

Nano One's Powerful Low-Risk Lithium Edge

As the global market for lithium batteries is expected to be worth a staggering US\$30 billion by 2020, largely driven by the exploding electric vehicle and mobile device markets, a multitude of companies have coalesced at various points in the supply chain hoping to share in the boom. Investors looking to participate will know that lithium plays are fraught with risk, but Nano One Materials Corp. (TSXV: NNO) ("Nano One") have cleverly positioned themselves to reap the benefits of the lithium story while completely avoiding the majority of the pitfalls.

The company has developed a patented technology that massively improves the performance of lithium-ion batteries, cuts costs, and eliminates the need to produce value-added lithium-hydroxide. Resultantly, batteries produced using Nano One cathode technology could store and provide more power than existing models by a considerable margin. The innovative manufacturing process gives a cathode that could last up to three times longer than current models, a fact that could very easily sway the market.

Furthermore, the fundamental process that the company has created is far simpler than any technique currently used. Even the most promising battery-cathodes being produced today are made in upwards of a hundred stages, sometimes requiring production cycles of seven days. Nano One's technology can use lower grade raw materials, assemble them at the nanoscale into the desired components using only three stages, and all this is achieved in less than a day. The next step is to prove that this can be done on a large enough scale to significantly disrupt the technology materials sector.

The consequences of this emerging tech are massive; less

handling, lower equipment and procurement costs, fewer failure points, higher safety, no waste solvents, 90-95% yield, and the flexibility to produce a myriad of nanoscale materials for an almost unimaginable number of markets. Not to mention the complete omission of the mining and exploration stage that a cleantech materials company would be expected to suffer through; Nano One really have jumped to the front of the line on this one.

Confidence in the team has been demonstrated since their inception in 2011; repeated large scale institutional and private investment has driven the company forward to the point where they now hold three confirmed patents, as well as beginning construction of a pilot plant, which is expected to be completed this year. The company reports that the plant is on schedule and on budget, so expect further movement on company stocks in the next few months as Nano One proves that high-volume production of their paradigm-shifting materials is truly feasible.

The cathode market alone is worth US\$2-3 billion, and this is expected to more than triple by 2025. Nano One has a real shot at becoming the supplier of choice for pretty much everyone, but more than that, their technology can move with the market, affording them a level of flexibility that feels incredibly secure; let's say that in five years, a new type of battery takes precedent and requires an entirely different cathode material, it really wouldn't take these guys long to reconfigure their process to produce exactly that material in a shorter time and for less money than most. New technology always gets me excited, but high-volume nanoscale assembly is to materials science what the transistor was to electronics; simply revolutionary.