Skyrocketing LFP demand has experts asking, “How fast can Nano One scale production?”

written by Tracy Weslosky | November 7, 2022

Lithium iron phosphate (“LFP”) batteries are rapidly gaining market share due to their improved energy density, longer cycle life, improved safety, generally lower costs, and no requirement for nickel and cobalt. It certainly makes sourcing the critical materials much easier as lithium and graphite become the only critical materials needed. No need to source cobalt from the Congo or nickel from Russia.

Furthermore, the LFP trend is now expanding out from China to other regions as Chinese patents expire. In October last year, Tesla announced it is switching all of its standard range Model 3 and Model Y electric cars globally to LFP batteries. Multiple OEMs have since followed Tesla’s lead. The problem is now that the Inflation Reduction Act will only reward U.S or U.S free trade countries if their batteries are made locally (not in China), but there are very few western LFP battery facilities.

Nano One Materials now owns the only LFP battery facility in North America

In news announced on October 31, Nano One Materials Corp. (TSX: NANO) has now completed the acquisition of Johnson Matthey Battery Materials Ltd., who just happens to own the only LFP battery factory (the “Candiac facility”) in North America. Many in the market failed to appreciate the significance. And let me lay out – there is a massive demand for western made LFP batteries, and there is an extremely small current western supply to access.

Highlights of the announcement are:

“The Acquisition helps expedite Nano One’s business strategy for LFP and other battery materials and includes:

- A talented and dedicated workforce of 46 professionals with almost 400 years of scale-up, commercialization, and cathode manufacturing know-how on LFP.
- **The only existing North American lithium iron phosphate (“LFP”) production facility.**
- An 80,000 square foot, 2,400 tpa capacity LFP production facility on 9.5 acres, strategically located near Montréal.
- Certification systems supplying tier 1 cell manufacturers for the automotive sector.”

Note: Bold emphasis by the author.

Another key factor many in the market fail to appreciate is the difficulty in obtaining experienced battery manufacturing personnel. In the case of the above-mentioned deal, Nano One was able to secure a very key person, namely Denis Geoffroy. Denis was an early contributor to Phostech Lithium, which led the first commercial manufacturing of LFP cathode active materials globally. Nano One CEO Dan Blondal summed it up well stating:

“Today marks the beginning of an exciting new chapter in the Nano One story. I am pleased to report that the entire team in Candiac has transitioned to Nano One and this positions us with the most experienced LFP workforce in North America.”

Denis Geoffrey is the Chief Commercialization Officer of Nano One



Source: Nano One Materials website (video link)

In terms of the next steps Nano One states:

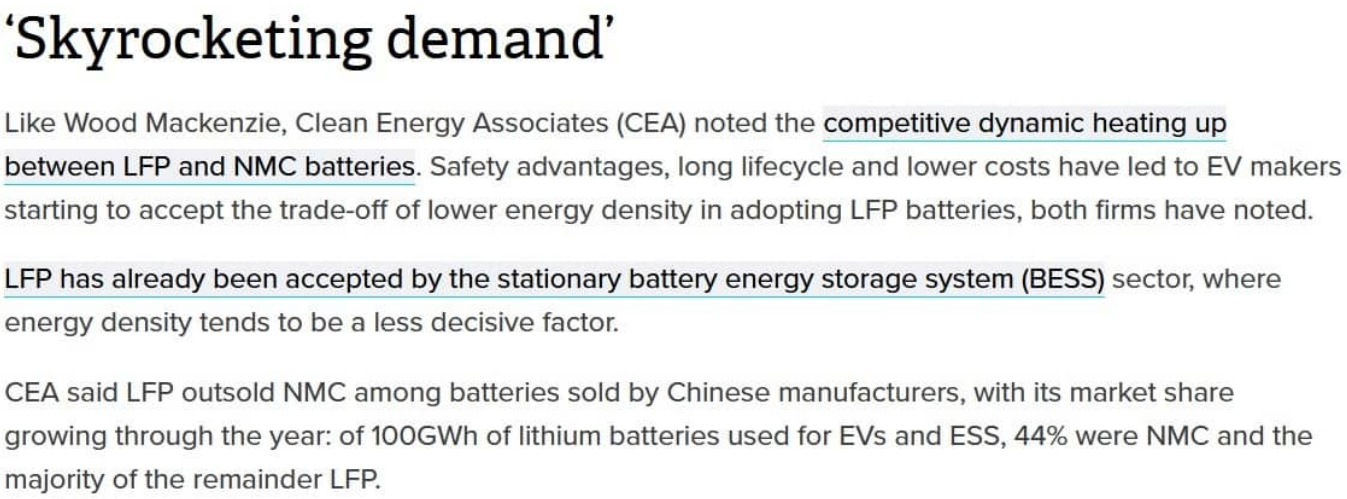
"The Company will begin with trials in the Candiac facility to validate the production of LFP using the Company's patented One-Pot process. Results from these trials will drive business, commercial and plant conversion decisions in 2023."

One would think Tesla and other North American based electric car and battery OEMs would be taking notice of how this all develops, and off-take deals could potentially soon emerge.

The rise and rise of LFP batteries

LFP batteries outsold NMC batteries last year in China, rapidly gaining market share (see below).

LFP battery demand skyrocketing – LFP outsold NMC in China as of March 2022



‘Skyrocketing demand’

Like Wood Mackenzie, Clean Energy Associates (CEA) noted the competitive dynamic heating up between LFP and NMC batteries. Safety advantages, long lifecycle and lower costs have led to EV makers starting to accept the trade-off of lower energy density in adopting LFP batteries, both firms have noted.

LFP has already been accepted by the stationary battery energy storage system (BESS) sector, where energy density tends to be a less decisive factor.

CEA said LFP outsold NMC among batteries sold by Chinese manufacturers, with its market share growing through the year: of 100GWh of lithium batteries used for EVs and ESS, 44% were NMC and the majority of the remainder LFP.

Source: Energy Storage News

Looking ahead this decade it looks likely that LFP will continue to gain market share from NMC and become the preferred battery cathode type. Energy Storage News quotes research from Wood Mackenzie stating: “Lithium iron phosphate (LFP) will be the dominant battery chemistry over nickel manganese cobalt (NMC) by 2028.”

Time will tell, but certainly, the current trend is towards LFP gaining market share globally. In North America the LFP demand will massively outweigh the supply, putting Nano One Materials in the box seat this decade, as a LFP battery manufacturer. The question really will be – **How fast can Nano One scale production?**

Nano One trades on a market cap of C$266 million.

Nano One’s cathode materials are inventing the zero-emission battery future

written by InvestorNews | November 7, 2022

Every once in a while, something that you have been working on, seemingly forever, starts to come together and that momentum starts to snowball. Today we are going to discuss a company that recently announced Q2 results with several exciting highlights that are the result of many years of hard work and determination. And although this article isn’t part of the critical minerals series, this company is inextricably linked to EV batteries, the processing of critical minerals and has already received funding from the Canadian Federal Government as well as the National Research Council of Canada Industrial Research Assistance Program and is engaged in the Mines-to-Mobility initiative. And if that isn’t enough of a teaser for you, their stock price has rallied over 140% since hitting its 52-week low in mid-May. It has been a solid couple of months, to say the least.

The company that has been on a pretty good roll of late is Nano One Materials Corp. (TSX: NANO), a clean technology company with a patented, scalable and low carbon intensity industrial process for the low-cost production of high-performance lithium-ion battery cathode materials. The technology is applicable to electric vehicle, energy storage, consumer electronic and next generation batteries in the global push for a zero-emission future. Nano One’s One-Pot process, its coated nanocrystal

materials and its Metal to Cathode Active Material (M2CAM) technologies addresses fundamental performance needs and supply chain constraints while reducing costs and carbon footprint.

The second quarter news flow began in late May with the acquisition of 100% of the shares of Johnson Matthey Battery Materials Ltd. located in Candiac, Québec. The acquisition included the team, facilities, equipment, land and other assets, with highlights of the deal being:

- A team with more than 360 years of scale-up and commercial production know-how
- Team and facilities proven in supplying tier 1 cell manufacturers for automotive
- LFP facility and land strategically located near Montréal and operational since 2012
- Facility and equipment that can serve Nano One's process needs with room to expand
- Expedites Nano One business strategy for LFP and other battery materials

The fully funded C$10.25 million deal is strategically located and has the benefit of access to a North American ecosystem that will serve the broader global community with cost-effective, resilient, and environmentally sustainable cathode materials. If you've been following my critical minerals series you'll recognize that this is an opportunistic deal that is the right asset in the right location at the right time.

Nano One quickly followed up with another, even more important (in my opinion), corporate announcement less than a week later by signing a joint development agreement (JDA) for lithium-ion battery materials with industry giant BASF. The JDA will see the companies co-develop a process with reduced by-products for commercial production of next-generation cathode active

materials (CAM), based on BASF's HED™-family of advanced CAM and using Nano One's patented One-Pot process and metal direct to CAM (M2CAM®) technologies. The multi-phase agreement includes a detailed commercialization study for pre-pilot, pilot and scaled up production. BASF, a global leader in chemistry and high-performance lithium-ion battery cathode materials, has recognized Nano One's advanced technology that has the potential to improve the product performance of BASF's high-performance CAM and further simplify the synthesis of battery materials.

And if all the above wasn't validation enough that Nano One has finally made it to the big leagues, less than 2 weeks after the BASF news the company announced a US$10 million equity investment by one of the world's largest mining companies, Rio Tinto. In addition to the investment, Rio Tinto has agreed to enter into a strategic partnership to provide iron and lithium products, all of which will accelerate Nano One's multi-cathode (multi-CAM) commercialization strategy and support cathode active materials (CAM) manufacturing in Canada for a cleaner and more efficient battery supply chain for North American and overseas markets. The collaboration agreement includes a study of Rio Tinto's battery metal products, including iron powders from the Rio Tinto Fer et Titane facility in Sorel-Tracy, Québec, as feedstock for the production of Nano One's cathode materials, which dovetails nicely with the first deal noted above.

Nano One finished Q2 with cash and cash equivalents of C$48 million, which represents roughly 14% of their C$343 million market cap. With abundant capital to deploy, plenty of tailwinds for the industry as a whole, and a team with ample experience in financing, capital growth, technology management, chemistry, engineering, materials science, batteries, and intellectual property, it seems the company is really hitting its stride. I

dare say, based on the recent news flow, there could be a lot more to come from Nano One.

Dan Blondal of Nano One Materials on its patented lithium-ion battery cathode technology

written by InvestorNews | November 7, 2022

In this InvestorIntel interview with host Byron W. King, Nano One Materials Corp.'s (TSX: NANO | OTC: NNOMF | FSE: LBMB) CEO, Director & Founder Dan Blondal provides an update on Nano One's patented One-Pot process and metal-direct-to-cathode-active-material (M2CAM) technology for production of lithium-ion battery cathode materials.

In the interview, which can also be viewed in full on the InvestorIntel YouTube channel (click here), Dan Blondal talks about the versatility of Nano One's One-Pot process which is suited for multiple battery chemistries like lithium iron phosphate (LFP), nickel-rich (NMC), and manganese-rich (LNMO) cathode materials. Dan explains how Nano One's M2CAM technology eliminates 100% of the sulphate waste in traditional standard lithium-ion battery cathode manufacturing to reduce cost, complexity, and carbon footprint of the process.

Don't miss other InvestorIntel interviews. Subscribe to the InvestorIntel YouTube channel by clicking here.

About Nano One Materials Corp.

Nano One Materials Corp. (Nano One) is a clean technology company with a patented, scalable and low carbon intensity industrial process for the low-cost production of high-performance lithium-ion battery cathode materials. The technology is applicable to electric vehicle, energy storage, consumer electronic and next generation batteries in the global push for a zero-emission future. Nano One's One-Pot process, its coated nanocrystal materials and its Metal to Cathode Active Material (M2CAM) technologies address fundamental performance needs and supply chain constraints while reducing costs and carbon footprint. Nano One has received funding from various government programs and the current "Scaling of Advanced Battery Materials Project" is supported by Sustainable Development Technology Canada (SDTC) and the Innovative Clean Energy (ICE) Fund of the Province of British Columbia.

To learn more about Nano One Materials Corp., click here

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If you have any questions surrounding the content of this interview, please contact us at +1 416 792 8228 and/or email us direct at info@investorintel.com.

Nano One Strives For Sustainability and a Total Domestic North American Lithium Ion Battery Supply

Chain

written by InvestorNews | November 7, 2022

My biggest takeaway from COP26 is not so much climate action and emission reduction, but the message of sustainability. Without focusing on the importance of sustainability one risks thundering down a path of unintended consequences. What do I mean by this? Several years ago I read that if we could convert all coal fired power generation to natural gas it would achieve the Kyoto emission target. I can't confirm if this is completely accurate or not, regardless it would have been a large step in the right direction (despite still being a fossil fuel based solution). At the time it would also have been achievable with existing, available resources and bought the world some time to continue building out renewable resources, which is the ultimate end game. However in 2021, with the lack of energy investment over the last several years due to a combination of factors, that isn't the case today, and we are starting to see parts of the world where renewables haven't developed enough by themselves to even keep people warm this winter. Meanwhile, the fossil fuel alternatives aren't any longer as readily available as backup and may still not even provide enough for home heating. I understand the urgency of eliminating coal fired power, but if there aren't enough alternative power options to keep people warm then who knows what happens next.

That's why I think in order to successfully green our economy and reduce our global carbon footprint, the focus has to be on how to do it sustainably. One company that has to be at or near the top of the list in the transition to clean energy in a sustainable way is Nano One Materials Corp. (TSX: NANO). Nano One is a clean technology company with a patented, scalable and low carbon intensity industrial process for the low-cost production of high-performance lithium-ion battery cathode

materials. The technology is applicable to electric vehicle, energy storage, consumer electronic, and next generation batteries in the global push for a zero-emission future. Nano One's One-Pot process, its coated nanocrystal materials, and its Metal to Cathode Active Material (M2CAM) technologies address fundamental performance needs and supply chain constraints while reducing costs and carbon footprint.

Another facet of sustainability that is very applicable today is the supply chain. Currently, the cathode supply chain is long and complex. Nano One manufactures its cathode materials directly from nickel, manganese, and cobalt metal powder feedstocks rather than metal sulfates or other chemical salts. The metal powders used are one fifth of the weight of metal sulfates, avoiding the added costs, energy, and environmental impact of first converting to sulfate and then the shipping and handling of waste. The manufacturing process for all of its Cathode Active Material (CAM) uses lithium feedstock in the form of carbonate rather than of (lithium) hydroxide, which is costly, corrosive and harder-to-handle. The process is feedstock flexible which enables improved optionality of sourcing of raw materials. Nano One's technology aligns it with the sustainability objectives of automotive companies, investment communities and governmental infrastructure initiatives.

On Tuesday, November 10, 2021, Nano One announced the goal of building a fully integrated and resilient battery supply chain in North America, which must include responsible mining of battery metals, onshore refining, environmentally favorable cathode material production, and recycling. The Company believes there is a once-in-a-generation opportunity to create a secure and cost competitive supply chain that is domestically integrated with a low environmental footprint. Accordingly, Nano One is shifting its LFP (lithium-iron-phosphate) cathode material strategic direction to large emerging markets outside

of China, starting in North America, and has ceased joint development activities with Pulead Technology Industry.

LFP production is free from the constraints of nickel and cobalt, and although its origins are deeply rooted in Canada, its growth over the last decade is almost entirely based in China. Recent LFP cell-to-pack innovations have driven costs down and enabled greater EV range, setting the stage for EV pioneers to shift to LFP. The need has never been greater for a sustainable, responsible, and secure supply of LFP materials and batteries, to be established and supported in North America and Europe, proximal to where the EV's are manufactured. Canada has clean energy assets, responsibly sourced critical minerals, and a rich history in LFP technology and manufacturing. By leveraging these opportunities with the Company's simplified low-cost approach to cathode production, Nano One seeks to create a resilient value-added North American LFP supply chain in a collaborative ecosystem with a smaller environmental footprint.

There you have it. A company that sees the bigger picture and embraces sustainability in an effort to advance clean technology while reducing both costs and the overall carbon footprint. If this were a video, at this point I would simply drop the mic and walk away. Since it's an article and I need a conclusion I'll finish off by saying Nano One has the potential to have its technology in every EV built in North America and Europe, and that's going to be a pretty big number in the not too distant future.

Nano One Materials' Dan Blondal with Chris Thompson on decarbonizing the battery materials supply chain

written by InvestorNews | November 7, 2022

In a recent InvestorIntel interview, Chris Thompson spoke with Dan Blondal, CEO, Director & Founder of Nano One Materials Corp. (TSX: NANO) about Nano One's place in decarbonizing the battery materials supply chain and about the company's product development collaboration with Euro Manganese and a global OEM automotive company.

In this InvestorIntel interview, which may also be viewed on YouTube (click here to subscribe to the InvestorIntel Channel), Dan Blondal said that Nano One's patented technologies are used to make a wide range of the cathode materials used in batteries for electric vehicles, energy storage, and for consumer electronics. Dan also provided an update on Nano One's One-Pot process, which increases the energy density and durability of lithium ion batteries, and how its M2CAM technology addresses supply chain complexities while reducing costs and carbon footprint.

To watch the full interview, click here.

About Nano One Materials Corp.

Nano One Materials Corp (Nano One) is a clean technology company with a patented, scalable and low carbon intensity industrial process for the low-cost production of high-performance lithium-ion battery cathode materials. The technology is applicable to

electric vehicle, energy storage, consumer electronic and next generation batteries in the global push for a zero-emission future. Nano One's One-Pot process, its coated nanocrystal materials, and its Metal to Cathode Active Material (M2CAM) technologies address fundamental performance needs and supply chain constraints while reducing costs and carbon footprint. Nano One has received funding from various government programs and its current "Scaling of Advanced Battery Materials Project" is supported by Sustainable Development Technology Canada (SDTC) and the Innovative Clean Energy (ICE) Fund of the Province of British Columbia.

To learn more about Nano One Inc., click here

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If you have any questions surrounding the content of this interview, please email info@investorintel.com.

ESG Investors look to Nano One as a connector in a sustainable future

written by InvestorNews | November 7, 2022

If you follow Jack Lifton on InvestorIntel you'll have a pretty good idea that the dream of replacing all the internal combustion engines on the road today with battery electric vehicles (BEVs) is more of a fantasy than a reality based on today's technology. The demand for raw materials, in particular lithium, just doesn't add up. Jack does a great job of explaining the math in his Lithium by the numbers article from earlier this month with a follow up to hammer the point home in Lithium: The Haves and the Have Nots from last week. In summary, the first article suggests that even if lithium production

doubles by 2025 (which producers say they can do), that will only get the world to roughly 10% of annual car production being BEVs. The latter article states "There is not even the remotest possibility that global lithium (measured as metal) production could grow to this week's prediction, for example, by the child-like prognosticators at Deloitte, that in 2030 32% of all newly manufactured motor vehicles would be battery electric vehicles (BEVs)."

I think it's safe to say that most reasonable people around the world agree that reducing emissions is a positive step for humanity. But how do we think as a global community that we can achieve these goals in light of some pretty serious shortfalls in the basic building blocks to making this happen? Obviously, technology has to be the answer. We have to be more efficient with the resources we've got if we want to have any chance at not only meeting the political goals of carbon reduction but also avoiding the often unwitnessed reality of destroying the earth by mining every possible resource required to achieve those goals.

The good news is that there is already a company out there working on technology to improve lithium-ion batteries. Nano One Materials Corp. (TSX: NANO) is a technology company with a patented and scalable industrial process for the production of low-cost, high-performance cathode powders used in lithium-ion batteries. These unique materials are being designed to add value to electric vehicles and grid storage batteries in the global push for a zero-emission future. Nano One's patented manufacturing technology – the "One Pot Process" – streamlines the production process and thereby reduces cost while enabling higher performance cathode materials as compared to the standard manufacturing process. Last year the Company announced the development of a coated, single crystal cathode material for lithium-ion batteries that provides up to 4 times improvement in

longevity. Granted this doesn't necessarily reduce initial demand for lithium but it certainly helps to put less stress on the supply chain going forward.

With that said, last month Nano One announced three new patents issued and allowed in Canada, the US and China. Notably coverage for a novel method for phosphate stabilizing of lithium-ion battery cathodes. An important, low-cost durability improvement to lithium nickel manganese oxide (LNMO) cathode material which delivers energy and power on par with other high-performance cathodes and is more cost-effective because it is cobalt-free, low in nickel and does not require excess lithium. LNMO also has an operating voltage that is 25% higher than commercial high nickel cathodes, enabling fewer cells in applications such as power tools and electric vehicles while providing improved productivity, efficiency, thermal management and power. So no cobalt, less nickel and ultimately less lithium given you don't need as many power cells.

And then there's the other unintended consequence of moving towards a lower carbon future, the supply chain. Currently, the cathode supply chain is long and complex. Nano One technology enables cathode materials to be manufactured directly from nickel, manganese, and cobalt metal feedstocks in the form of metal powders, metal carbonates and other salts rather than metal sulfates. Metal powders are one-fifth of the weight of metal sulfates, avoiding the added costs, energy, and environmental impact of converting to sulfate and shipping and handling of waste. Nano One's technology aligns it with the sustainability objectives of automotive companies, investment communities and governmental infrastructure initiatives. It also offers an opportunity for metals refiners to provide environmentally, and sustainably mined sources of nickel ore to integrate and manufacture cost-reduced value-added cathode powders for direct supply to battery manufacturers.

In summary, Nano One appears to have the right technology at the right time. On top of that, the Company does it all with a lower overall carbon footprint than many, if not all, of its peers. In my opinion, the latter concept still isn't valued as high as it should be given as most ESG investors appear to be focused on top line carbon impact, and rightfully so given that policymakers haven't really made it an issue yet. In the meantime, as Jack Lifton educates the world that BEVs in every driveway may be a fallacy in our lifetime utilizing current technology, here's a company that could perhaps help make it more of a reality.

Stock price up 275% over the past year, Nano One progresses commercialization efforts with JV partners in the lithium ion battery industry

written by InvestorNews | November 7, 2022

Battery cathode materials nanotech company, Nano One Materials Corp. (TSX: NANO) ("Nano One") continues to make solid progress with regards to commercialization of their patented licenses via several joint development agreements. The Company has also recently been upgraded to the TSX exchange, trading under the new ticker "NANO".

Nano One is working with some of the biggest names in the

battery and EV industry

Source: Nano One investor presentation

Nano One's recent development agreements update

Announced on April 20, 2021, Nano One reported that they had successfully advanced phases one and two of their joint development agreement (JDA) with their multi-billion-dollar Asian (outside China) cathode producer development partner. The announcement stated: "LNMO cathode materials have met performance metrics and initial economic targets. Next steps include scale up, detailed economic modeling, third-party evaluation and planning for commercialization……The JDA provides a framework to develop a business plan for the commercialization of cathode materials, through a joint venture, licensing of Nano One's technology and or through further development work."

The key takeaway here for investors is that Nano One has developed advance intellectual property that will help cathode makers make next-generation batteries, needed to support the next generation of electric vehicles that require lower cost, faster charging, and still with good energy density and power. Nano One's high-performance lithium-nickel-manganese-oxide (LNMO) cathode materials (using Nano One's patented one-pot process) is also known as high voltage spinel (HVS). It delivers energy and power on par with other high-performance cathodes and is more cost effective because it is cobalt free, low in nickel and does not require excess lithium. LNMO's three-dimensional spinel structure enables lithium ions to flow more quickly than other types of cathode for fast charging and discharge and keeps it from expanding, contracting and straining the battery.

Announced on June 3, 2021, Nano One and Johnson Matthey entered

into a joint development agreement for lithium-ion battery materials. The co-development agreement is for next generation products and processes for Johnson Matthey's eLNO® family of nickel-rich advanced cathode materials using Nano One's patented one-pot process. The agreement also includes a detailed commercialization study for pre-pilot, pilot and scaled up production.

Announced on May 6, 2021, Nano One and niobium producer CBMM entered into a co-development agreement. The project will build on CBMM's niobium products and technologies, and on Nano One's successful demonstration and patenting of niobium coated cathode materials. Niobium coatings protect the cathode which leads to long-term cycling stability and improved battery durability.

Nano One is targeting to make US$1B from the forecast US$23 billion cathode market by 2025

Source: Nano One investor presentation

Closing remarks

Car makers and customers are demanding electric cars at lower prices with longer lasting and better batteries. To achieve this car makers, cathode and anode manufacturers, are spending up big on R&D and innovation. For most companies, it is easier and faster to pay a royalty to benefit from this better technology than spend billions of dollars trying to develop it themselves. The battery cathode market alone is forecast to be worth an incredible US$23 billion by 2025, so there is plenty of incentive to have the best technology. Nano One's goal is to target just US$1 billion of the sector.

Nano One has done the work and is now rapidly co-developing

better cathode materials to support cathode and battery manufacturers, and ultimately the EV and energy storage industries. This should potentially lead to successful commercialization and the beginning of strong revenues for Nano One.

Nano One is recently cashed up after a successful equity capital raise of C$28.9 million and trades on a market cap of C$436 million after a nice 275% stock price rise over the past year. There should be good times ahead for Nano One.

A cleaner greener world is what Nano One Materials is all about

written by InvestorNews | November 7, 2022

The market sure liked the latest news that Nano One Materials Corp. (TSXV: NNO) received conditional approval to graduate to the Toronto Stock Exchange under a new trading symbol “NANO” as the share price was up an impressive 13% yesterday. Perhaps this reflects market interest of the exciting potential of this interesting cleantech innovator.

For starters, Nano One is a technology company with a patented process for the low cost production of high performance cathode materials used in lithium ion batteries. You know, the batteries that are going to power virtually every battery electric vehicle and store the power from all the renewable energy sources coming online along with all your portable electronic devices. In other

words, a pretty large addressable market. Nano One is in the process of showing the world that they have a better design for coating the cathode of a lithium ion battery.

All lithium ion batteries have cathode materials and it's estimated that the cathode represents roughly 25% of the cost of the overall battery. This is where Nano One has focused on trying to reduce costs and improve efficiency. The Company's silver bullet (that's an expression, I don't think there's any silver involved) is the patented "One Pot Process" which streamlines the production process and thereby reduces cost while enabling higher performance cathode materials versus the standard manufacturing process.

Cost reduction comes from the process being able to go directly from metals (lithium, nickel, cobalt and manganese) to cathode powder without having to convert it to sulphate or in lithium's case, a hydroxide. This results in reduced costs for raw materials and energy input which in turn makes for a greener, lower carbon footprint overall. Cost savings can be several thousands of dollars per ton for cathode material.

The One Pot Process also helps on the performance side. As a battery charges and discharges, conventional polycrystalline cathode particles start to break apart from the stress of repeated charging. Over time this can fracture the protective coating and expose the inner part of the crystals to side reactions. This has the effect of reducing the range, life and charge of a battery. The Nano One process individually coats nanocrystals which form in one step and resist fracturing thus boosting durability and in turn full life cycle performance.

Source: Nano One Materials Corporate Presentation

The technology has been proven to work on several occasions including a joint development program focused on LNMO cathode materials (lithium nickel manganese oxide) that was successfully completed with validation by a multi-billion-dollar Asian cathode material producer and in collaboration with the University of Michigan on the development of innovative solid-state battery technology, to highlight the most recent updates. As well the Company is involved in strategic partnerships with Volkswagen, an undisclosed large US auto producer, Pulead Technology Industry (a highly respected Chinese cathode producer) and Saint Gobain (a 400-year-old materials company). In February Nano One announced its M2CAM (metal to cathode active material) initiative to engage in discussions with large integrated miners to reduce environmental footprints and maximize upstream value in the global battery supply chain.

As you can see, this company ticks all the boxes for a greener, cleaner world. And the best part is, they have more than enough cash to continue ongoing research and development, pilot plant expansion, business development and strategic initiatives having raised $29 million at the start of April to go along with the $30 million of working capital they finished Q1/21 with. Nano One appears to have the right solution at the right time and if the new green economy is serious about reducing its carbon footprint we all know who should be at the top of the list.

Follow Dean on Twitter: @iiDeanB1

Nano One's Dan Blondal on reducing the carbon footprint in the lithium-ion battery supply chain

written by InvestorNews | November 7, 2022

In a recent InvestorIntel interview, Chris Thompson spoke with Dan Blondal, CEO, Director & Founder of Nano One Materials Corp. (TSXV: NNO) about Nano One's M2CAM (metal to cathode active material) technology that can reduce cost, waste, and carbon footprint in the lithium-ion battery supply chain.

In this InvestorIntel interview, which may also be viewed on YouTube (click here to subscribe to the InvestorIntel Channel), Dan went on to explain how Nano One's patented One-Pot process can produce cathode materials directly from metal using nickel, manganese, and cobalt metal powder feedstocks eliminating the need for costly and energy-intensive conversion of nickel, cobalt, and manganese to sulfate, and lithium to hydroxide. He said that the process can "transform the supply chain and make it much cleaner and greener and cheaper because we eliminate the steps in between."

Nano One recently achieved TSX Venture 50 recognition as a top-performing company and is focused on improving the performance of the cathode materials and ultimately the durability of lithium-ion batteries. "We have a process of making cathode materials and we can make all the different types of chemistries that are applicable to any type of lithium-ion battery you can think of," Dan added.

To watch the full interview, click here.

About Nano One Materials Corp.

Nano One is developing patented technology for the low-cost production of high-performance battery materials used in electric vehicles, energy storage, consumer electronics, and next-generation batteries. The processing technology addresses fundamental supply chain constraints by enabling wider raw materials specifications for use in lithium-ion batteries. The process can be configured for a range of different nanostructured materials and has the flexibility to shift with emerging and future battery market trends and a diverse range of other growth opportunities. The novel three-stage process uses equipment common to industry and Nano One has built a pilot plant to demonstrate high volume production and to optimize its technology across a range of materials. This pilot plant program is being funded with the assistance and support of the Government of Canada through Sustainable Development Technology Canada (SDTC) and the Automotive Supplier Innovation Program (ASIP) a program of Innovation, Science and Economic Development Canada (ISED). Nano One also receives financial support from the National Research Council of Canada Industrial Research Assistance Program (NRC-IRAP). Nano One's mission is to establish its patented technology as a leading platform for the global production of a new generation of nanostructured composite materials.

To learn more about Nano One Inc., click here

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Nano One’s Dan Blondal talks about their unique high-voltage cobalt-free battery and many partnerships

written by InvestorNews | November 7, 2022

In a recent InvestorIntel interview, Peter Clausi talks to Dan Blondal, CEO, Director & Founder of Nano One Materials Corp. (TSXV: NNO) about their recent news about their unique high-voltage cobalt-free battery. Dan Blondal explains how their breakthrough LNM material, also known as high voltage spinel, is a cobalt-free, low-cost cathode material that provides improved efficiency, thermal management and power.

“Our process is to develop the processes for making these cathode materials,” Dan Blondal says in the interview, “the cathode materials themselves, batteries that use the cathode materials, and then license that technology, or joint venture with partners on manufacturing.” He went on to explain how Nano One’s LNM cathode is a leading candidate for next generation lithium-ion and solid-state batteries because its durability and dimensional stability enable a stable interface.

In this InvestorIntel interview, which may also be viewed on YouTube, Dan went on to say “Our DNA is in process innovation,” he continued, “and we look to partner with people who understand how to control supply chain” as well as “understand manufacturing and have the supply channels.”

Asked about partnerships, Dan said: “We have about 20 groups were are actively working with.” They include the Asian development partner announced this August. “Volkswagen is one of

our announced partners, but we are also working with a bunch of their peers.” These partners and opportunities are “a big part of the story, and my job is to convert those into real and meaningful deals.”

To watch the full interview, click here.

YouTube (click here to subscribe to the InvestorIntel Channel),

To learn more about Nano One Inc., click here

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