

May 31, 2021

Fellow Shareholders,

We are looking forward to the opportunity of becoming the first NASDAQ-listed metamaterials company, joining the world's premier exchange for technology companies. We believe this should improve access to capital markets, raise global awareness of META, help attract exceptional talent, and support a broad range of organic growth opportunities. Moreover, we will actively seek strategic opportunities to broaden our platform, focusing on complementary technologies, adding manufacturing capacity, building relationships, and opening new markets.

We expect to invest about \$10MM to complete our initial pilot scale **roll-to-roll production capability**, located in our newly expanded facility in Dartmouth, Nova Scotia. Last year, we secured approximately 53,000 square feet to house holography and lithography R&D labs and the next phase of volume manufacturing process development. In March 2021, we [signed an LOI](#) to amend the lease, **adding 15,000 square feet**, for a new customer center for training and technology transfer. These are two key elements of our strategy to progress our highest volume customer opportunities toward licensing agreements, from which we expect to derive multiple recurring revenue streams.

As of today, our balance sheet holds cash and equivalents of approximately \$13MM, and we estimate our working capital is sufficient to fund operations through Q2:2022. Since year-end 2020, META raised approximately \$18.1MM of additional financing and converted about \$13.5MM of liabilities into common shares.

In April, we announced a [collaboration with Sage Geosystems](#) to develop subsurface thermo-electric generation. Project "Pluton" seeks to apply new metamaterial technology to produce **utility scale geothermal power at U.S. \$0.04/kWh**, a 32-60% reduction vs. a current cost of 5.9-10.1¢. Able to operate in more moderate temperature and much more prevalent "dry hot rock" locations, Pluton should dramatically expand the number of suitable sites around the United States and the world. Moreover, unlike intermittent wind and solar, which require much more land area, geothermal has the potential to become an abundant source of clean, compact, renewable baseload power. SAGE and META are working to address technical requirements and demonstrate a prototype in 2021.

Our Mission: META **delivers previously unachievable performance**, across a range of applications, by inventing, designing, developing, and manufacturing sustainable, highly functional smart materials. Our technology platform encompasses **three core capabilities**, holography, lithography, and wireless sensing, and is **software and AI-design driven**. This allows us to develop a library of solutions and functional prototypes much faster and at lower cost than traditional chemical synthesis. We enable leading global brands to deliver breakthrough products to customers in consumer electronics, 5G communications, health and wellness, aerospace, automotive, and clean energy.

Application Examples:

- **Augmented Reality** – metaFUSION™ smart eyewear for augmented reality (AR) is designed to be comfortable, unobtrusive, and support corrective lenses. In [February 2021](#), we acquired specialized lens casting production equipment of Swiss lens manufacturer, Interglass, along with 35 patents in 10 patent families.
- **5G Communications** – META and [Sekisui Chemical are collaborating](#) to develop a transparent and flexible, passive radio wave reflective film based on NANOWEB® metal mesh to improve the performance and coverage of 5G and future 6G networks, at a lower cost and consuming less power than adding network hardware.
- **Molecular Biosensor** – META is developing a bio-photonic sensor with sensitivity and performance enhanced by nanomaterial to meet rising demand for point of care/point of use testing for COVID-19 and 50 other molecules. This portable, smartphone attached biosensor under development uses Surface-Enhanced Raman Spectroscopy (SERS) with a special film material as a consumable.

- **LIDAR Protection** – Autonomous vehicles and ADAS (advanced driver assistance systems) depend on sensors to “see” their surroundings. Sensors can be disrupted by inclement weather, as well as electromagnetic interference (EMI). META is developing NANOWEB® for deicing/defogging and EMI shielding.
- **Scientific Instruments** - Imaging instrumentation is widely used in fields as diverse as medicine and industrial process monitoring. Waveguides incorporating metaOPTIX™ offer a transparent, thin, low-cost illumination solution for light management in a diverse range of imaging applications.

Intellectual Property: In 2021 to date, we were granted **six new patents** related to: laser glare eye protection for metaAIR® in the U.S. and Brazil, MRI (magnetic resonance imaging) in the U.S. and Europe, GLUCOWISE® in the UK, and solar enhancement in Korea. YTD, we have **filed five new patent families** and we **added 10 patent families** with the acquisition of assets and IP from Interglass. META currently has a total of **76 patents granted and 64 pending patent applications**, including 33 active applications in the U.S. and 107 in 21 other countries around the world. META’s portfolio comprises **44 patent families, 28 of which are granted**.

Route to Market: The breakthrough applications we are enabling require custom development and integration with the product plans of our customers. We expect our OEM relationships to proceed through phases: design verification/test samples, funded development and production of Beta lots, and pilot scale production, with high-volume applications leading to multiple potential revenue streams, product sales, licensing, and supply agreements.

In November 2020, we began introducing a range of standard products via a [new e-commerce store](#), starting with metaOPTIX™, in order to make our state-of-the-art technology accessible to a wider range of end users. [In March 2021](#), two new series of filters were added, bringing the total to 18 product variants in the metaOPTIX™ range. The metaAIR® product family was expanded to include applications for law enforcement and sensors. In June through September, META will be exhibiting at [five law enforcement tradeshows](#). A series of NANOWEB® standard products is also in development.

Financial Results: META is an early growth stage, platform company, moving toward volume production for applications in multiple end markets. In Q1:2021, development revenue grew 22% Y/Y, to \$728K compared to \$595K in Q1:2020. Development revenue for holography totaled \$518K in Q1:2021, compared to \$344K in Q1:2020. Product sales of metaAIR® accounted for \$27.9K vs. \$2.6K. Development revenue for lithography totaled \$210K in Q1:2021, vs. \$250K in Q1:2020. Wireless sensing development is being supported by Innovate UK grants. We expect development programs to account for the majority of our revenue over the next 12 months. We target continued growth in corporate development programs as a precursor to future product sales. Please visit the [Investors section](#) of our website for our complete financial statements and MD&A.

Conclusion: We are building a platform technology company, secured by a growing IP portfolio, and focusing on development of high-volume applications, such as 5G communications. META is scaling high volume roll-to-roll production capabilities, which can be flexibly reconfigured to support different applications as we transition customers to licensed production located in their own facilities or with their suppliers. We seek to make this a scalable, repeatable process to support strong growth and margins as we execute on our pipeline of engagements.

We very much appreciate your continued support.

Sincerely,



George Palikaras, Ph.D.,
President & CEO / Founder

About Metamaterial Inc.

META delivers previously unachievable performance, across a range of applications, by inventing, designing, developing, and manufacturing sustainable, highly functional materials. Our extensive technology platform enables leading global brands to deliver breakthrough products to their customers in consumer electronics, 5G communications, health and wellness, aerospace, automotive, and clean energy. Our achievements have been widely recognized, including being named a Global Cleantech 100 company. Learn more at www.metamaterial.com.

Forward Looking Information

This release includes forward-looking information within the meaning of Canadian securities laws regarding META and its business, which may include, but are not limited to, statements with respect to the focus of the resulting issuer and the resulting issuer's NASDAQ-listing and the benefits thereof including the Company's ability to access capital markets, raise awareness of the resulting issuer, attract talent, and support organic growth opportunities, the business strategies and operational activities of the Company, the Company's investment in R&D and scaling up of roll-to-roll production, the transactions contemplated by the LOI relating to the Company's lease and the use of space in the leased facility, the working capital needs of the Company and the Company's ability to fund operations through 2022, the ability of Sage and META to produce utility scale geothermal power, the ability of the Company to deliver previously unachievable performance through invention, design, development, and manufacturing including such applications as augmented reality, 5G communications, molecular biosensors, LIDAR protection and scientific instruments, the ability of the Company to protect its intellectual property including patents, the Company's route to market and the phases through which META's OEM relationships will proceed, META's future revenue streams, product sales, licensing, and supply agreements, the expansion of META's product range, the broadening of META's customer base, META's investments and vertical solutions, the completion of the business combination with Torchlight Energy Resources Inc. ("Torchlight"), and the timeline for the closing of the business combination. Often but not always, forward-looking information can be identified by the use of words such as "expect", "intends", "anticipated", "believes" or variations (including negative variations) of such words and phrases, or statements that certain actions, events or results "may", "could", "would" or "will" be taken, occur or be achieved. Such statements are based on the current expectations and views of future events of the management of META and are based on assumptions and subject to risks and uncertainties. Although the management of META believes that the assumptions underlying these statements are reasonable, they may prove to be incorrect. The forward-looking events and circumstances discussed in this release may not occur and could differ materially as a result of known and unknown risk factors and uncertainties affecting the companies, including risks regarding the ability and performance of the Company's development, production and products, the ability of META to commercialize its prototypes, the ability of the Company to expand into other uses, receipt of shareholder approval by the shareholders of Torchlight and required third party and regulatory consents in connection with the business combination, the ability of META to complete the business combination and the resulting issuer's listing on the NASDAQ, the ability of the Company to succeed on its various collaborations for metaFUSION™, NANOWEB®, SERS, and metaOPTIX™, and the ability of META to complete the transactions contemplated by the LOI relating to META's lease on the terms currently contemplated by the LOI or at all. Although META has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results to differ from those anticipated, estimated or intended. Accordingly, readers should not place undue reliance on any forward-looking statements or information. No forward-looking statement can be guaranteed. Except as required by applicable securities laws, forward-looking statements speak only as of the date on which they are made and META does not undertake any obligation to publicly update or revise any forward looking statement, whether as a result of new information, future events, or otherwise.

The CSE has neither approved nor disapproved the contents of this letter.