Fully integrated lithium battery supplier poised for double digit growth

In 2016, Electrovaya Inc. (TSX: EFL | OTCQX: EFLVF) ("Electrovaya") and its German subsidiary Litarion GmbH achieved revenue growth of 17.5% and this year, the company is again poised for another bout of double digit growth.

2016 was a pivotal year for Electrovaya as the company transformed itself from a components manufacturer to a fully vertically integrated lithium battery supplier. The company is now able to distribute powerful proprietary battery technologies on the back of its previously established cathode, anode and ceramic separator business.

Not only did Electrovaya come through this period of transition with flying colours, as evidenced by their top line growth, but the company now has the necessary stock to deliver on previously agreed orders throughout 2017.

Electrovaya is based in Ontario, and the Canadian company develops ceramic separators for lithium ion batteries for home storage and electric vehicle markets. Since its incorporation of Litarion back in 2015, the company has continued to refine and develop its products and last year saw the launch of an intelligent 48V, 2.3 kWh module, a 1kWh module and a 36V fork-lift battery system. The move to supplying complete systems has meant more cash invested in research and in stockpiling inventory to meet orders for OEM customers. The company can now boast inventory of $18.2m, $8.1m in finished goods and $5.9m in components to meet forward orders in 2017.

The results of the research investment are evident; the energy density of the cells has been increased from 40Ah to 44Ah, taking them well above the average for cells of their type.

Lithium batteries that include an NMC (Nickel-Manganese-Cobalt) cathode and NG (Natural Graphite) anode would be expected to produce specific gravimetric energy density between 100-190Wh/kg, the higher end of which, being the maximum possible with such chemistries. With their Litacell® product, Electrovaya have achieved 162Wh/kg, once again pushing them into the upper-end of the lithium cell market and creating yet more opportunities for OEM supply.

The research bore additional fruit in the further development of a networked battery management system; a hardware-software combination for the remote monitoring and management of both motive and stationary applications. The system can determine and communicate allowable power limits and available energy, comes with an optimised charging algorithm and permits remote monitoring of systems via Wi-Fi.

Revenue for 2016 came in at $19.5m (C$26.4m), with transitory losses of $8.8m for the year ended September 30, 2016. The developments in revenue, although not overly significant in 2016, are expected to have a strong influence on the year to come. The company is focusing on applications where its competitive advantage is accentuated; by funding research into systems that have higher duty cycles, longer-life and improved safety, they enable themselves to be a supplier-of-choice for larger companies with higher standards, and therefore higher value contracts.

2017 depends on the expansion of both production and sales. The goal is to increase the client-base with heavy duty operations such as 24-hour distribution centers, allowing the company to take advantage of the added performance and safety of Electrovaya’s own ceramic separator technology. Importantly, the product is market ready and under trial at multiple customer sites; the 36V currently in operation is to be followed by 48V models for Class I and II forklifts, in line with Electrovaya’s clear goal of creating numerous new

and lucrative market opportunities in the near future.