



PRESS RELEASE

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5N Plus Announces Long Term Supply Agreement with Samsung for Engineered Substrates for the Next Generation of Medical Imaging Systems

Multi-year joint development program has yielded disruptive X-ray imaging technology

Montreal, Quebec, October 19, 2021 – 5N Plus Inc. (“5N Plus” or the “Company”) (TSX: VNP), a leading global producer of specialty semiconductors and performance materials, today announced a long-term agreement with Samsung Electronics Co. (“Samsung”) to supply engineered substrates based on II-VI semiconductor materials for the detector core of the next generation of medical imaging devices. The detector is based on Photon Counting Detector (“PCD”) technology, and will be incorporated into computed tomography (“CT”) by Samsung’s subsidiary NeuroLogica Corp., located in Danvers, Massachusetts.

Market driver for PCD technology

The global market for medical imaging based on CT is estimated to over five billion dollars in revenue. The detector element comprises 5 to 10% of the cost associated with the device. Over 95% of the CT imaging devices produced today are non-PCD-based. The increased demand for enhanced diagnostics, radiation reduction and cost efficacy have made this market ripe for innovation. PCD technology is at the forefront of addressing the latent demands associated with this market. In recent years, the advancements in product and process technologies have delivered PCD-based imaging systems with superior image quality and reduced radiation levels not achievable with the current mainstream technology.

Collaborative innovation delivering breakthrough technology

Over the last several years, 5N Plus has been developing engineered substrates for high-performance detectors essential for applications in medical and security markets. These efforts have recently yielded a family of semiconductor substrates facilitating unrivalled performance in both PCD-based CT imaging and various applications within the security market. Through its close collaboration with Samsung and NeuroLogica, 5N Plus has developed an engineered substrate product optimized to uniquely fulfill requirements for PCD-based CT medical imaging devices. The success of this program has prompted both parties to engage in a long-term supply relationship.

“We are very pleased by the outcome of this project and believe 5N Plus is uniquely positioned to become the leading global supplier of engineered substrates for PCD-based medical imaging applications,” said Arjang Roshan, President and Chief Executive Officer of 5N Plus. “We would like to thank Samsung and NeuroLogica for cultivating a collaborative ecosystem which not only fostered innovation but enabled its expedient implementation.”

Expansion of specialty semiconductor value-chain and product portfolio

5N Plus continues to expand its value-chain for specialty semiconductor materials. With over 20 years of experience in the development and manufacturing of ultra-high purity II-VI semiconductor compounds, the Company is the leading global supplier of these products. Over the past several years, 5N Plus has expanded its value-chain through its site in St. George, Utah, utilizing these compounds to develop engineered substrates. These efforts have resulted in an array of engineered substrates facilitating unsurpassed performance in customer applications ranging from PCD-based solutions in medical imaging to engineered substrates for infrared imaging and other applications within the security industry.

Recently, the Company announced that it is investing \$8.5 million in its Montreal campus to expand the development and manufacturing of critical and strategic materials, including those containing tellurium, for advanced II-VI semiconductor compounds and engineered powders. The investment is supported and has received funding from governmental agencies for about a third of the total investment.

Strategic alignment with AZUR acquisition

While 5N Plus has organically expanded its II-VI semiconductor value-chain, its III-V semiconductor value-chain has required a combination of organic growth initiatives and strategic investments. The Company is in the last stage of the regulatory approval process to acquire AZUR SPACE Solar Power GmbH ("AZUR"). This acquisition is expected to be transformational for 5N Plus.

AZUR brings established businesses within III-V semiconductor materials which are complementary to 5N Plus's current activities. This, in combination with 5N Plus's expanding business in II-VI semiconductor materials, serve as a unique source of competitive distinction and a substantial catalyst for future growth. The synergies of AZUR and 5N Plus will result in a higher total addressable market beyond space and enable entry into larger markets such as high-power electronics, electrification, advanced communication and other areas within the security market.

About 5N Plus Inc.

5N Plus is a leading global producer of specialty semiconductors and performance materials. The Company's ultra-pure materials often form the core element of its customer products. These customers rely on 5N Plus's products to enable performance and sustainability in their own products. 5N Plus deploys a range of proprietary and proven technologies to develop and manufacture its products. The Company's products enable various applications in a number of key industries including renewable energy, security, space, pharmaceutical, medical imaging, and industrial and additive manufacturing. Headquartered in Montreal, Quebec, 5N Plus operates R&D, manufacturing and commercial centers in strategically located facilities around the world including Europe, North America and Asia. The Company's mission is to be critical to its customers, valued by its employees and trusted by its shareholders. The Company's core values focus on integrity, commitment and customer development along with emphasis on sustainable development, continuous improvement, health and safety. www.5nplus.com.

Forward-Looking Statements and Disclaimer

Certain statements in this press release may be forward-looking within the meaning of applicable securities laws. Forward-looking information and statements are based on the best estimates available to the Company at the time and involve known and unknown risks, uncertainties or other factors that may cause the Company's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. A description of the risks affecting the Company's business and activities appears under the heading "Risk and Uncertainties" of the 5N Plus 2020 MD&A dated February 23, 2021, available on www.sedar.com.

Forward-looking statements can generally be identified by the use of terms such as "may", "should", "would", "believe", "expect", the negative of these terms, variations of them or any similar terms. No assurance can be given that any events anticipated by the forward-looking information in this press release will transpire or occur, or if any of them do so, what benefits that 5N Plus will derive therefrom. In particular, no assurance can be given as to the future financial performance of 5N Plus. The forward-looking information contained in this press release is made as of the date hereof and the Company has no obligation to publicly update such forward-looking information to reflect new information, subsequent or otherwise, unless required by applicable securities laws. The reader is warned against placing undue reliance on these forward-looking statements.

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