

Metamaterial Technologies Inc.

Management's Discussion and Analysis
For the year ended December 31, 2019



**Management's Discussion and Analysis
December 31, 2019**

NOTICE TO READER

Metamaterial Inc. is filing the attached amended and restated the Management's Discussion & Analysis (the "Amended MD&A") of Metamaterial Technologies Inc. ("MTI"), predecessor to its wholly-owned subsidiary Metacontinental Inc., for the year ended December 31, 2019 to correct for an error relating to the accounting for deferred taxes on the acquisition of Medical Wireless Sensing Ltd. ("MediWise") which was completed during the year ended December 31, 2018. The Management's Discussion & Analysis of MTI for the year ended December 31, 2019 included comparative financial information that reflected a restatement of MTI's financial statements for the year ended December 31, 2018 previously appended to Metamaterial Inc.'s listing statement filed on SEDAR on March 5, 2018 in connection with the listing of its common shares on the Canadian Securities Exchange. It was subsequently determined that the original accounting for the acquisition was correct and did not require restatement. The 2018 comparative financial information has been updated in this Amended MD&A to reflect the original accounting for the Mediwise acquisition.

**Management's Discussion and Analysis
December 31, 2019**

The effective date of this Management's Discussion and Analysis is May 18, 2020, except as otherwise noted.

INTRODUCTION

Management's Discussion and Analysis ("MD&A") of the financial condition and results of the operations of Metamaterial Technologies Inc. ("MTI" or the "Company") constitutes management's review of the factors that affected the Company's financial and operating performance for the year ended December 31, 2019. This MD&A has been prepared in compliance with the requirements of National Instrument 51-102 – Continuous Disclosure Obligations. This MD&A should be read in conjunction with the audited consolidated financial statements of the Company for the years ended December 31, 2019 and 2018, together with the notes thereto. Results are reported in Canadian dollars, unless otherwise noted. In the opinion of management, all adjustments (which consist only of normal recurring adjustments) considered necessary for a fair presentation have been included in the MD&A. Information contained herein is presented as at May 18, 2020, unless otherwise indicated.

The Company's audited consolidated financial statements and the financial information contained in the MD&A are prepared in accordance with International Financial Reporting Standards ("IFRS").

For the purposes of preparing this MD&A, management, in conjunction with the Board of Directors, considers the materiality of information. Information is considered material if: (i) such information results in, or would reasonably be expected to result in, a significant change in the market price or value of the Company's common shares; (ii) there is a substantial likelihood that a reasonable investor would consider it important in making an investment decision; or (iii) it would significantly alter the total mix of information available to investors. Management, in conjunction with the Board of Directors, evaluates materiality with reference to all relevant circumstances, including potential market sensitivity.

Further information about the Company and its operations can be obtained from the offices of the Company or on SEDAR at www.sedar.com.

FORWARD-LOOKING STATEMENTS

This MD&A contains certain forward-looking information and forward-looking statements, as defined in applicable securities laws (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. 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.

Forward-looking statements may include, but are 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 expenditure and capital requirements; and
- the impact of adoption of new accounting standards.

**Management's Discussion and Analysis
December 31, 2019**

Although the Company believes that the plans, intentions and expectations reflected in these Forward-looking statements 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 statements contained in this report. Disclosure of important factors that could cause actual results to differ materially from the Company's plans, intentions, or expectations is included in this report under the heading Risks and Uncertainties.

Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause 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.

COMPANY OVERVIEW

The Company was incorporated on August 15, 2011 as Lamda Guard Canada Inc. The Company amended its Articles of Incorporation on March 27, 2013 and has continued operations under its current name since April 30, 2013 until March 5, 2020 as further explained below. On March 28, 2013, The Company federally incorporated Lamda Guard Inc., Lamda Lux Inc., and Lamda Solar Inc., as wholly owned subsidiaries of the Company. These subsidiaries have minimal operational activity. The Company specializes in designing and producing nanocomposite transparent materials with properties not found in nature that can manipulate light, either by enhancing, absorbing or blocking it.

On September 7, 2015, the Company incorporated Metamaterial Technologies USA Inc. ("MTI USA") as a wholly owned subsidiary and on May 25, 2016 MTI USA acquired the assets and operations of a business operating as Rolith Inc. On March 31, 2018, the Company acquired 100% of the common shares of a business, owned by related parties, operating as Medical Wireless Sensing Ltd ("MediWise") incorporated in the United Kingdom.

On March 5, 2020, Metamaterial Inc. ("META") (formerly known as Continental Precious Minerals Inc., "CPM") and the Company completed a business combination by way of a three-cornered amalgamation pursuant to which the Company amalgamated with Continental Precious Minerals Subco Inc. ("CPM Subco"), a wholly owned subsidiary of META to become "Metacontinental Inc." (the "RTO"). In connection with the RTO, CPM changed its name effective March 2, 2020 from Continental Precious Minerals Inc. to Metamaterial Inc. The RTO was completed pursuant to the terms and conditions of an amalgamation agreement dated August 16, 2019 between CPM, the Company and CPM Subco, as amended March 4, 2020. Following completion of the RTO, Metacontinental Inc. will carry-on the business of the former Company, as a wholly-owned subsidiary of META. The common shares of CPM were delisted from the NEX board of 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 trading symbol "MMAT".

On April 3, 2020, META closed a Secured Debenture financing from BDC Capital Inc., a wholly owned subsidiary of the Business Development Bank of Canada, in the amount of \$5,000,000 ("Secured Debenture Financing") and also received the proceeds from a \$500,000 unsecured convertible debenture that was held in trust pending closing of the Secured Debenture financing.

**Management's Discussion and Analysis
December 31, 2019**

DESCRIPTION OF BUSINESS, OPERATIONAL OVERVIEW, AND BUSINESS OBJECTIVES

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 are 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, medical, automotive, energy and other industries.

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 wide commercial application.

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, with the objective of enabling 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 offer 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.

The Company's current principal product relating to holography technology is metaAIR® laser glare protection eyewear. The Company has co-developed an eyewear product with Airbus that has been engineered to provide laser glare protection for pilots, military and law enforcement using the Company's holography technology. metaAIR® is a holographic optical filter developed using nano-patterned designs that block and deflect specific colors

**Management's Discussion and Analysis
December 31, 2019**

or wavelengths of light. The Company launched metaAIR with strategic and exclusive distribution partner, Satair, a wholly owned Airbus company and started producing and selling metaAIR® in April 2019. During 2019, the Company had certain yield issues while processing its lenses with a subcontractor, which it expects to overcome in 2020. The scale-up and specification for the raw photopolymer material used to produce the eyewear was successfully finalized in 2019.

The Company's current product in development relating to holography technology is metaVISION™, a holographic optical element ("HOEs"). The Company is using its know-how on holography to design and manufacture HOEs. HOEs are a core component in the display of augmented reality smart glass products, as well as (in their larger version) in Heads-Up Displays ("HUDs") in automobiles and aircrafts. The HOEs require precise control of the nanostructures recorded in them, which is a core expertise of the Company. The Company is currently seeking a strategic partner to commercialize metaVISION™ in the consumer electronics, aerospace and automotive industries.

The Company operates its holographic division from Dartmouth, Nova Scotia, Canada. The Company recorded development revenue of \$835,107 (2018 – \$1,570,311) from its holography technology and product sales of \$31,426 from its metaAIR eyewear (2018 - \$Nil).

Lithography Technology

At present, available nanopatterning technologies are unable to meet the required performance, fabrication-speed, or cost criteria for many potential applications requiring 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 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®, which has a variety of applications. The Company operates its lithography division from its California subsidiary, MTI USA, and MTI USA can produce a meter-long sample of NanoWeb®, at a small scale, for a variety of applications and has been supplying samples for de-icing, defogging, electromagnetic interference ("EMI") shielding, transparent antennas, touch-sensors, as well as for solar and energy applications to its industry customers/partners.

There are five 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 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 CSE listing statement.

The Company is in the process of upgrading its equipment at its California Lab to efficiently supply NanoWeb® samples. The Company has entered into a collaboration agreement with Crossover Solutions Inc. to commercialize the NanoWeb®-enabled products and applications in the automotive industry.

During 2019, the Company recorded development revenue of \$323,712 (2018 - \$14,880) from its lithography technology.

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

**Management's Discussion and Analysis
December 31, 2019**

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 primarily advancing the wireless sensing technology with innovate UK grants and has recorded development revenue of \$4,813 (2018 – nil) from its wireless sensing technology. Management is in the process of preparing a Request for Quote to seek licensing and/or partnership opportunities to commercialize wireless sensing technology related applications.

OVERALL PERFORMANCE, INDUSTRY TRENDS AND ECONOMICS FACTORS

In Q1 2019, the Company completed the setup of its metaAIR eyewear production facility and started providing its eyewear to several airlines for in-market flight tests through its distributor, Satair (an Airbus Company). The Company has sold 50 units during 2019 and it is further increasing its reach to airlines through Airbus and Satair. Satair prepared a series of marketing initiatives to promote the Company's laser glare protection eyewear solution to increase market awareness in the existing laser glare protection market. During May 2019, the Company received the prestigious Silver A' Design Award in Safety Clothing and Personal Protective Equipment Design Category, from the A' Design Award and Competition in Italy for its metaAIR eyewear.

In January 2019, the Company was named one of the Global Cleantech 100 companies in the world, out of over 13,000 innovators from over 90 countries. Also in January 2019, the Company, Dalhousie University and Mitacs announced a \$1,620,000 collaboration to explore different areas of application of metamaterial including absorption enhancement of ultra-thin solar cells, light emission enhancement for LEDs, development of next-generation optics for augmented reality applications and development of a wearable thin-film glucose sensor. This was Mitacs largest supported project in Atlantic Canada.

In June 2019, the Company's quality management system was awarded ISO 9001: 2015 certificate in the area of design, development, manufacturing, and distribution of metamaterials for applications in Photonics, Transportation, Renewable Energy, Aviation, Space and Defense.

In June 2019, the Company entered into a statement of work (“SOW”) with a third party for the purchase of manufacturing equipment. The SOW was initiated based on the Industrial and Regional Benefits (“IRB”) general investment funding between the third party and the Government of Canada. The Company received the funding of \$1,300,000 in two tranches, one in June 2019 and the second in October 2019 and acquired the related equipment in July 2019. The \$1,300,000 received under the SOW is repayable based on 10% of the revenue from the sale of holographic film for augmented or virtual reality that is produced using the related manufacturing equipment.

During Q2 2019, the team at the Company's wholly owned U.K. based subsidiary, Mediwise, tested, in a clinical environment, its medical device prototypes that increased the image quality of 1.5T MRI scans.

In August 2019, the Company, through its U.S. wholly owned subsidiary, MTI USA, signed an agreement with SOFWERX, an innovation hub acting as a partnership intermediary for the United States of America Government as represented by United States Special Operation Command to develop NanoWeb® films for de-fogging applications to be applied on wearable equipment such as gas masks and diving masks. During Q4 2019, the Company's designs were reviewed with the SOFWERX team and in Q1 2020 the Company demonstrated a working prototype to SOFWERX resulting in approval to move to the next stage including delivery of 40 samples.

During December 2019, the Company received a purchase order for its second holographic product HOEs from an established consumer electronic industry leader.

During Q4 2019, the engineering team worked on a plan to set up lithographic capabilities in Canada and enhance the lithography fabrication equipment at the Company's facility located in Silicon Valley California.

**Management's Discussion and Analysis
December 31, 2019**

During 2019, the Company was paid to deliver NanoWeb® proof of concept product samples to large blue-chip Original Equipment Manufacturers in Japan, Germany, and China. In addition, the Company secured Purchase Orders and delivered NanoWeb® samples for testing in solar and energy product applications.

During the year ended December 31, 2019, the Company incurred a comprehensive loss of \$10,836,260, compared to \$5,746,624 in 2018. The \$5,089,636 increase in comprehensive loss is primarily due to an increase in depreciation and amortization, research and development costs, consulting and professional fees, share-based compensation expense, unrealized foreign currency exchange, and the unrealized loss on the derivative liability. Refer to "Results of Operations for the years ended December 31, 2019 and 2018" below for further details.

Further note that the comprehensive loss for the year ended December 31, 2019, excluding depreciation and amortization, impairment, share-based compensation expense, unrealized foreign currency exchange, and the unrealized loss on the derivative liability amounted to \$4,580,346 compared to a the similar comprehensive loss of \$4,134,383 in 2018. The increase of \$445,963 is primarily due to increase of \$571,000 in professional fees and an increase of \$229,732 in consulting fees related to the RTO, offset by a decrease in other expenses as further explained below in "Results of Operations for the years ended December 31, 2019 and 2018".

Research and Product Development

As at the date of this MD&A, the Company has 5 registered trademarks, 40 patents granted in 27 filed patent families and 41 patents pending. The Company believes that its combination of patents and additional IP that is being held confidential by way of multiple Trade Secrets provides the Company with an important competitive advantage, marketing benefits, and licensing revenue opportunities.

COVID-19 IMPACT

Subsequent to December 31, 2019 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 to this, the Company's management implemented a Work From Home policy for management and non-engineering employees in all three locations, which will remain in place until further notice. Engineering staff in all three locations are continuing to work on given tasks and are following strict safety guidelines. 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. The Alameda County in the State of California where the Company's wholly owned subsidiary operates is currently on lockdown and it has been declared a "major disaster" area. The Company is planning to seek business relief as per California announced relief plans.

The Company expects that COVID-19 will impact its 2020 sales of metaAIR® laser protection eyewear product in the near term. Worldwide restrictions on travel are significantly impacting the airline industry and purchasing of metaAIR eyewear may not be the primary focus of airlines post COVID-19, however, the Company is pursuing sales in adjacent markets including consumer, military and law enforcement. The situation is dynamic and the ultimate duration and magnitude of the impact on the economy and the financial effect on the Company's business is not known at this time.

The Company's scheduled purchase of equipment to upgrade its California lab have been delayed due to supply chain issues as a result of COVID-19. This may result in the Company requiring more capital to execute on its business plan.

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Management's Discussion and Analysis
December 31, 2019

SELECTED ANNUAL INFORMATION

The following table sets out selected consolidated financial information for the Company for the last three fiscal years, prepared in accordance with IFRS.

	2019 (\$)	2018 (\$) *	2017 (\$)
Total revenue	1,195,058	1,585,191	2,284,233
Cost of goods sold	12,138	—	—
Total expenses	12,385,542	6,696,425	10,624,808
Net loss	(11,083,258)	(5,106,647) *	(8,340,575)
Comprehensive loss for the year	(10,836,260)	(5,746,624) *	(8,088,288)
Total assets	11,947,746	13,172,716 *	7,507,238
Non-current financial liabilities [1]	4,707,744	3,108,273	1,691,710
Deficit	(32,282,011)	(21,198,753) *	(16,092,105)
Dividends declared - common shares	Nil	Nil	Nil
Loss from continuing operations – per share (basic and diluted) [2]	(1.12)	(0.56)	(1.13)

* Consolidated financial information as at December 31, 2018 and for the year then ended has been updated for the correction of an error in the accounting for the MediWise acquisition, which resulted in a decrease in total assets of \$132,228, a decrease in amortization of intangible assets of \$55,568, and an increase in the deferred tax recovery of \$98,639, which resulted in a decrease in the net loss of \$154,207, an unrealized foreign currency translation adjustment of \$8,173 and a decrease in comprehensive loss of \$162,380.

[1] The non-current financial liabilities are calculated as defined in the CPA Canada handbook and therefore deferred revenue, deferred government assistance, and deferred tax liability, are excluded from total long-term financial liabilities.

[2] Calculated based on the weighted average number of the Company's issued and outstanding common shares during 2019, 2018 and 2017, respectively. The diluted loss per share does not include the effect of the Company's preferred shares, the Company's deferred share units ("DSUs"), the Company's options, and the Company's warrants as they are anti-dilutive.

Results of Operations for the years ended December 31, 2019 and 2018

The Company recorded a net loss for the year ended December 31, 2019 of \$11,083,258, or \$1.12 per share as compared to a net loss of \$5,106,647 or \$0.56 per share for the year ended December 31, 2018. Before commercializing its first product metaAIR, the Company raised capital through various rounds of financing in addition to securing government grants, product development funding from industry partners, and unsecured, interest-free loans from Atlantic Canada Opportunities Agency ("ACOA"). These funds were used to fund the Company's research and product development, general and overhead expenses. The increase of \$5,976,611 in loss in 2019 is primarily due to:

- a \$390,133 decrease in revenue;
- a \$1,858,532 increase in consulting, professional fees, interest and bank charges and unrealized loss on derivative liability;
- a \$1,644,761 increase in share-based compensation expense;
- a \$1,712,212 increase in depreciation, amortization, impairment and research and development;
- a \$424,085 increase in non-cash interest accretion, increase in unrealized foreign exchange, net of increase in other income and income tax recovery and;
- a \$53,113 net decrease in expenses as further explained below.

**Management's Discussion and Analysis
December 31, 2019**

\$390,133 decrease in revenue

The major revenue stream during 2019 and 2018 relates to the Offset Project Agreement ("OPA") entered into with Lockheed Martin Aeronautics Corporation on April 13, 2017 for research and development ("R&D") and commercialization of MetaSOLAR technology for \$5,641,095 (US\$4,150,000), increased demand of Nanoweb product proof of concepts during 2019 and development revenue related to Build in Canada Innovation Program ("BCIP") project, to provide metaAIR helmet visors to the Royal Canadian Mounted Police, entered on November 15, 2017 and delivered in 2018.

During 2019, contributions of \$705,137 (2018-\$1,124,861) were recorded as development revenue which reflects the research activities performed by the Company in accordance with the agreed milestones in the OPA. During 2019 the Company recorded lithography development revenue of \$323,712 (2018-14,880) related to increased Nanoweb product proof of concepts samples by industry partners in USA, Japan, Germany, and China. During 2019, the Company accounted sale of metaAIR eyewear amounting to \$31,426. On March 27, 2018, the Company delivered the helmet visors related to BCIP project and recognized development revenue of \$419,560 as compared to \$nil in 2019. On September 18, 2018, the Company signed an exclusive distribution agreement with Satair A/S for a term of 10 years and received \$1,299,700 as distribution fees. During 2019 the Company has recognized \$129,970 of distribution rights related revenue earned over the first year of the contract.

The Company launched its first product, metaAIR, in Q1 2019, however, the primary source of revenue during 2019 and 2018 remains development revenue and the primary reason for the decrease in revenue of \$390,133 is receiving \$nil revenue related to BCIP as compared to \$419,560 during 2018.

\$1,858,532 increase in consulting, professional fees, interest and bank charges and unrealized loss on derivative liability

The increase in consulting expenses of \$229,732 is primarily due to \$70,000 of consulting fees payable to a consultant in relation to the RTO, \$127,582 payable to a director and a former director, including related tax payable to CRA, related to advisory services and their contribution during the RTO and \$45,000, payable in stock, to a former director related to advisory services. The increase in professional fees of \$571,000 is primarily due to an increase of \$387,051 in legal fees related to the RTO and an increase of \$257,760 of audit and review fees for additional reporting requirements. During the RTO process, existing investors financially supported the Company by funding the Company through convertible promissory notes and the increases in interest expense of \$195,624 is primarily due to interest on additional promissory notes received during 2019. The conversion feature of convertible promissory notes was recorded as a derivative liability at initial receipt and upon further remeasurement of its fair value \$862,176 was recognized in the consolidated statement of loss and comprehensive loss as an unrealized loss on derivative liability during the year ended 2019.

\$1,644,761 increase in share-based compensation

The increase of \$1,644,761 of share-based compensation expense in 2019 primarily includes \$933,593 for options issued to employees in December 2018 and \$597,140 for the options issued to employees, directors, and advisors during 2019, primarily in connection with the RTO.

\$1,712,212 increase in depreciation, amortization, impairment and research and development

Since April 2019, the Company's Dartmouth based production facility has started producing its first holographic product, metaAIR® eyewear, offering laser glare protection for pilots. The increase in depreciation and amortization of \$1,141,147 is primarily due to \$330,768 of increased depreciation related to metaAIR production facility which was set up in late 2019, \$193,750 of increased depreciation related augmented reality equipment set up in 2019, \$140,313 of amortization of software purchase for product development during 2019, \$51,885 of amortization of amortization of ERP beginning 2019, \$79,222 of lease amortization upon adoption of IFRS 16 leases in January 2019 and \$223,079 additional amortization of intangibles assets primary related to MediWise intangibles acquired

Management's Discussion and Analysis
December 31, 2019

on March 31, 2018. The increase in R&D expenses of \$483,899 is primarily due to the write-off of \$291,995 of inventory that was restricted in use during 2019 and \$191,904 of product development expenses for increased work with industry partners for different applications of the holography and lithography film. The increase in impairment losses of \$87,166 is related to the patents that was not renewed considering the maintenance cost of the patents in relation to commercial value of these patents.

\$423,485 net increase includes increase in non-cash interest, increase in unrealized foreign exchange net of increase in other income and income tax recovery

The increase of \$908,423 in unrealized foreign currency exchange (gain) loss is primarily due to rise of USD to CAD foreign exchange rate during 2018 and as at December 31, 2018 as compared to fall in USD to CAD foreign exchange rate during 2019 and as at December 31, 2018. The increase of \$530,960 in other income represents interest free portion of \$1,300,000 of funding received from a third party in June 2019 and October 2019 to set up augment reality production line as explained above in Overall Performance Section. The increase in income tax recovery of \$114,778 is primarily due to change in temporary difference on account of intangibles and non capital losses and also change of applicable UK income tax rate. The increase of \$161,400 in non-cash interest is primarily due to the accretion expenses of \$208,632 accounted related to conversion feature of promissory notes.

\$53,113 net decrease in all the expenses other than mentioned above

The net decrease of \$53,113 is primarily due to the decrease of \$77,960 in travel and entertainment expenses resulting from management reducing travel to focus on taking the Company public pursuant to the RTO and preparation of the listing statement for the CSE.

SELECTED QUARTERLY RESULTS

The following table sets out selected quarterly information and highlights for the last eight quarters:

	12/31/19 [2]	9/30/19 [2]	6/30/19 [2]	3/31/19 [2]	12/31/18 [2]	9/30/18 [2]	6/30/18 [2]	3/31/18 [2]
Product Sales	20,113	627	10,686	—	—	—	—	—
Development revenue	499,554	215,873	257,243	190,962	217,054	176,284	176,284	1,015,569
Cost of good sold	(7,870)	(245)	(4,023)	—	—	—	—	—
Gross Profit	511,797	216,255	263,906	190,962	217,054	176,284	176,284	1,015,569
Expenses (income)								
Salaries and benefits	811,914	718,695	782,610	727,556	637,437	618,161	924,662	949,916
Depreciation, amortization and impairment	1,007,522	820,888	747,492	689,749	657,583	508,690	502,074	368,991
Consulting	236,309	86,091	122,555	103,967	216,134	18,635	45,750	38,671
Investor relations	30,936	—	—	—	—	—	—	—
Research and development	263,639	215,128	154,081	155,628	103,136	52,362	61,824	87,255
Professional fees	301,909	357,858	132,864	53,787	92,811	45,840	106,648	30,119
Non-cash interest	251,147	131,365	115,276	(81,944)	115,408	100,870	(39,770)	77,936

Management's Discussion and Analysis
December 31, 2019

	12/31/19 [2]	9/30/19 [2]	6/30/19 [2]	3/31/19 [2]	12/31/18 [2]	9/30/18 [2]	6/30/18 [2]	3/31/18 [2]
Share-based compensation	433,982	694,386	282,745	299,839	288,451	(383,587)	(2,438)	163,765
Other expenses [1]	607,697	470,263	483,155	427,245	613,700	465,232	380,660	360,295
Unrealized loss on derivative liability	480,179	145,977	(5,073)	241,093	—	—	—	—
Realized/Unrealized foreign currency exchange loss (gain)	150,512	(100,346)	191,431	176,828	(495,871)	174,872	(158,892)	39,161
Government assistance	(357,977)	(45,671)	(129,617)	(467,168)	(228,494)	—	(841,572)	—
Other income	(401,253)	(129,707)	—	—	—	—	—	—
Income tax (recovery) expense	(1,652)	(34,298)	(53,139)	(30,275)	98,894	(47,909)	(55,571)	—
Net loss for the quarter [2]	(3,303,067)	(3,114,374)	(2,560,474)	(2,105,343)	(1,882,135)	(1,376,882)	(747,091)	(1,100,540)
Loss per share – basic and diluted [3]	(0.31)	(0.33)	(0.26)	(0.22)	(0.19)	(0.14)	(0.08)	(0.15)

[1] Other expenses includes travel and entertainment, subscriptions and licenses, office supplies, postage and shipping, insurance, repair and maintenance, janitorial services, telephone, training, IT support, rent and utilities, interest and bank charges, technology license fees, and are net of interest income.

[2] Quarterly net loss for the year ended 2019 and 2018 has been adjusted to reflect 2018 restatement and 2019 annual adjustments. Consolidated financial information as at December 31, 2018 and for the year then ended has been updated for the correction of an error in the accounting for the MediWise acquisition, which resulted in a decrease in total assets of \$132,228, a decrease in amortization of intangible assets of \$55,568, an increase in the deferred tax recovery of \$98,639, which resulted in a decrease in the net loss of \$154,207.

[3] Calculated based on the weighted average number of the Company issued and outstanding common shares during respective quarters. The diluted loss per share does not include the effect of the Company preferred shares, the Company deferred share units, the Company options, and the Company warrants as they are anti-dilutive.

Results of Operations for the three months ended December 31, 2019 and 2018

The Company recorded a net loss for the three months ended December 31, 2019 of \$3,303,067, or \$0.31 per share as compared to a net loss of \$1,882,135 or \$0.19 per share for the year ended December 31, 2018. The increase of \$1,420,932 in loss in 2019 is primarily due to:

- a \$302,613 increase in revenue;
- a \$793,905 increase in professional fees, interest and bank charges and unrealized loss on derivative liability;
- a \$145,531 increase in share-based compensation expense;
- \$684,919 increase in salaries, depreciation, amortization, impairment and research and development expenses;
- a \$390,755 net increase in unrealized foreign exchange net of increase in other income and increase in non-cash interest and;

**Management's Discussion and Analysis
December 31, 2019**

- a \$291,565 net decrease in expenses as further explained below.

\$302,613 increase in revenue

The major revenue stream for the three months ended 2019 and 2018 relates to the OPA entered into with LM Aero for R&D and commercialization of MetaSOLAR technology for \$5,641,095 (US\$4,150,000), increased demand of Nanoweb product proof of concepts, product sale of metaAIR and recognition of distribution rights related revenue.

On September 18, 2018, the Company signed an exclusive distribution agreement with Satair A/S for a term of 10 years and received \$1,299,700 as distribution fees. During the three months ended December 31, 2019 the Company has recognized \$129,970 in revenue related to these distribution rights.

For the three months ended December 31, 2019, contributions of \$176,284 (2018-\$176,284) were recorded as development revenue which reflects the research activities performed by the Company in accordance with the agreed milestones in the OPA. For the three months ended December 31, 2019, the Company recorded development revenue of \$193,300 (2018-40,770) primary related to Nanoweb product proof of concepts samples by industry partners in USA, Japan, Germany, and China.

The Company launched its first product, metaAIR, in Q1 2019, however, the primary source of revenue during three months ended December 2019 remains development revenue and the primary reason for the increase in revenue of \$302,613 is due to increased development revenue related to Nanoweb samples and recognition of distribution fees.

\$793,905 increase in expenses professional fees, interest and bank charges and unrealized loss on derivative liability

The increase in professional fees of \$209,098 is primarily due to an increase of \$82,324 in legal fees related to the RTO and an increase of \$144,275 of review fees to advisors for additional reporting requirements and review CSE listing related documents. During the RTO process, existing investors financially supported the Company by funding the Company through convertible promissory notes and the increase in interest expense of \$104,628 is primarily due to interest on additional promissory notes received during 2019. The conversion feature of convertible promissory notes was recorded as a derivative liability at initial receipt and upon remeasurement of its fair value \$480,179 was recognized as an unrealized loss on derivative liability in the consolidated statement of loss and comprehensive loss during three months ended December 31, 2019.

\$145,531 increase in share-based compensation expense

The increase of \$145,531 of share-based compensation is due to the options issued to employees, directors, and advisors during 2019 primarily in connection with the RTO.

\$684,919 increase in salaries, depreciation, amortization, impairment and research and development expenses

The increase in salaries and benefits of \$174,477 is mainly due to \$nil capitalization of salary in three months ended December 31, 2019 as compared to \$244,533 of salary capitalization related to metaAIR plant in three months ended December 31, 2018. The increase in impairment losses of \$87,166 is related to the patents that was not renewed considering the maintenance cost of the patents in relation to commercial value of these patents. The increase in R&D expenses of \$160,503 primarily includes a write off of \$153,421 for inventory that was restricted in use during 2019. The increase in depreciation and amortization of \$262,773 is primarily due to the increased depreciation related to metaAIR production facility set up in late 2019, depreciation of augmented reality equipment set up in 2019, amortization of software purchase for product development during 2019, amortization of ERP beginning 2019, lease amortization upon adoption of IFRS 16 leases in January 2019 and additional depreciation of intangibles assets related to MediWise acquired on March 31, 2018

**Management's Discussion and Analysis
December 31, 2019**

\$390,755 increase includes increase in non-cash interest, increase in unrealized foreign exchange net of increase in other income

The increase of \$656,269 in unrealized foreign currency exchange (gain) loss is primarily due to rise of USD to CAD foreign exchange rate during three months ended December 31, 2018 and as at December 31, 2018 as compared to fall in USD to CAD foreign exchange rate during three months ended December 31, 2019 and as at December 31, 2018. The increase of \$401,253 in other income represents interest free portion of \$1,300,000 of funding received from a third party in June 2019 and October 2019 to set up augment reality production line as explained above in Overall Performance Section. The increase of \$135,739 in non-cash interest is primarily due to the accretion expenses of \$208,632 accounted related to conversion feature of promissory notes.

\$291,565 net decrease in all the expenses other than mentioned above

The net decrease of \$291,565 in expenses primarily includes a \$107,014 increase in deferred tax recovery, and a decrease of \$129,483 government assistance due to adjustments to the fair-value of non-interest bearing ACOA loans and decrease of \$32,103 in travel and entertainment resulting from management reducing travel to focus on taking the Company public pursuant to the RTO and preparation of the listing statement for the CSE. The repayment term was extended by ACOA to comply with the condition of Secured Debenture financing.

LIQUIDITY AND CAPITAL RESOURCES

Continued operations of the Company are dependent on the Company's ability to complete equity and/or debt financings and generate profitable operations in the future. To date, the Company has not generated significant revenue, and has incurred a net loss of \$11,083,258 and negative cash flow from operations of \$5,628,384 for the year ended December 31, 2019 and has an accumulated deficit of \$32,282,011 as at December 31, 2019.

As at December 31, 2019, the Company had cash of \$528,691 as compared to \$850,623 as at December 31, 2018. As at December 31, 2019, the Company has a working capital deficit of \$9,371,518, defined as current assets less current liabilities, compared to a working capital deficit of \$2,667,637 as at December 31, 2018. The increase of \$6,703,881 is primarily due to increase in promissory notes amounting to \$3,341,481, increase in trade payables amounting to \$1,862,280, increase in derivative liability amounting to \$1,175,056 on account of embedded conversion feature in promissory notes and recognition of lease liabilities amounting to \$71,947 upon adoption of IFRS 16, leases.

In accordance with the ACOA loan agreements, the Company is required to maintain a minimum in equity throughout the term of the loan. However, on November 14, 2019, ACOA waived this requirement for June 30, 2019 and for each period thereafter until the loans are fully repaid.

During January 2020, the Company raised additional equity of \$875,614 through a private placement of common shares and warrants and \$950,000 of unsecured convertible debentures, including \$500,000 that was held in trust and released to the Company after closing the Secured Debenture financing with BDC on April 3, 2020. On March 9, 2020 upon completion of the RTO, the Company gained access to CPM's cash and cash equivalents of \$4,173,186, which was used to pay \$3,480,000 of outstanding trade payables to outside suppliers and professionals. On April 3, 2020, the Company closed a Secured Debenture financing of \$5,000,000 with BDC and in addition received a \$500,000 unsecured convertible debenture that was held in trust, incurred \$300,617 in legal costs relating to the Secured Debenture financing, and repaid an existing equipment loan of \$238,189 with BDC.

As of the date of this MD&A, the Company holds cash and marketable securities of \$5.2 Million, has a current monthly burn rate, excluding sales, of approximately \$500,000, and has committed capital expenditures of \$2.5 million. Management and the board are closely monitoring the Company's sales, capital expenditures and monthly burn rate so as to ensure that the Company has sufficient working capital to execute its strategic business plan. Appropriate adjustments to capital expenditures and the monthly burn rate will be made if necessary. Concurrent with focusing on generating sales, management is advancing applications that have been submitted for

**Management's Discussion and Analysis
December 31, 2019**

government grants and or loans, as well as exploring raising additional equity in the capital markets and pursuing debt financings. There are no assurances that any of the aforementioned sources of cash will be available to the Company on acceptable terms, or at all.

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 necessitate the need for the Company to issue equity or obtain debt financing.

The Company is currently pursuing financing alternatives. However, there can be no assurance that additional future financings will be available on acceptable terms or at all. If the Company is unable to obtain additional financing when required, the Company may have to substantially reduce or eliminate planned expenditures. The risk is that the Company's availability of future financings or future profitability cannot be assured. The Company expects to record losses until such time as it further commercializes its products and secures additional customers. These factors indicate the existence of a material uncertainty that may cast significant doubt on the Company's ability to continue as a going concern.

COMMITMENTS AND CONTIGENCIES

On February 12, 2016, the Company received an award in partnership with Polytechnique Montréal for a Collaborative Research and Development Grant from the Natural Sciences and Engineering Research Council for LED emission enhancement using smart metasurfaces, through its subsidiary, Lamda Lux Inc. Under the agreement, the Company was committed to contributing cash of \$43,478 per year plus an overhead charge of 15% or \$50,000 between March 1, 2016 and February 28, 2019.

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 (metaAIR) 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 USD, 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. During 2016, the Company received and recognized \$1,000,000 USD as revenue under the cooperation agreement. To date, \$1,570 of royalties have been incurred in connection with this agreement and are currently reflected in the trade payables as at December 31, 2019.

In June 2019, the Company entered into a statement of work ("SOW") with a third party for the purchase of manufacturing equipment. The SOW was initiated based on the Industrial and Regional Benefits ("IRB") general investment funding between the third party and the Government of Canada and the Company received \$1,300,000 during 2019. The funding received under the SOW is repayable based on 10% of the revenue from the sale of holographic film for augmented or virtual reality that is produced using the related manufacturing equipment.

As at December 31, 2019 the Company has the following contractual obligations:

Management's Discussion and Analysis
December 31, 2019

Contractual Obligations	Payments due by Period				
	Total	Less than 1 year	1-3 years	4-5 years	After 5 years
Long-term debt	6,680,572	106,824	1,205,534	1,546,554	3,821,660
Operating leases	309,491	309,491	—	—	—
Trade payables	3,176,640	3,176,640	—	—	—
Derivative liability	1,175,056	1,175,056	—	—	—
Due to related party	345,033	345,033	—	—	—
Promissory notes	4,595,975	4,595,975	—	—	—
Unsecured convertible debentures	760,145	—	—	—	760,145
Total	17,042,912	9,709,019	1,205,534	1,546,554	4,581,805

OFF-BALANCE SHEET ARRANGEMENTS

The Company has no other off-balance sheet arrangements.

PROPOSED TRANSACTIONS

The Company has no material transactions to report as of the date of this MD&A.

SIGNIFICANT TRANSACTIONS

As described in "Overall Performance – Industry trends, operations, and economic factors", the Company completed its metaAIR eyewear production facility in Q1 2019. During the year ended December 31, 2019, manufacturing equipment additions include capitalized machinery, components, and labour of \$420,967 (2018 - \$1,566,304) to this production facility. Also, during the year ended December 31, 2019, the Company purchased augmented reality manufacturing equipment for \$1,395,000.

SECURITIES

The Company's outstanding securities as of December 31, 2019 and as of May 18, 2020 are as follows:

Description of Security	Number Of Shares Outstanding as of December 31, 2019	Number Of Shares Outstanding as of the date of the MD&A
Common shares	10,504,573	83,597,092 ³
Preferred shares A-1	5,273,720 ¹	—
Preferred shares A-2	4,125,264 ¹	—
Stock options ("ESOP")	2,858,300 ¹	13,087,197 ³
DSUs	784,000 ¹	1,872,750 ³
Warrants	627,097 ²	1,651,352 ^{3&4}
Broker warrants	—	52,861 ^{3&4}
Promissory notes	3,456,046 ²	—
Unsecured convertible debentures	390,625 ²	2,428,571 ⁵
Secured Debenture	—	7,142,857 ⁵
TOTAL Shares Issued & Outstanding Fully Diluted	28,019,625	109,832,680

**Management's Discussion and Analysis
December 31, 2019**

- [1] Each A-1 preferred share, DSUs, and stock options is convertible into one common share of the Company and each A-2 preferred share will be converted into 1.5 common shares pursuant to the articles of amendment upon certain events.
- [2] For every two warrants, warrant holders shall have the right to purchase one common share of the Company for \$2.475. Outstanding promissory notes, including interest but excluding derivative liability, of \$4,700,223 are convertible at a 20% discount, entitling the holder to convert at a value of \$1.36 per share of the Company and outstanding unsecured convertible debentures, excluding accrued interest, of \$750,000 are convertible at a value of \$1.92 per share of the Company.
- [3] As per the Amalgamation Agreement, CPM agreed to acquire all of the issued and outstanding the Company common shares in exchange for CPM common shares on the basis of 2.75 CPM common shares for each of the Company common share and 4.125 CPM common shares for each of the Company preference share. Options issued to employees, directors, and consultants, DSUs issued to directors and each outstanding warrant were also converted as per the agreed exchange rate of 2.75:1 upon completion of the RTO.
- [4] For every two warrants, warrant holders shall have the right to purchase one META common share for \$0.90 and for every one broker warrant, warrant holders shall have the right to purchase one META common share for \$0.62.
- [5] Unsecured convertible debentures of \$1,700,000, excluding interest, are assumed to be convertible at a value of \$0.70 per META common share. The \$5,000,000 Secured Debenture is also convertible at \$0.70 per META common share.

TRANSACTIONS WITH RELATED PARTIES

Related party transactions impacting the accompanying consolidated financial statements for the year ended December 31, 2019 are summarized below:

- The Consulting fees includes \$45,000 to a former director related to advisory services, \$127,582 payable to a director and a former director, including related tax to CRA, related to advisory services and their contribution during the RTO, and 14,400 (2018-\$14,400) to Versa Tech Consulting Ltd., which is owned by a director of the Company.
- Technology license fees of \$50,807 (2018-\$51,879) to Lamda Guard Technologies Ltd ("LGTL"), the principal shareholder of the Company, to allow the use of certain patents to the Company as per an exclusive technology license agreement ("License Agreement").
- Reimbursement of rent and utilities from LGTL by MediWise of \$41,453 (2018-\$49,133) to LGTL to allow the use of its premises in the UK.
- As at December 31, 2019, the Company had a loan totalling \$345,033 (2018-344,784) from LGTL that is unsecured and repayable in full on demand.
- As at December 31, 2018, there was a shareholder loan totalling \$1,578 which was acquired through the MediWise acquisition and settled on March 15, 2019.

RISKS AND UNCERTAINTIES

Current Cash Flow

As of the date of this MD&A, the Company has working capital for six to eight months of operations depending on the capital spend. In order to fund operations after that period, the Company will need to be generating additional revenue or secure additional capital to fund its operations. Should future funds not be made available to the Company or made available on terms that are commercially reasonable, the Company would be unable to meet its financial obligations and may have cash flow issues that could materially and adversely affect the Company's business, operations, financial condition and results of operations. These factors indicate the existence of a material uncertainty that may cast significant doubt about the Company's ability to continue as a going concern.

**Management's Discussion and Analysis
December 31, 2019**

Additional Financing and its impact on existing shareholders

With the unforeseen delay in sales, in order to execute on its business plan the Company will likely require additional funding by way of; equity, debt or government grants/loans,. If additional funds are raised through further issuances of equity or convertible debt securities, existing shareholders could suffer significant dilution. Any debt financing secured in the future could involve restrictive covenants relating to capital raising activities and other financial and operational matters, which may make it more difficult for the Company to obtain additional capital and to pursue business opportunities, including potential acquisitions.

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 eye protection eyewear, named metaAIR®, 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 metaAIR® to the aviation market. Since 2016, Airbus and Satair invested a total of USD \$2,000,000 for the product development and exclusive distribution rights. Since the launch of metaAIR 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 metaAIR® 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.

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

**Management's Discussion and Analysis
December 31, 2019**

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 also plans to move into a larger facility suitable to host the Holography and Lithography production scale up as the current facility in Canada does not have enough space or capability for a production line for Lithography. 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 CSE 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.

Product Liability Claims

The Company's wireless sensing technology to enhance MRI imaging and non-invasive Glucomise™ 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.

**Management's Discussion and Analysis
December 31, 2019**

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.

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 and the Canadian dollar 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.

Resale of Shares

There can be no assurance that, an active and liquid market for the Company's common shares 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 shares (META's common shares) will be high enough to create a positive return for investors. Further, there can be no assurance that META's common shares 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 shares 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 shares 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 shares 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 shares and could use significant resources. Even if the Company is involved in litigation and wins, litigation can redirect significant resources.

Management's Discussion and Analysis
December 31, 2019

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.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The preparation of the consolidated financial statements in accordance with IFRS requires management to make certain estimates, judgments and assumptions that affect the reported amounts of assets and liabilities at the date of the consolidated financial statements and reported amounts of revenues and expenses during reporting periods. Actual results could differ materially from those estimates and would impact future results of operations and cash flows. For more information about the Company's accounting policies and estimates, please refer to note 2 of the consolidated financial statements. The Company has identified certain accounting policies that it believes are most critical in understanding the judgments that are involved in producing the consolidated financial statements and the estimates made that could impact results of the operations, which are discussed below.

Non-repayable government assistance is recorded in the period earned as other income or netted against expenses. Interest-free repayable government loans are recorded initially at fair value, with the difference between book value and fair value recorded as government assistance.

Financial Instruments

Financial assets and financial liabilities are recognized when the Company becomes a party to the contractual provisions of a financial instrument. Financial assets and financial liabilities are initially measured at fair value. Financial assets are classified into one of the following specified categories: amortized cost, or fair value through profit or loss ("FVTPL"). Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities classified as FVTPL) are added to, or deducted from, the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities classified as FVTPL are recognized immediately in the audited statement of loss and comprehensive loss.

The Company's financial instruments are classified and subsequently measured as follows:

Financial Instrument	IAS 39	IFRS 9
Grants receivable	Loans and receivables	Amortized cost
Other receivables	Loans and receivables	Amortized cost
Trade payables	Other financial liabilities	Amortized cost
Due to related parties	Other financial liabilities	Amortized cost
Derivative liability	Other financial liabilities	FVTPL
Long-term debt	Other financial liabilities	Amortized cost

**Management's Discussion and Analysis
December 31, 2019**

Financial Assets

Subsequent to initial recognition, financial assets classified as loans and receivables are measured at amortized cost using the effective interest method.

Financial Liabilities

Financial liabilities are classified as and are measured at amortized cost subsequent to initial measurement at fair value.

New accounting standards and interpretations issued and adopted

IFRS 16

In January 2016, the International Accounting Standards Board ("IASB") issued IFRS 16, Leases, which replaces IAS 17, Leases, and its associated interpretive guidance. The new standard brings most leases on-balance sheet for lessees under a single model, eliminating the distinction between operating and finance leases.

The nature and effect of the changes as a result of adoption of IFRS 16 is increase in non-current assets by \$149,378 on account of recognition of right-of-use assets and increase in liabilities by \$149,378 on account of recognition of lease liabilities as at January 1, 2019. There was no material impact to the consolidated statement of cash flows, except that the principal repayment of the lease liabilities will be presented in financing activities under IFRS 16, whereas previously, it was presented in operating activities.

IFRIC Interpretation 23, Uncertainty over Income Tax Treatments

The interpretation clarifies the application of recognition and measurement requirements in IAS 12, Income Taxes, where there is uncertainty over income tax treatments. It addresses whether an entity considers each tax treatment independently or collectively, the assumptions an entity makes about the examination of tax treatments by taxation authorities, how an entity determines taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates, and how an entity considers changes in facts and circumstances. The interpretation was adopted by the Company effective January 1, 2019 and resulted in no significant adjustments.

New accounting standards not yet adopted

The IASB issued the following standards that has not been applied in preparing these consolidated financial statements as their effective date falls within annual periods beginning subsequent to the current reporting period.

IAS 1 – Presentation of Financial Statements and IAS 8 – Accounting Policies, Changes in Estimates and Errors

On October 31, 2018, the IASB issued amendments to IAS 1 Presentation of Financial Statements and IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors. These amendments clarify the definition of 'material' and aligns the definition used within the IFRS Standards. The effective date of the amendment is for annual periods beginning on or after January 1, 2020 and is to be applied prospectively.

The application of this amendment is not expected to have a material impact to the Company.

IFRS 3 – Business Combinations

On October 22, 2018 the IASB issued an amendment to IFRS 3 Business Combinations to narrow the definition of a business and introduce a screening test, which eliminates the requirement for a detailed assessment of the definition, when met. The effective date of the amendment is for annual periods beginning on or after January 1, 2020 and is to be applied prospectively.

**Management's Discussion and Analysis
December 31, 2019**

The application of this amendment is not expected to have a material impact to the Company.

Critical accounting estimates

The preparation of consolidated financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions about future events that affect the application of policies and the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected. Information about critical accounting judgments and estimates in applying accounting policies that have the most significant impact on the amounts recognized in the audited consolidated financial statements are outlined below.

Share-based payments and Warrants

The Company makes certain estimates and assumptions when calculating the estimated fair values of stock options granted and warrants issue. The significant assumptions used, as listed in note 12 and note 13 of consolidated financials statement for the year ended December 31, 2018, the include estimates of expected life, expected volatility, expected dividend rate and expected risk-free rate of return. Changes in these assumptions may result in a material change to the expense recorded for grants of stock options and the issuance of warrants.

Derivative liability

The conversion options embedded within the unsecured debentures and promissory notes are recorded as derivative liabilities at fair value. This requires determination of the most appropriate valuation model and determination of the most appropriate inputs to the valuation model including the probability of conversion, and discount rate to be used. Changes in these estimates and assumptions while selecting valuation model and discount rate may result in a material change to the expense recorded for unrealized loss on derivative liability.

Income Tax

The Company is subject to income tax in various jurisdictions. Significant judgement is required to determine the consolidated tax provision. The tax rates and tax laws used to compute income tax are those that are enacted or substantively enacted at the reporting date in the countries where the Company operates and generates taxable income.

Impairment of non-financial assets

Assessment of impairment triggers are based on management's judgement of whether there are sufficient internal and external factors that would indicate an asset or cash generating unit ["CGU"] is impaired, or any indicators of impairment reversal. The determination of the Company's CGUs is also based on management's judgement and is an assessment of the smallest group of assets that generate cash inflows independently of other assets.

The Company's estimate of the recoverable amount for the purpose of impairment testing requires management to make assumptions regarding future cash flows before taxes. Future cash flows are estimated based on budgets and a terminal value calculated by discounting the final year in perpetuity. The future cash flows are then discounted to their present value using an appropriate discount rate.

SUBSEQUENT EVENTS

In January 2020, the Company received an additional \$875,614 for subscriptions of 515,067 units, comprised of 515,067 common shares and 515,067 of the Company's warrants as part of a private placement, expiring on the second anniversary of the RTO as per the extended expiry approved by the board on February 28, 2020. Additionally, in relation to the private placement completed in January 2020, the Company paid cash commissions of \$32,683 and issued 19,225 broker warrants as payment for finder's fees. The broker warrants expire on the second anniversary of the RTO as per the extended expiry approved by the board on February 28, 2020.

**Management's Discussion and Analysis
December 31, 2019**

For every broker warrant, warrant holders shall have the right to purchase one META common share at a exercise price of \$0.62.

During January 2020, 103,000 the Company's DSUs were converted into 103,000 the Company's common shares and the common shares are held in treasury pending payment of taxes by the DSU holders following the Company's DSU plan.

During January 2020, the Company received unsecured convertible debentures with an aggregate principal of \$950,000 in favour of existing equity investors, out of which \$500,000 was held in trust, which was released on April 3, 2020 upon closing of Secured Debenture financing, as mentioned below. The terms and conditions of the unsecured convertible debentures are the same as the debentures issued during the year ended December 31, 2019.

On February 24, 2020, the promissory note holders and the Company entered into agreements to pay all interest accrued on the promissory notes after January 28, 2020 in cash to the holders. On February 26, 2020, the aggregate principal, interest accrued on the promissory notes up to January 28, 2020, and the embedded derivate liability were converted into common shares of the Company and accordingly 3,498,825 of the Company's common shares were issued to the promissory note holders.

On March 5, 2020, the Amalgamation was completed, and META started trading on the CSE on March 9, 2020.

On March 23, 2020, META issued 4,575,000 stock options to directors, and officers. The exercise price of the options is \$0.62 with various vesting periods of between 2 to 4 years.

On March 23, 2020, the Company paid a bonus of \$216,000 to the CEO relating to the CEO entering into a non-compete arrangement with the Company in relation to the RTO. On April 13, 2020, the Company paid \$41,628 in taxes to CRA, on behalf of a current director and a former director, who were each granted \$50,000 bonuses, net of applicable taxes, that related to fees approved by the Company's board on August 9, 2019 and November 13, 2019.

On April 3, 2020, META closed a \$5,000,000 secured convertible debenture ("Secured Debenture") financing from BDC Capital Inc., a wholly owned subsidiary of the Business Development Bank of Canada. The maturity date for the Secured Debenture is October 31, 2024 and it bears interest at a rate of 10.0% per annum, payable monthly in cash. In addition to the cash interest a non-compounding payment in kind ("PIK") interest of 8% per annum will accrue. This PIK may get reduced to 5% per annum upon certain conditions being met. The Secured Debenture is convertible in full or in part, at BDC Capital Inc's option, into Common Shares of META, at any time prior to their maturity at a conversion price of \$0.70 (the "Conversion Price") or META may force the conversion of the Secured Debenture if META's Common Shares are trading on the CSE on a volume-weighted average price greater than 100% of the Conversion Price (i.e. greater than \$1.40) for any 20 consecutive trading days with a minimum daily volume of at least 100,000 Common Shares.

On April 3, 2020, the License Agreement between LGTL and META was amended and monthly maintenance fees of £ 2,500 was reduced to monthly fees of £100.

FURTHER INFORMATION

Additional information relating to the Company or Metamaterial Inc. is also available on the SEDAR website www.sedar.com and in the Press Release section of the Company's website www.metamaterial.com