,000	1,922
Contract revenue ¹	545,547	152,667	954,467	306,138
Other development revenue	76,820	57,677	242,156	342,623
Development revenue	622,367	210,344	1,196,623	648,761
	<u>624,320</u>	<u>210,344</u>	<u>1,220,623</u>	<u>650,683</u>

¹ Contract revenue represents previously recorded deferred revenue that was recognized as revenue after satisfaction of performance obligation either through passage of time or after completion of specific performance milestones. Refer to note 18 for outstanding contracts.

18. Deferred revenue

Deferred revenue consists of the following:

	June 30, 2021 \$	December 31, 2020 \$
Covestro - Cooperation Framework	373,215	—
Satair A/S-exclusive rights	786,491	815,310
Satair A/S-advance against PO	502,179	488,847
LM Aero-MetaSOLAR commercialization	379,289	646,135
US Deferred Revenue	75,000	75,000
Innovate UK-R&D tax credit	19,007	18,778
	<u>2,135,181</u>	<u>2,044,070</u>
Less current portion	1,453,556	1,239,927
	<u>681,625</u>	<u>804,143</u>

19. (Loss) Gain on financial instruments, net

	Three months ended June 30,		Six months ended June 30,	
	2021	2020	2021	2020
Gain on secured convertible promissory notes	—	—	—	5,235
Loss on unsecured convertible promissory notes – Bridge loan	—	—	(19,163,417)	—
Gain (Loss) on unsecured convertible promissory notes – Torchlight notes	535,170	—	(343,197)	—
Gain (Loss) on secured convertible debentures	—	782,723	(16,957,029)	782,723
Gain (Loss) on unsecured convertible debentures	—	260,205	(4,076,448)	508,277
	<u>(535,170)</u>	<u>1,042,928</u>	<u>(40,540,091)</u>	<u>1,285,765</u>

20. Leases

On August 31, 2020, MMI signed a ten-year lease with a lessor in Halifax, Canada, commencing January 1, 2021, for an approximately 53,000 square foot facility, which will host the Company's holography and lithography R&D labs and manufacturing operations. Commencing in September 2021, the Company was to pay monthly basic rent of CA\$28,708 and additional rent for its proportionate share of operating costs and property taxes of CA\$24,910 per month, subject to periodic adjustments. In conjunction with signing the lease, the Company entered into a loan agreement with the lessor in the amount of CA\$500,000 to fund leasehold improvements.

The Company has accounted for the lease as an operating lease and recorded a right-of-use (“ROU”) asset in the amount of \$1,021,499. The ROU asset is being amortized over the remaining lease term in an amount equal to the difference between the calculated straight-line expense of the total lease payments less the monthly interest calculated on the remaining lease liability.

On June 9, 2021, MMI signed a lease amendment with the landlord to expand the leased space of the facility by approximately 15,000 square feet, reduce the annual rent for the 10-year term of the lease and obtain from the landlord CA\$500,000 in cash to fund ongoing tenant improvements. In exchange, the landlord received 993,490 MMI common stock valued at CA\$3.40 per share. As of June 30, 2021, the Company did not yet have access to the additional leased space and therefore, the Company has not recorded a right-of-use asset and corresponding lease liability for this additional leased space. Instead, the Company has recognized a prepaid expense for \$601,192 equivalent to 219,152 common stock.

The Lease Amendment was accounted for as a lease modification. As such, the operating lease liability was remeasured and the difference was recorded in ROU assets.

On June 3, 2021, MMI signed lease amendment with its lessor in Pleasanton, California to expand the leased space of the facility in the United States to include additional office space of 5,475 square feet, commencing from June 2021 onwards. Alongside this lease amendment, the durations of all of the leased spaces were also extended until August 31, 2024. The Lease Amendment was accounted for as a lease modification. As such, the operating lease liability was remeasured and the difference was recorded in ROU assets. These amendments required the Company to derecognize the existing right-of-use asset and operating lease liability, and recognize a new right-of-use asset and an operating lease liability commencing from June 2021.

These amendments required the Company to derecognize the existing right-of-use asset and operating lease liability, and recognize a new right-of-use asset and an operating lease liability commencing from June 2021.

The Company has one other noncancellable operating lease in the United States and United Kingdom. Total operating lease expense included in the condensed consolidated interim statements of operations and comprehensive loss is as follows:

	Three months ended		Six months ended	
	2021	2020	2021	2020
Operating lease expense	175,107	68,897	318,537	138,353

Future minimum payments under non-cancelable operating lease obligations were as follows as of June 30, 2021:

Remainder of 2021	186,002
2022	444,258
2023	433,594
2024	360,971
2025	166,774
Thereafter	1,208,757
Total minimum lease payments	<u>2,800,356</u>
Less: interest	(1,375,475)
Present value of net minimum lease payments	1,424,881
Less: current portion of lease liabilities	(279,832)
Total long-term lease liabilities	<u>1,145,049</u>

21. Commitments and contingencies

Contractual Commitments and Purchase Obligations

- On January 29, 2021, the Company arranged an irrevocable standby letter of credit with Toronto Dominion Bank (“TD”) in favour of Covestro Deutschland AG (“Covestro”) for EUR600,000 in relation to Cooperation Framework Agreement (“CFA”). In the event the Company fails to meet the performance milestones under the CFA, Covestro shall draw from the letter of credit with TD. The letter of credit was secured by restricted cash of CA\$1,000,000 under a cash use agreement which has been recorded as long-term debt in the consolidated balance sheets. In June 2021, Covestro issued a certificate of reduction of \$283,228 (EUR 225,000) to reduce the letter of credit after completion of certain performance milestones and an equal amount has been transferred from restricted cash to cash and cash equivalents. The Company recorded development revenue in an amount equal to the certificate of reduction in the condensed consolidated interim statement of operations and comprehensive loss. As at June 30, 2021, the letter of credit has an outstanding amount of EUR375,000.
- During 2020, the Company signed a three-year supply deal with Covestro Deutschland AG, which provides early access to new photo-sensitive holographic film materials, the building block of MMI’s holographic product. This agreement will not only allow early access to Covestro’s R&D library of photopolymer films but will also accelerate MMI’s product development and speed of innovation. Target markets include photonics/optical filters and holographic optical elements, diffusers, laser eye protection, optical combiners, and AR (augmented reality) applications.

- c) During 2018, the Company arranged a guarantee/standby letter of credit with RBC in favour of Satair A/S for \$500,000 in relation to an advance payment received. In the event the Company fails to deliver the product as per the contract or refuse to accept the return of the product as per the buyback clause of the contract or fails to repay the advance payment in accordance with the conditions of the agreement signed with Satair on September 18, 2018, Satair shall draw from the letter of credit with RBC. Borrowings from the letter of credit with RBC are repayable on demand. The letter of credit from RBC is secured by a performance security guarantee cover issued by Export Development of Canada. Further, this guarantee/standby letter of credit expires on October 5, 2021. As at June 30, 2021, no amount has been drawn from the letter of credit with RBC.

- d) On December 8, 2016, the Company entered into a cooperation agreement with a large aircraft manufacturer to co-develop laser protection filters for space and aeronautical civil and military applications, METAIR, and support the setup of manufacturing facilities for product certification and development. The cooperation agreement includes financial support provided to the Company in the form of non-recurring engineering costs of up to \$4,000,000 to be released upon agreement of technical milestones in exchange for a royalty fee due by the Company on gross profit after sales and distribution costs. The total royalty fee to be paid may be adjusted based on the timing of the Company's sales and the amount ultimately paid to the Company by large aircraft manufacturer to support the development.

22. Subsequent events

On July 13, 2021, the Company issued 553,500 warrants at an exercise price of \$4.50 per share to a consultant and on July 12, 2021, the Company issued 300,000 warrants at an exercise price of \$3.94 per share to a consultant.

On August 5, 2021, the Company announced the signing of a definitive agreement to indirectly acquire Nanotech Security Corp. ("Nanotech"). Subject to the terms and conditions of the definitive agreement, a wholly-owned subsidiary of META will purchase 100% of Nanotech's common stock at CA\$1.25 per share. In addition, Nanotech will repurchase restricted share units ("RSU") to acquire 538,516 Nanotech common stock at a purchase price of CA\$1.25 per RSU and in-the-money options to acquire 4,579,000 Nanotech common stock at a purchase price equal to CA\$1.25 per option less the exercise price thereof. The consideration payable to securityholders under the arrangement will be payable in cash resulting in an estimated total purchase price of CA\$90.8 million.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Management's Discussion and Analysis ("MD&A") of the financial condition and results of the operations of Meta Materials Inc. ("META" or the "Company") constitutes management's review of the factors that affected the Company's financial and operating performance for the three and six months ended June 30, 2021. The condensed consolidated interim financial statements and this Management's Discussion and Analysis of Financial Condition and Results of Operations should be read in conjunction with the consolidated financial statements and notes thereto for the year ended December 31, 2020 which are contained in Form 8-K/A filed with the Securities and Exchange Commission, or the SEC, on August 12, 2021. All financial information is stated in U.S. dollars unless otherwise specified. The Company's condensed consolidated interim financial statements are prepared in accordance with accounting principles generally accepted in the United States, or U.S. GAAP.

Further information about the Company and its operations can be obtained from the offices of the Company, from the Company's website or on EDGAR at www.sec.gov/edgar.shtml.

This MD&A contains certain forward-looking information and forward-looking statements, as defined within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. (collectively referred to herein as "forward-looking statements"). These statements relate to future events or the Company's future performance. All statements other than statements of historical fact are forward-looking statements. Often, but not always, forward-looking statements can be identified by the use of words such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "continues", "forecasts", "projects", "predicts", "intends", "anticipates" or "believes", or variations of, or the negatives of, such words and phrases, or statements that certain actions, events or results "may", "could", "would", "should", "might" or "will" be taken, occur or be achieved. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results to differ materially from those anticipated in such forward-looking statements. The forward-looking statements in this MD&A speak only as of the date of this MD&A or as of the date specified in such statements.

This information includes, but is not limited to, comments regarding:

- the Company's business strategy;
- the Company's strategy for protecting its intellectual property;
- the Company's ability to obtain necessary funding on favorable terms or at all;
- the Company's plan and ability to secure revenues;
- the risk of competitors entering the market;
- the Company's ability to hire and retain skilled staff;
- the ability to obtain financing to fund future expenditures and capital requirements;
- the Company's plans with respect to its new facility;
- the impact of adoption of new accounting standards.

Although the Company believes that the plans, intentions and expectations reflected in this forward-looking information are reasonable, the Company cannot be certain that these plans, intentions, or expectations will be achieved. Actual results, performance, or achievements could differ materially from those contemplated, expressed or implied by the forward-looking information contained in this report. Disclosure of important factors that could cause actual results to differ materially from the Company's plans, intentions, or expectations are included in this report under the heading Risk Factors.

Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance or achievements to be materially different from any of its future results, performance or achievements expressed or implied by forward-looking statements. All forward-looking statements herein are qualified by this cautionary statement. Accordingly, readers should not place undue reliance on forward-looking statements. The Company undertakes no obligation to update publicly or otherwise revise any forward-looking statements whether as a result of new information or future events or otherwise, except as may be required by law. If the Company does update one or more forward-looking statements, no inference should be drawn that it will make additional updates with respect to those or other forward-looking statements, unless required by law.

This Report on Form 10-Q contains references to our trademarks and to trademarks belonging to other entities. Solely for convenience, trademarks and trade names referred to in this Report on Form 10-Q, including logos, artwork and other visual displays, may appear without the ® or TM symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks and trade names. We do not intend our use or display of other companies' trade names or trademarks to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

OVERVIEW

Meta Materials Inc. (the “Company” or “META” or “Resulting Issuer”) is a smart materials and photonics company specializing in metamaterial research and products, nanofabrication, and computational electromagnetics. The Company’s registered office is located at 5700 West Plano Pkwy, Plano, Texas 75093 and its principal executive office is located at 1 Research Drive, Halifax, Nova Scotia, Canada.

Business combinations

On December 14, 2020, Torchlight Energy Resources, Inc. (“Torchlight”) and its subsidiaries, Metamaterial Exchangeco Inc. (formerly named 2798832 Ontario Inc., “Canco”) and 2798831 Ontario Inc. (“Callco”), entered into an Arrangement Agreement (the “Arrangement Agreement”) with MMI to acquire all of its outstanding common stock by way of a statutory plan of arrangement (the “Arrangement”) under the Business Corporations Act (Ontario), on and subject to the terms and conditions of the Arrangement Agreement (the “Torchlight RTO”). On June 25, 2021, Torchlight implemented a reverse stock split, changed its name from “Torchlight Energy Resources, Inc.” to “Meta Materials Inc.” and changed its trading symbol from “TRCH” to “MMAT”. On June 28, 2021, following the satisfaction of the closing conditions set forth in the Arrangement Agreement, the Arrangement was completed.

On June 28, 2021, and pursuant to the completion of the Arrangement Agreement completion, the Company began trading on the NASDAQ under the symbol “MMAT” while MMI common stock were delisted from the Canadian Securities Exchange (“CSE”) and at the same time, Metamaterial Exchangeco Inc., a wholly-owned subsidiary of META, started trading under the symbol “MMAX” on the CSE.

For accounting purposes, the legal subsidiary, MMI, has been treated as the accounting acquirer and the Company, the legal parent, has been treated as the accounting acquiree. The transaction has been accounted for as a reverse acquisition as per ASC 805. Accordingly, The information disclosed in the financial statements as well as the MD&A is a continuation of MMI’s financial statements and MD&A.

Prior to the Torchlight RTO, and on March 5, 2020, Metamaterial Inc. (formerly known as Continental Precious Minerals Inc., “CPM”) and Metamaterial Technologies Inc. (“MTI”) completed a business combination by way of a three-cornered amalgamation pursuant to which MTI amalgamated with Continental Precious Minerals Subco Inc. (“CPM Subco”), a wholly owned subsidiary of CPM to become “Metacontinental Inc.” (the “RTO”). The RTO was completed pursuant to the terms and conditions of an amalgamation agreement dated August 16, 2019, between CPM, MTI and CPM Subco, as amended March 4, 2020. Following completion of the RTO, Metacontinental Inc. carried on the business of the former MTI, as a wholly-owned subsidiary of CPM and changed its name effective February 3, 2021 to “Metamaterial Technologies Canada Inc.”. In connection with the RTO, CPM changed its name effective March 2, 2020, from Continental Precious Minerals Inc. to Metamaterial Inc.. The common stock of CPM were delisted from the TSX Venture Exchange on March 4, 2020 and were posted for trading on the Canadian Securities Exchange (“CSE”) on March 9, 2020 under the symbol “MMAT”. For accounting purposes, the legal subsidiary, MTI, has been treated as the accounting acquirer and CPM, the legal parent, has been treated as the accounting acquiree. The transaction has been accounted for as a reverse recapitalization.

Impact of COVID-19 on the Company’s Business

During March 2020, the COVID-19 outbreak was declared a pandemic by the World Health Organization. This has resulted in governments worldwide enacting emergency measures to combat the spread of the virus. In response, the Company’s management implemented a Work-From-Home policy for management and non-engineering employees in all of the Company’s locations for the remaining period of the year. Engineering staff continued to work on given tasks and follow strict safety guidelines. As of August 2021, the majority of the Company’s employees have returned to the workplace. Although the Company’s supply chain has slowed down, the Company is currently able to maintain inventory of long lead items and is working with its suppliers to optimize future supply orders

COVID-19 has impacted the Company’s 2020 and 2021 sales of its metaAIR® laser protection eyewear product. Worldwide restrictions on travel are significantly impacting the airline industry and purchasing of metaAIR eyewear has not been the primary spending focus of airline companies emerging from the financial impacts of COVID-19, however, the Company is pursuing sales in adjacent markets such as consumer, military and law enforcement. The situation is dynamic and the ultimate duration and magnitude of the impact of COVID-19 on the economy and financial effect specific to the Company cannot be quantified or known at this time.

BUSINESS AND OPERATIONAL OVERVIEW

The Company has generated a portfolio of intellectual property and is now moving toward commercializing products at a performance and price point combination that has the potential to be disruptive in multiple market verticals. The Company’s platform technology includes holography, lithography, and medical wireless sensing. The underlying approach that powers all of the Company’s platform technologies comprises advanced materials, metamaterials and functional surfaces. These materials include structures that are patterned in ways that manipulate light, heat, and electromagnetic waves in unusual ways. The Company’s advanced structural design technologies and scalable manufacturing methods provide a path to broad commercial opportunities in aerospace and defense, automotive, energy, healthcare, consumer electronics, and data transmission.

Controlling light, electricity and heat have played key roles in technological advancements throughout history. Advances in electrical and electromagnetic technologies, wireless communications, lasers, and computers have all been made possible by challenging our understanding of how light and other types of energy naturally behave, and how it is possible to manipulate them.

Over the past 20 years, techniques for producing nanostructures have matured, resulting in a wide range of ground-breaking solutions that can control light and heat at very small scales. Some of the areas of advancement that have contributed to these techniques are photonic crystals, nanolithography, plasmonic phenomena and nanoparticle manipulation. From these advances, a new branch of material science has emerged – metamaterials. Metamaterials are composite structures, consisting of conventional materials such as metals and plastics, that are engineered by Company scientists to exhibit new or enhanced properties relating to reflection, refraction, diffraction, filtering, conductance and other properties that have the potential for multiple commercial applications.

A metamaterial typically consists of a multitude of structured unit nano-cells that are comprised of multiple individual elements. These are referred to as meta-atoms. The individual elements are usually arranged in periodic patterns that, together, can manipulate light, heat, or electromagnetic waves. Development strategies for metamaterials and functional surfaces focus on structures that produce unusual and exotic electromagnetic properties by manipulating light in ways that have never been naturally possible. They gain their properties not as much from their composition as from their exactly designed structures. The precise shape, geometry, size, orientation, and arrangement of these nanostructures affect the electromagnetic waves of light to create material properties that are not easily achievable with conventional materials.

The Company's platform technology (holography, lithography, and medical wireless sensing) is being used to develop potentially transformative and innovative products for: aerospace and defence, automotive, energy, healthcare, consumer electronics, and data transmission. The Company has many product concepts currently in different stages of development with multiple customers in diverse market verticals. The Company's business model is to co-develop innovative products or applications with industry leaders that add value. This approach enables the Company to understand market dynamics and ensure the relevance and need for the Company's products.

Holography Technology

Holography is a technique where collimated visible wavelength lasers are used to directly write an interference pattern inside the volume of light-sensitive material (photopolymer) in order to produce highly transparent optical filters and holographic optical elements. For some product lines that require large surface areas, this is combined with a proprietary scanning technique, where the lasers, optically or mechanically, directly write nano-patterns to cover large surface areas with nanometer accuracy.

Meta's principal products that employ holography technology are its METAIR® laser glare protection eyewear, METAIR® laser protection films for law enforcement and metaOPTIX™ notch filters. Meta co-developed its METAIR® laser protection eyewear product with Airbus S.A.S. that has been engineered to provide laser glare protection for pilots, military and law enforcement using Meta's holography technology. METAIR® is a holographic optical filter developed using nano-patterned designs that block and deflect specific colors or wavelengths of light. Meta launched METAIR® with strategic and exclusive distribution partner, Satair, a wholly owned Airbus company and started producing and selling METAIR® in April 2019. The scale-up and specification for the raw photopolymer material used to produce the eyewear was successfully finalized in late 2019 and commercialized in 2020. Meta launched its laser protection films for law enforcement use in late 2020. These films are designed to be applied to face shields and helmet visors providing the wearer with the same type of laser eye protection afforded to pilots by METAIR® glasses while preserving peripheral vision critical to law enforcement duties. metaOPTIX™ notch filters are optical filters that selectively reject a portion of the spectrum, while transmitting all other wavelengths. They are used in applications where it is necessary to block light from a laser, as in machine vision applications and in confocal or multi-photon microscopy, laser-based fluorescence instrumentation, or other life science applications. metaOPTIX™ notch filters were commercially launched by the Company in November 2020.

Meta has additional products in development that utilize its proprietary holography technology. Included in the metaOPTIX™ family of products are holographic optical elements ("HOEs"). HOEs are a core component in the display of augmented reality smart glasses products, as well as (in their larger version) in Heads-Up Displays ("HUDs"), in automobiles and aircraft.

Lithography Technology

In order to meet the performance, fabrication-speed, and/or cost criteria required for many potential applications that require large area and low cost nanopatterning, the Company has developed a new nanolithography method called "Rolling Mask" lithography (registered trademark RML®), which combines the best features of photolithography, soft lithography and roll-to-plate/roll-to-roll printing capability technologies. Rolling Mask Lithography utilizes a proprietary UV light exposure method where a master pattern is provided in the form of a cylindrical mask. These master patterns are designed by the Company and over the years they have become part of a growing library of patterns, enriching the intellectual property ("IP") of the Company. The nanostructured pattern on the mask is then rolled over a flat surface area writing a nano-pattern into the volume of a light-sensitive material (a photoresist), creating patterned grooves, metal is then evaporated and fills the patterned grooves. The excess metal is then removed by a known post-process called lift-off. The result is an invisible conductive metal mesh-patterned surface (registered trademark NANOWEB®) that can be fabricated onto any glass or plastic transparent surface in order to offer high transparency, high conductivity and low haze smart materials.

The Company's current principal prototype product in lithography technology is its transparent conductive film, NANOWEB®. The lithography division operates out of the Company's wholly owned U.S. subsidiary, which can produce meter-long samples of NANOWEB®, at a small volumes scale, for industry customers/partners.

There are six NANOWEB®-enabled products and applications that are currently in early stages of development including NANOWEB® for Transparent EMI Shielding, NANOWEB® for Transparent Antennas, NANOWEB® for 5G signal enhancement, NANOWEB® for Touch Screen Sensors, NANOWEB® for Solar cells and NANOWEB® for Transparent Heating to de-ice and de-fog. More details of these products and applications can be found in META's EDGAR filings and on META's website at www.metamaterial.com.

Throughout 2020 and 2021, the Company has been ordering and upgrading its equipment at its California facility to efficiently supply NANOWEB® samples in larger volumes. The Company has entered into a collaboration agreement with Crossover Solutions Inc. to commercialize the NANOWEB®-enabled products and applications for the automotive industry and with ADI Technologies to help secure contracts with the US Department of Defense.

Wireless Sensing Technology

Wireless Sensing is the ability to cancel reflections (anti-reflection) from the skin to increase the Signal-to-Noise- Ratio (“SNR”) transmitted through body tissue to enable better medical diagnostics. This breakthrough wireless sensing technology is made using proprietary patterned designs, printed on metal-dielectric structures on flexible substrates that act as anti-reflection (impedance-matching) coatings when placed over the human skin in combination with medical diagnostic modalities, such as MRI, ultrasound systems, non-invasive glucometers etc. For example, as a medical imaging application, the Company is developing metaSURFACE™ (also known as RadiWise™) an innovation which allows up to 40 times more energy to be transmitted through the human tissue, instead of being reflected. The benefit is increased diagnostic speed and imaging accuracy leading to patient throughput increases for healthcare providers. The metaSURFACE™ device consists of proprietary non-ferrous metallic and dielectric layers that are exactly designed to interact (resonate) with radio waves allowing the waves to “see-through the skin”.

The Company is developing wireless sensing applications from its London, UK office and advancing the wireless sensing technology with Innovate UK grants.

BUSINESS AND OPERATIONAL HIGHLIGHTS

The Company’s lease at Highfield Park for approximately 53,000 square foot facility, commenced on January 1st, 2021. The facility will host the Company’s holography and lithography R&D labs and manufacturing operations. The Company has thus far spent a total of \$0.55 million on leasehold improvements, of which \$0.4 million was spent during the six months ended June 30, 2021. The Company also amended this lease agreement on June 9, 2021 to expand the leased space by approximately 15,000 square feet, reduce the annual rent for the 10-year term of the lease and obtain from the landlord CA\$500,000 in cash to fund ongoing tenant improvements. In exchange, the landlord received 993,490 MMI common stock at CA\$3.40 per share.

In addition, in the six months ended June 30, 2021, the Company purchased equipment for \$1.9 million for the Highfield Park facility as well as equipment for \$1.86 million for its California facility. The Company will be incurring additional construction and equipment costs over the coming quarters.

In the six months ended June 30, 2021, the Company has executed its agreement to acquire specialized lens casting production equipment and intellectual property, including more than 70 patents, from Interglass Technology AG (Switzerland) for \$800,000. META will invest and expand its capabilities in design, development, and manufacturing of metaFUSION™ products for smart eyewear.

Pursuant to the closing of the Torchlight acquisition, The Company has reclassified the Oil and Gas assets as held for sale and has hired a consultant to help determine the best path to maximize value for the Series A Preferred shareholders. all aspects of lease obligations for the Torchlight oil and gas assets are in compliance The CDC (Continuing Drilling Clause) with University Lands on the Orogrande asset is in the process of being satisfied. Four wells must be drilled in the project in 2021 in order to hold the lease for sale or spinout.

RESULTS OF OPERATIONS

Revenue and Gross Profit

	Three months ended June 30,				Six months ended June 30,			
	2021	2020	Change	%	2021	2020	Change	%
	\$	\$	\$		\$	\$	\$	
Product sales	1,953	—	1,953	100%	24,000	1,922	22,078	1149%
Development revenue	622,367	210,344	412,023	196%	1,196,623	648,761	547,862	84%
Total Revenue	624,320	210,344	413,976	197%	1,220,623	650,683	569,940	88%
Cost of goods sold	706	1,336	(630)	-47%	1,106	2,160	(1,054)	-49%
Gross Profit	623,614	209,008	414,606	198%	1,219,517	648,523	570,994	88%

Product sales include products, components, and samples sold to various customers. The Company has not generated significant product sales for the three and six months ending June 30, 2021 since most of the company’s products remain under development.

The increase in development revenue for the three months ended June 30, 2021 of \$412,023 is due to an increase in contract revenue of \$392,880 and increase in other development revenue of \$19,143. The increase in contract revenue is primarily due to revenue recognition of \$377,637 in Q2 2021 subsequent to achieving certain milestones of the cooperation framework agreement with Covestro Deutschland AG.

The increase in development revenue for the six months ended June 30, 2021 of \$547,862 is due to an increase in contract revenue of \$648,329 partially offset by a decrease in other development revenue of \$100,467. The increase in contract revenue is primarily due to revenue recognition of \$620,846 in Q2 2021 subsequent to achieving certain milestones of the cooperation framework agreement with Covestro Deutschland AG.

Operating expenses

	Three months ended June 30,				Six months ended June 30,			
	2021 \$	2020 \$	Change \$	%	2021 \$	2020 \$	Change \$	%
Operating Expenses								
Selling & Marketing	298,871	153,962	144,909	94%	695,465	324,528	370,937	114%
General & Administrative	3,145,368	1,553,118	1,592,250	103%	5,738,251	3,157,652	2,580,599	82%
Research & Development	1,633,653	960,430	673,223	70%	3,412,909	1,892,601	1,520,308	80%
Total operating expenses	5,077,892	2,667,510	2,410,382	90%	9,846,625	5,374,781	4,471,844	83%

The increase in selling and marketing expenses for the three and six months ended June 30, 2021, compared to the same period of 2020, is primarily due to:

- increase in salaries and benefits of \$91,538 and \$180,671 respectively due to new hires in 2021 as part of the Company's expansion.
- increase in consulting fees of \$58,509 and \$175,778 respectively for market research and various promotional campaigns as the Company sought to list on the NASDAQ.
- increase in trade shows and travel and entertainment for \$4,421 and \$31,681 respectively.

The increase in general and administrative expenses for the three and six months ended June 30, 2021, compared to the same period of 2020, is primarily due to:

- increase in legal and audit expense of \$1,125,751 and \$1,812,254 respectively mainly due to legal cost associated with the Torchlight RTO.
- increase in consulting fees of \$154,284 and \$379,543 respectively for market research, investment banking and investor related expenses most of which are associated with the Torchlight RTO, NASDAQ and CSE listing.
- increase in salaries and benefits of \$216,243 and \$201,276 respectively mainly due to management expansion in 2021.
- increase in rent and utilities of \$90,445 and \$169,890 respectively due to the new lease for Highfield Park effective January 1, 2021.
- Decrease in stock-based payments expense of \$104,850 and \$122,668 respectively due to the issuance of fully vested options in Q1 and Q2 2020 in addition to the change in fair value of certain warrants as a result of changing their maturity date past the CPM RTO.

The increase in research and development expenses for the three and six months ended June 30, 2021, compared to the same period of 2020, is primarily due to:

- increase in salaries and benefits of \$507,744 and \$829,376 respectively due to R&D new hires in 2021 in both Halifax and California locations.
- increase in R&D materials of \$169,440 and \$632,585 respectively mainly due to inventory write-off of Covestro material of \$432,638 in Q1 2021 to be utilized in R&D as well as other R&D material purchases as a result of the R&D department expansion.
- decrease/increase in stock-based payments expense of \$6,649 and \$133,547 respectively due to issuance of 4.6 million stock options (as adjusted for Torchlight RTO) in December 2020 for all employees which increased the quarterly expense in Q1 and Q2 2021.
- Decrease in depreciation and amortization expense for R&D assets of \$31,297 and \$88,217 respectively.

Other income (expense)

	Three months ended June 30,				Six months ended June 30,			
	2021 \$	2020 \$	Change \$	%	2021 \$	2020 \$	Change \$	%
Other income (expense):								
Interest expense, net	(427,809)	(324,421)	(103,388)	32%	(878,717)	(516,225)	(362,492)	70%
(Loss) Gain on foreign exchange, net	(163,941)	(323,172)	159,231	-49%	(330,385)	256,673	(587,058)	-229%
(Loss) Gain on financial instruments, net	(535,170)	1,042,928	(1,578,098)	-151%	(40,540,091)	1,285,765	(41,825,856)	-3253%
Other income, net	341,958	236,001	105,957	45%	933,864	411,669	522,195	127%
Total other income (expense)	(784,962)	631,336	(1,416,298)	-224%	(40,815,329)	1,437,882	(42,253,211)	-2939%

The increase in net interest expense for the three and six months ended June 30, 2021, compared to the same period of 2020, is primarily due to:

- increase in non-cash interest accretion of \$62,620 and \$106,777 respectively due to accretion of long-term debt and funding obligation.
- increase in interest expense of \$43,987 and \$259,387 respectively due to interest carrying promissory notes and convertible debts outstanding at December 31, 2020 of \$8,574,094 and additional financing obtained during Q1 2021 of \$13,963,386. All convertible notes and promissory notes were converted into common stock in Q1 2021 except Torchlight promissory notes which have been eliminated June 30, 2021, subsequent to completion of the Torchlight RTO.

The net loss/gain on foreign exchange for the three and six months ended June 30, 2021, compared to the same period of 2020, is primarily driven by fluctuations in global currencies as a result of COVID-19, especially relating to the US Dollar in relation to Canadian dollar.

The net loss/gain on financial instruments for the three and six months ended June 30, 2021, compared to the same period of 2020, is primarily due to the remeasurement of convertible financial liabilities of carrying value of \$12,003,142 at the conversion dates and recognition of \$40,340,460 non-cash realized loss in the statements of operations. This significant increase in the fair value of the convertible financial liabilities is due to the significant increase of the Company's stock price from CA\$0.66 as at December 31, 2020 to:

- CA\$3.01 at February 16, 2021 when the Company converted unsecured convertible promissory notes of \$4,356,734 principal and interest at share price of CA\$0.50 in accordance with the terms of the bridge financing;
- CA\$3.01 at February 16, 2021 when the Company converted unsecured convertible debentures of \$1,527,108 principal and interest at share price of CA\$0.70 as per terms of the agreement and;
- CA\$3.80 at March 3, 2021 when the Company converted secured convertible debentures of \$4,252,059 principal and interest at share price of CA\$0.70 pursuant to the terms of the agreement with BDC.

Each of the above referenced promissory notes and debentures included a conversion feature, exercisable at the option of the debt holder. For accounting purposes, each of these conversion features is an embedded derivative in the note or debenture. The Company elected to account for fluctuations in (a) the value of the liabilities driven by interest rate volatility and the Company's credit risk and (b) the embedded derivatives driven by fluctuations in the Company's common stock share price using a method known as Fair Value option. This accounting method calls for the Company to measure the fair value of the convertible financial liabilities at each balance sheet date and to record any fluctuations in the values that as non-cash adjustments relating to instrument specific credit risk in the other comprehensive income and non-cash adjustments relating to other factors in the statements of operations. If, as in the case of the liabilities described above, the debt is converted, the valuations and any adjustments are to be recorded as of the date of such conversion.

The Fair value option also provides that the total revaluation adjustment, in this case \$40,340,460, be recorded in Common Stock thus having no impact on shareholder's deficit despite the recording of the loss in the profit and loss.

The recorded loss is a non-cash expense and had no impact on shareholder's equity at June 30, 2021. The creditors of the Company exchanged their secured and unsecured debt for common stock of the Company at conversion prices that were established at the time the instruments were created and, at which time, represented a conversion price close to or higher than the then market price of the common stock. Had the Company been permitted to pay off the debts in cash at the time of conversion, fewer stock would have been required to be issued and a lower loss would have been recorded. However, the instruments prevented any pre-payment of the debts by the Company. The conversions had the beneficial effect of significantly reducing the Company's liabilities and eliminating broad-based security interests in all of the Company's assets previously held by the creditors.

The increase in net other income for the three and six months ended June 30, 2021, compared to the same period of 2020, is primarily due to increase in government assistance of due to grants received from the Canadian and United Kingdom Government of \$105,857 in the three months ended June 30, 2021 and \$552,856 in the six months ended June 30, 2021.

Deferred Tax recovery

	Three months ended June 30,				Six months ended June 30,			
	2021	2020	Change		2021	2020	Change	
	\$	\$	\$	%	\$	\$	\$	%
Income tax recovery	57,847	10,425	47,422	455%	102,526	54,347	48,179	89%

The Company records deferred income tax liabilities only for its foreign operation in the United Kingdom. The decrease in income tax expense for the three and six months ended June 30, 2021, compared to the same periods in 2020 was driven by an increase in accumulated losses as well as changes in foreign exchange rates.

The Company has not yet been able to establish profitability or other sufficient significant positive evidence, to conclude that its deferred tax assets are more likely than not to be realized. Therefore, the Company continues to maintain a valuation allowance against its deferred tax assets.

LIQUIDITY AND CAPITAL RESOURCES

Liquidity risk is the risk that the Company will not meet its financial obligations as they become due after use of currently available cash. The Company has a planning and budgeting process to monitor operating cash requirements, including amounts projected for capital expenditures, which are adjusted as input variables change. These variables include, but are not limited to, the ability of the Company to generate revenue from current and prospective customers, general and administrative requirements of the Company and the availability of equity or debt capital and government funding. As these variables change, it may require the Company to issue equity or obtain debt financing.

At June 30, 2021, the Company had cash and cash equivalents of \$155.0 million including \$0.4 million in restricted cash compared to \$1.4 million at December 31, 2020.

For the six months ended June 30, 2021, the Company's principal sources of liquidity included \$147 million of cash obtained through the Torchlight RTO, \$14 million in cash obtained through convertible debt, \$1.2 million in cash obtained through revenue and deferred revenue, and \$1.1 million in cash obtained through long-term and short-term interest-free debt. The Company's primary uses of liquidity included salaries of \$3 million, legal and audit fees of \$2.4 million, consulting fees of \$0.8 million and R&D materials of \$0.8 million.

At June 30, 2021, META had a working capital surplus of \$143 million compared to a deficit of \$9.7 million at June 30, 2020 which represents an improvement in working capital of \$152.7 million. This is primarily due to a \$153.7 million increase in cash and restricted cash as a result of the Torchlight acquisition, a \$1.1 million increase in prepayments mainly due to stock issued to a lessor for \$0.6 million as prepaid expense relating to the extension of leased space (see Highfield Park amendment above), a \$5 million net decrease in working capital as a result of the acquisition of Torchlight's assets held for sale and preferred stock liability, \$2.3 million increase in accounts payables mainly due to construction of the Highfield Park facility in Canada and equipment purchases in the United States, \$1 million increase in long term debt current portion, and \$6.7 million decrease in convertible debt as a result of conversions into equity in Q1 2021.

META believes that its existing cash will be sufficient to meet its working capital and capital expenditure needs for the foreseeable future. However, META may need to raise additional capital to expand the commercialization of its products, fund its operations and further its research and development activities. META's future capital requirements may vary materially from period to period and will depend on many factors, including the timing and extent of spending on research and development efforts, the capital expansion of its facilities in Halifax and California and the ongoing investments to support the growth of its business.

The following table summarizes META's cash flows for the periods presented;

	<u>Six months ended June 30,</u>	
	<u>2021</u>	<u>2020</u>
Net cash used in operating activities	(5,607,851)	(4,461,287)
Net cash provided by investing activities	143,639,858	2,486,266
Net cash provided by financing activities	15,483,993	4,955,785
Net increase in cash, cash equivalents and restricted cash	<u>153,516,000</u>	<u>2,980,764</u>

Net cash used in operating activities

During the six months ended June 30, 2021, net cash used in operating activities of \$5.6 million was primarily driven by \$49.3 million of net loss reported for the period, and non-cash adjustments of \$43 million related to fair value losses on financial instruments, depreciation and amortization, interest expense, stock-based compensation, and other items. In addition, there was \$0.76 million cash provided by working capital primarily due to \$0.5 million increase in accounts payable, \$0.4 million cash received for tenant inducement, \$0.1 million inventory sold and written off to R&D offset by \$0.24 million increase in receivables and prepayments.

During the six months ended June 30, 2020, net cash used in operating activities of \$4.5 million was primarily driven by \$3.2 million of net loss reported for the period, and non-cash adjustments of \$0.45 million related to fair value losses on financial instruments, depreciation and amortization, interest expense, stock-based compensation, and other items. In addition, there was \$1.48 million cash used in working capital primarily due to \$1.6 million decrease in accounts payable, \$0.15 million increase in inventory due to raw materials purchases offset by \$0.29 million decrease in receivables and prepayments.

Net cash provided by investing activities

During the six months ended June 30, 2021, net cash provided by investing activities of \$143.6 million was primarily driven by cash acquired as a result of the Torchlight acquisition of \$147 million, \$3 million purchases of property plant and equipment associated with the construction of the Highfield Park Facility in Canada as well as the equipment purchases for META's facility in California, United States and \$0.27 increase in intangibles as a result of capitalized legal cost of patents as well as patents acquired as part of the interglass assets.

During the six months ended June 30, 2020, net cash provided by investing activities of \$2.5 million was primarily driven by proceeds from CPM acquisition of \$3.1 million and \$0.5 million equipment purchases for META's facility in California, United States.

Net cash provided by financing activities

During the six months ended June 30, 2021, net cash provided by financing activities of \$15.3 million was primarily driven by \$10 million proceeds from issuance of unsecured convertible promissory notes to Torchlight that was eliminated upon consolidation at June 30, 2021, \$3.9 million proceeds from issuance of unsecured convertible promissory notes to a shareholder that was subsequently converted into common stock in Q1 2021, \$1.1 million proceeds from long-term debt, and \$0.2 million proceeds from options and warrants conversion.

During the six months ended June 30, 2020, net cash provided by financing activities of \$4.8 million was primarily driven by \$3.6 million proceeds from issuance of secured convertible debentures to BDC Capital that was subsequently converted into common stock in Q1 2021, \$0.7 million proceeds from issuance of unsecured convertible debentures that was subsequently converted into common stock in Q1 2021, \$0.6 million proceeds from common stock and warrants issuances offset by \$0.2 million repayments of long-term debt.

Commitments and contractual obligations

For a description of our commitments and contractual obligations, please see "Note 21—Commitments and contingencies" in the Notes to the Condensed Consolidated Interim Financial Statements of this Form 10-Q.

Off-Balance Sheet Arrangements

Off-balance sheet firm commitments relating to outstanding letters of credit amounted to approximately \$945,000 as of June 30, 2021. These letters of credit and bank guarantees are collateralized by \$433,627 of restricted cash. Please see "Note 21—Commitments and contingencies" in the Notes to Condensed Consolidated Interim Financial Statements of this Form 10-Q. The Company do not maintain any other off-balance sheet arrangements.

Recent Accounting Pronouncements

For a description of recent accounting pronouncements, including the expected dates of adoption and estimated effects, if any, on our condensed consolidated interim financial statements, please see "Note 2—Significant accounting policies" in the Notes to Condensed Consolidated Interim Financial Statements of this Form 10-Q.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. Interest rate risk is minimized through management's decision to primarily obtain fixed rate or interest free debt. Funding obligation and long-term debt are at a nil interest rate and the interest on the cash balances is insignificant. As a result, the Company is not exposed to material cash flow interest rate risk.

Foreign currency risk

Foreign currency risk is the risk to earnings or capital arising from changes in foreign exchange rates. The Company has transactional currency exposures that arise from loans and receivables as well as purchases in currencies other than their functional currency such as United States Dollars, Euros and Great Britain Pound. The Company does not enter into derivatives to hedge the exposure.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this quarterly report. Based upon this evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures as defined under Securities Exchange Act Rules 13a-15(e) and 15d-15(e) were effective at the reasonable assurance.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting identified in management's evaluation pursuant to Rules 13a or 15(d) of the Exchange Act that occurred during the three months ended June 30, 2021, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

However, as a result of the closing of the Arrangement, our internal control over financial reporting may change. Our process for evaluating controls and procedures is continuous and encompasses constant improvement of the design and effectiveness of established controls and procedures and the remediation of any deficiencies, which may be identified during this process.

Inherent Limitation on the Effectiveness of Internal Control

The effectiveness of any system of internal control over financial reporting, including ours, is subject to inherent limitations, including the exercise of judgment in designing, implementing, operating, and evaluating the controls and procedures, and the inability to eliminate misconduct completely. Accordingly, in designing and evaluating the disclosure controls and procedures, management recognizes that any system of internal control over financial reporting, including ours, no matter how well designed and operated, can only provide reasonable, not absolute assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints, and that management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs. Moreover, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. We intend to continue to monitor and upgrade our internal controls as necessary or appropriate for our business but cannot assure you that such improvements will be sufficient to provide us with effective internal control over financial reporting.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings

On January 31, 2020, Torchlight Energy Resources, Inc. and its wholly owned subsidiaries Torchlight Energy, Inc. and Torchlight Energy Operating, LLC were served with a lawsuit brought by Goldstone Holding Company, LLC (*Goldstone Holding Company, LLC v. Torchlight Energy, Inc., et al.*, in the 160th Judicial District Court of Dallas County, Texas). On February 24, 2020, Torchlight Energy Resources, Inc., Torchlight Energy, Inc., and Torchlight Energy Operating, LLC timely filed their answer, affirmative defenses, and requests for disclosure. The suit, which sought monetary relief over \$1 million, made unspecified allegations of misrepresentations involving a November 2015 participation agreement and a 2016 amendment to the participation agreement. Torchlight denied the allegations and asserted several affirmative defenses including but not limited to, that the suit is barred by the applicable statute of limitations, that the claims had been released, and that the claims were barred because of contractual disclaimers between sophisticated parties. Torchlight also asserted counterclaims for attorney fees. On January 14, 2021, Goldstone Holding Company, LLC dismissed its claims without prejudice, leaving Torchlight's counterclaims for attorney fees as the only pending claim in the case. On February 26, 2021, Torchlight filed a non-suit without prejudice on its counterclaims for attorney fees, leaving no claims in the case. The court signed a final order disposing of the entire case on March 5, 2021. However, Goldstone Holding Company, LLC asked the court to re-instate its claims, and a hearing was held on April 13, 2021. On June 16, 2021, the court signed an order denying the motion to reinstate Goldstone Holding Company's, LLC's claims, and the case is closed.

On April 30, 2020, our wholly owned subsidiary, Hudspeth Oil Corporation, filed suit against Datalog LWT, Inc. d/b/a Cordax Evaluation Technologies. The suit seeks the recovery of approximately \$1.4 million in costs incurred as a result of a tool failure during drilling activities on the University Founders A25 #2 well that is located in the Orogrande Field. Working interest owner Wolfbone Investments, LLC, a company owned by our Chairman Gregory McCabe, is a co-plaintiff in that action. After the suit was filed, Cordax filed a mineral lien in the amount of \$104,500.01 against the Orogrande Field and has sued the operator and counterclaimed against Hudspeth for breach of contract, seeking the same amount as the lien. We have added the manufacturer of one of the tool components that we contend was a cause of the tool failure. It was later discovered that Datalog LWT, Inc. d/b/a Cordax Evaluation Technologies forfeited its charter to conduct business in the State of Texas by failing to timely pay its franchise taxes, and we added members of the board of directors to the case pursuant to the Texas Tax Code. It was recently disclosed that Datalog LWT, Inc. d/b/a Cordax Evaluation Technologies is the subsidiary of a Canadian parent company, Cordax Evaluation Technologies, Inc., who has also been added to the case. The suit, Hudspeth Oil Corporation and Wolfbone Investments, LLC v. Datalog LWT, Inc. d/b/a Cordax Evaluation Technologies, was filed in the 189th Judicial District Court of Harris County, Texas. The parties are currently engaged in preliminary discovery.

On March 18, 2021, Datalog LWT, Inc. d/b/a Cordax Evaluation Technologies filed a lawsuit in Hudspeth County, Texas seeking to foreclose its mineral lien against the Orogrande Field in the amount of \$104,500.01 and recover related attorney's fees. The foreclosure action, Datalog LWT Inc. d/b/a Cordax Evaluation Technologies v. Torchlight Energy Resources, Inc., was filed in the 205th Judicial District Court of Hudspeth County, Texas. We are contesting the lien in good faith and filed a Plea in Abatement on May 10, 2021, seeking a stay in the Hudspeth County lien foreclosure case pending final disposition of the related case currently pending in Harris County, Texas.

Item 1A. Risk Factors

The following factors could materially affect META's business, financial condition or results of operations and should be carefully considered in evaluating the Company and its business, in addition to other information presented elsewhere in this report.

Limited Operating History

The Company has a limited operating history, which can make it difficult for investors to evaluate the Company's operations and prospects and may increase the risks associated with investment in the Company.

The Company is expected to be subject to many of the risks common to early-stage enterprises for the foreseeable future, including challenges related to laws, regulations, licensing, integrating and retaining qualified employees; making effective use of limited resources; achieving market acceptance of existing and future products; competing against companies with greater financial and technical resources; acquiring and retaining customers; and developing new solutions.

Holography Market-Aviation Industry

The Company launched its first product, a laser protection eyewear, named METAIR[®], in March 2019, with a primary focus on the aviation market. The product offers unique performance and benefits over the competition and is the only industry-approved solution to date. The Company has co-developed this product with Airbus through a strategic partnership. Airbus further extended its support by introducing the Company to Satair, an Airbus owned company, which became the global distribution partner for METAIR[®] to the aviation market. Since 2016, Airbus and Satair invested a total of \$2,000,000 for the product development and exclusive distribution rights. Since the launch of METAIR[®] in March 2019, the Company has sold fifty units to its distributor Satair. The Company is currently in the process of increasing its marketing and sales capacity.

Despite the Company's close collaboration with the Airbus Group, with the impact of COVID-19 there can be no assurance that the aviation market will accept the METAIR[®] product at the expected market penetration rates and a slower than forecasted market acceptance may have a material adverse effect on the Holography laser protection related products and the Company's financial position. The Company is pursuing ancillary markets outside of the Aviation Industry for its METAIR[®] laser protection eyewear such as in law enforcement and defense.

Lithography Product and Market-Automotive

The Lithography related products have not yet reached the required technical maturity and are expected to be launched in two to three years' time after a successful product development completion. Despite the Company's close collaboration with two automotive partners, there can be no assurance that the automotive market will accept the NANOWEB® product at the expected market penetration rates and a slower than forecasted market acceptance may have a material adverse effect on the Lithography de-icing related products and the Company's financial position.

Change in Laws, Regulations and Guidelines

The current and proposed operations of the Company are subject to a variety of laws, regulations and guidelines relating to production, the conduct of operations, transportation, storage, health and safety, medical device regulation and the protection of the environment. These laws and regulations are broad in scope and subject to evolving interpretations, which could require the Company to incur substantial costs associated with compliance or alter certain aspects of its business plan. In addition, violations of these laws, or allegations of such violations, could disrupt certain aspects of the Company's business plan and result in a material adverse effect on certain aspects of its planned operations.

The Company launched a new product METAIR® in March 2019 to provide laser glare protection to pilots in the airline industry. Currently, METAIR® is not subject to any Federal Aviation Administration regulations, however, METAIR® may become subject to evolving regulation by governmental authorities as METAIR® market evolves further.

Currency Fluctuations

The Company's revenues and expenses are denominated in Canadian dollars, US dollars, and British Pounds, and therefore are exposed to significant currency exchange fluctuations. Recent events in the global financial markets have been coupled with increased volatility in the currency markets. Fluctuations in the exchange rate between the US dollar, the Canadian dollar and the British pound may have a material adverse effect on the Company's business, financial condition, and operating results. The Company may, in the future, establish a program to hedge a portion of its foreign currency exposure with the objective of minimizing the impact of adverse foreign currency exchange movements. However, even if the Company develops a hedging program, there can be no assurance that it will effectively mitigate currency risks.

New Facility and Permits for Lithography Production

The Company's plans to scale its lithography production in Canada is dependent on obtaining adequate additional funding. The Company is in process of moving into a larger facility suitable to host the Holography and Lithography production scale up. Lithography is a wet chemistry process which requires specific approvals from the local government to allow use of certain chemicals and their disposal.

Any delay in setting up the facility and receiving permits may impact launch and/or development of related products, and also may have a material adverse effect on the Lithography and Holography related products and consequently on the Company's financial position.

Raw Material Source

The Company purchases its holographic raw materials from a tier 1 German manufacturer, which is a single source supplier. Disruption in supply from this supplier may cause a material adverse effect on the Holography related products.

Intellectual Property

The success of the Company will depend, in part, on the ability of the Company to maintain and enhance intellectual property and trade secret protection over various existing and potential proprietary techniques and products. The Company may be vulnerable to competitors who develop competing technology, whether independently or as a result of acquiring access to the proprietary products and trade secrets. In addition, effective future patent, copyright, trademark, and trade secret protection may be unavailable or limited in certain foreign countries and may be unenforceable under the laws of certain jurisdictions.

Research and Market Development

Although the Company, itself and through its investments, is committed to researching and developing new markets and products and improving existing products, there can be no assurances that such research and market development activities will prove profitable or that the resulting markets and/or products, if any, will be commercially viable or successfully produced and marketed. A failure in the demand for products to materialize as a result of competition, technological change or other factors could have a material adverse effect on the business, results of operations and financial condition of the companies in which the Company has or will invest in, and consequently, on the Company.

Costs of Maintaining a Public Listing

As a public company, there are costs associated with legal, accounting, and other expenses related to regulatory compliance. Securities legislation and the rules and policies of the NASDAQ require listed companies to, among other things, adopt corporate governance and related practices, and to continuously prepare and disclose material information, all of which add to a company's legal and financial compliance costs. The Company may also elect to devote greater resources than it otherwise would have on communication and other activities typically considered important by publicly traded companies.

Conflicts of Interest

Certain of the Company's directors and officers are, and may continue to be, involved in other business ventures through their direct and indirect participation in corporations, partnerships, joint ventures, etc. that may become potential competitors of the technologies, products and services the Company intends to provide. Situations may arise in connection with potential acquisitions or opportunities where the other interests of these directors and officers conflict with or diverge from the Company's interests. In accordance with applicable corporate law, directors who have a material interest in or who are a party to a material contract or a proposed material contract with the Company are required, subject to certain exceptions, to disclose that interest and generally abstain from voting on any resolution to approve the contract. In addition, the directors and officers are required to act honestly and in good faith with a view to the Company's best interests. However, in conflict of interest situations, the Company's directors and officers may owe the same duty to another company and will need to balance their competing interests with their duties to the Company. Circumstances (including with respect to future corporate opportunities) may arise that may be resolved in a manner that is unfavorable to the Company.

Product Liability Claims

The Company's wireless sensing technology to enhance MRI imaging and non-invasive GLUCOWISE® monitoring is under development. The Company has performed many experiments on animals and humans and will continue to perform additional experiments as needed to continue the development of the related products.

Any product liability claims or regulatory action against the Company related to wireless sensing products could have a material adverse effect on this business segment of the Company and/or on the Company.

Reliance on Management

The success of the Company is dependent upon the ability, expertise, judgment, discretion, and good faith of its senior management. Any loss of the services of such individuals could have a material adverse effect on the Company's business, operating results, or financial condition.

Resale of Shares

There can be no assurance that, an active and liquid market for the Company's common stock will develop or be maintained and an investor may find it difficult to resell any securities of the Company. In addition, there can be no assurance that the publicly traded price of the Company's common stock (META's common stock) will be high enough to create a positive return for investors. Further, there can be no assurance that META's common stock will be sufficiently liquid so as to permit investors to sell their position in META without adversely affecting the stock price. In such event, the probability of resale of META's common stock would be diminished.

Price Volatility of Publicly Traded Securities

In recent years, the securities markets in the United States and Canada have experienced a high level of price and volume volatility, and the market prices of securities of many companies have experienced wide fluctuations in price which have not necessarily been related to the operating performance, underlying asset values or prospects of such companies. There can be no assurance that continuing fluctuations in price will not occur. It may be anticipated that any quoted market for META's common stock will be subject to market trends generally, notwithstanding any potential success of the Company in creating revenues, cash flows or earnings. The value of META's common stock will be affected by such volatility.

Dividends

The Company has not paid dividends in the past, and the Company does not anticipate paying any dividends in the foreseeable future. Dividends paid by the Company would be subject to tax and, potentially, withholdings.

Insurance Coverage

The Company will require insurance coverage for a number of risks. Although the management of the Company believes that the events and amounts of liability covered by its insurance policies will be reasonable, taking into account the risks relevant to its business, and the fact that agreements with users contain limitations of liability, there can be no assurance that such coverage will be available or sufficient to cover claims to which the Company may become subject. If insurance coverage is unavailable or insufficient to cover any such claims, the Company's financial resources, results of operations and prospects could be adversely affected.

Litigation

The Company may become party to litigation from time to time in the ordinary course of business which could adversely affect its business. Should any litigation in which the Company becomes involved be determined against the Company, such a decision could adversely affect the Company's ability to continue operating and the market price for the common stock and could use significant resources. Even if the Company is involved in litigation and wins, litigation can redirect significant resources.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Not applicable.

Item 3. Defaults Upon Senior Securities

None

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None

Item 6. Exhibits

Furnish the exhibits required by Item 601 of Regulation S-K (§ 229.601 of this chapter).

<u>Exhibit Number</u>	<u>Description</u>
31.1*	<u>Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
31.2*	<u>Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
32.1*	<u>Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
32.2*	<u>Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Filed herewith.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

Meta Materials Inc.

Dated: August 13, 2021

By: /s/ George Palikaras

George Palikaras
President and Chief Executive Officer
(Principal Executive Officer)

Dated: August 13, 2021

By: /s/ Ken Rice

Ken Rice
Chief Financial Officer
(Principal Financial and Accounting Officer)

**CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, George Palikaras, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Meta Materials Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: 8/13/2021

By: _____ /s/ George Palikaras
George Palikaras
Chief Executive Officer

**CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Kenneth Rice, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Meta Materials Inc;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 13, 2021

By: _____
/s/ **Kenneth Rice**
Kenneth Rice
Chief Financial Officer

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of Meta Materials Inc (the “Company”) on Form 10-Q for the period ending June 30, 2021 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

Date: August 13, 2021

By: _____
/s/ **George Palikaras**
George Palikaras
Chief Executive Officer

