

Nouveau Monde's Integrated Battery Anode Material Outperforms Leading Commercial Producers

12.11.2020 | [GlobeNewswire](#)

- Nouveau Monde has received important and impressive test results for its advanced graphite-based anode materials.
- Nouveau Monde's anode material has outperformed leading Asian commercial producers – the Company's reversible capacity (or energy density) performed at 365 mAh/g, above the 360 mAh/g of Asian peers, with similar charging efficiency, and well above the minimum customer specifications requirement of 350 mAh/g.
- Multiple samples were produced by Nouveau Monde's advanced international technical team, in partnership with its R&D consortium partners, and have now delivered to prospective lithium-ion battery customers for qualification testing.
- This proprietary carbon coating technology will be incorporated into the company's demonstration plant at Becancour, Quebec.
- Nouveau Monde is actively working with its partner, Forge Nano, to even further enhance the performance with their Atomic Layer Deposition ALD technology.
- Nouveau Monde's ability to control the entire value chain from graphite ore to the final coated anode material allows it to offer a high quality and consistent product, representing an important and cost-competitive supply of non-Chinese sustainable anode product to the fast-growing lithium-ion battery market.
- Nouveau Monde's unique, high-quality and zero-carbon footprint anode materials are well placed to serve both the North American as well as European anode materials markets for decades to come.

MONTREAL, Nov. 12, 2020 -- Nouveau Monde Graphite (‘Nouveau Monde’ or the ‘Company’) (TSXV: NOU; OTCQX: NMGRF; Frankfurt: NM9) is pleased to announce that it has completed an important technical program on its proprietary coating process with its research and development consortium, internal experts and raw material suppliers. The primary objective of the program, operating since 2018, was to establish the optimal process operational parameters and design criteria needed to complete the engineering and procurement of a large-scale demonstration coating line. This process step is crucial in demonstrating the full value chain proposition as an integrated battery anode materials producer, from mine to market-ready coated spherical purified graphite (‘CSPG’).

Eric Desaulniers, President & CEO, states, ‘The last few years of dedication to R&D and to forging partnerships with the leading research and battery anode experts is now allowing us to bring to market a high-quality ready-for-market battery anode material that compares very favorably with the established Asian supply chain. We will be able to respond to clients needs based on scale, cost-competitiveness, carbon-neutrality and product quality and performance efficiency.’

Furthermore, *Arne H. Frandsen, Chairman of Nouveau Monde*, commented: ‘This is an important announcement, confirming both the high quality of our anode product as well as our ability to produce those critical battery raw materials. With our substantial resource base in Quebec and integrated value-chain, Nouveau Monde is well set to become a global leader in the supply of anode materials for decades to come’.

To confirm product quality and performance, the Company's CSPG was benchmarked against the leading Asian commercial anode material that currently dominate the lithium-ion supply chain. A series of electrochemical tests made by the National Research Council of Canada revealed that under the same conditions in half-button cell batteries, the reversible capacity (a measure of the energy density for performance) obtained with Nouveau Monde's anode material is 365 mAh/g compared with 360 mAh/g for the leading Asian standards. Importantly, the coulombic efficiency for the first cycle was similar for both products and within industry specifications. Further, the broader market minimum specification for

reversible capacity is well below at only 350 mAh/g, highlighting the market opportunity for Nouveau Monde.

Figure 1: Nouveau Monde's coated anode material outperforms leading peers is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/523254c4-655f-4d9e-ad00-6f215a4ed450>

The importance of coating to Nouveau Monde

In a lithium-ion battery, coating is used to:

- form a stable and passive carbon barrier around the high-purity spheronised graphite, which prevents the electrolyte from penetrating into the graphite and creates a stable electrolyte interface layer; and
- increase first-cycle efficiency by decreasing the specific surface area of the particles, reducing the loss of lithium within the electrolyte interface.

Coating is considered the last value-added production step and will allow Nouveau Monde to provide high purity, battery grade anode material for the rapidly growing electric vehicle and renewable energy storage industries, securing significantly higher margins and cash flow for shareholders.

Figure 2: Increased margins through the value-added process is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/dc052726-ee93-47bf-bea5-bca0ffbb9ed1>

Forge Nano's ALD coating will enhance performance of current carbon coated anode material

On October 6, 2020 Nouveau Monde announced a collaborative agreement between the Company and the US-based high-tech company Forge Nano for the use of advanced coating technologies to enhance the performance of Nouveau Monde's carbon coated anode material. Eric Desaulniers explains: "Now that we have developed a process that is scalable, low-cost and proven based on the known carbon coating technologies, we are working closely with our partner at Forge Nano with their state-of-the art ALD coating to significantly improve anode material quality above what is currently available in the market. The ALD coating that Forge Nano will provide will be added on top of our coated product, creating a premium anode material for specific customers. Through Nouveau Monde, potential clients will have the ability to purchase our industry-standard anode material or an enhanced superior anode material for more performance driven applications."

Market perspective

On October 22, 2020, Roskill, an expert research and consultancy firm focused on the metals, minerals and chemicals industries, commented on Nouveau Monde and shared their insight into the market for coated product: "The addition of coatings creates even higher potential for profit from spherical graphite. Only a limited number of producers currently carry out battery material coating processes, which require a high level of knowledge and experience and has traditionally taken place in Japan and, more recently, South Korea, using proprietary production methods. Chinese spherical graphite producers have now also begun to develop coatings, mainly for supply to the domestic market."

The average value of Chinese imports of (mostly coated) spherical graphite was US\$7,157/t in 2019 but prices vary widely depending on the type of coating, as requested by the consumer and determined by the final battery application. China's monthly average value of imports ranged from a low of US\$4,068/t to a high of US\$22,965/t in 2019."

About Nouveau Monde

Nouveau Monde will be a key operator in the sustainable energy revolution. The Company is developing the only fully integrated source of green battery anode material in the Western World. Targeting full scale commercial operations by early 2023, the Company will provide advanced carbon-neutral graphite-based material solutions to the growing lithium-ion and fuel cell markets. With low-cost operations and the highest of ESG standards, Nouveau Monde will become a strategic supplier to the world's leading battery and

auto manufacturers, ensuring robust and reliable advanced material, while guaranteeing supply chain traceability.

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Die URL für diesen Artikel lautet:

<https://www.rohstoff-welt.de/news/366732--Nouveau-Mondes-Integrated-Battery-Anode-Material-Outperforms-Leading-Commercial-Producers.html>

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