

Higher Energy Density, Lower Cost "MN-Series" Li-ion Battery

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- *From:* "Pluto" <pluto7@xxxxxxxxxxx>
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Another article on the same company – from Energy Blog.

http://thefraserdomain.typepad.com/energy/2007/01/electovaya_laun.html#more

Electovaya Launces Higher Energy Density, Lower Cost "MN-Series" Li-ion Battery

Electrovaya Inc. (OTC: EFLV.PK), Toronto, Canada has launched the "MN-Series" Lithium Ion SuperPolymer® battery technology. The MN-Series, which is a Lithiated Manganese Oxide based system, differentiates itself from Electrovaya's Phosphate-Series solution with up to 50% higher energy density while retaining its safety characteristics.

Their website states that their proprietary Lithium Ion SuperPolymer® batteries have an energy density of 470-watt hours per liter, a higher energy density than other rechargeable battery technology currently in commercial production.

This would make the the energy density of the MN-series batteries on the order of 700 Wh/liter. The higher energy density directly contributes to their batteries having significantly longer run-times for their size (my italics) than any rechargeable batteries currently in commercial production.

Electrovaya's proprietary Lithium Ion SuperPolymer® technology is independent of the composition of the positive electrode active material. As such, advances in positive electrode chemistry, such as the MN-Series, are expected to enable better technical performance and safety characteristics at more economical price-points. Their previous batteries were claimed to be cost competitive with other manufacturers of lithium ion or lithium ion polymer batteries, so we should expect some reduction in price.

Dr. Sankar DasGupta, CEO of Electrovaya, notes that "our new MN-Series is an exciting addition to Electrovaya's existing solution base. It is particularly well suited to large-format battery system demands with its superior energy density, power and safety characteristics and we're pleased to offer it as part of our integrated power system solution offerings."

The MN-Series Lithium Ion SuperPolymer® technology will complement Electrovaya's existing roster of Phosphate-Series and (industry standard) Cobaltate-Series Lithium Ion SuperPolymer® technology solutions.

Their lithium ion polymer technology allows them to make batteries in thin sheets that

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can be stacked, folded or otherwise shaped to fit the desired form. This flexibility has enabled them to accommodate both small size applications like tablet PC's and larger potential applications like electric vehicles.

Electrovaya's zero emission vehicle, previous post, the MAYA-100 is powered by energy-dense, lithium-ion SuperPolymer® technology. Equipped with a 35 to 50 kWh battery pack, this long-range ZEV can travel over 200 miles between charging, at speeds up to 80 mph. In addition to the unsurpassed range, the MAYA-100 has excellent acceleration, performance and handling.

Electrovaya has a major contract with NASA to power their Astronauts while on their critical space walk missions. Their technology was chosen based on performance, reliability and safety features and it's run time.