



## JM Energy succeeds in reducing resistance of ULTIMO lithium ion capacitors To be exhibited at the 2nd International Rechargeable Battery Expo

YAMANASHI - February 15, 2011- JM Energy Corporation (President: Goro Miyabe) announces the launch of new laminated lithium ion capacitors in spring 2011. The new products, whose internal resistance has been reduced to one-third that of conventional products, have been developed ,.

The new products to be placed on the market are characterized by low energy loss in the charge/discharge cycles (with energy loss reduced to approx. one-third that of conventional products) by reducing the resistance. To meet the needs of customers who set up outdoor installations with built-in capacitors, the changes in capacitance at low temperatures have been significantly reduced, leading to dramatically improved performance compared with conventional products\*1.

Together with rechargeable lithium ion batteries, lithium ion capacitors have grabbed market attention in recent years. Applications of lithium ion capacitors include large-capacity electrical energy storage devices for temporarily storing electric power from renewable energy (e.g. photovoltaic and wind power generation); capacitors are discharged when power output decreases due to unstable weather.

JM Energy has succeeded in reducing resistance by improving electrode materials and other components in conventional products with its proprietary technologies. The improved laminated lithium ion capacitors will be used in new applications whose resistance requirements had e been difficult to meet, as well as in conventional applications such as backup power supplies, voltage balancing, peak current assistance, and energy regeneration. JM Energy aims to help develop a low-carbon society and create jobs in local communities.

The new products will be exhibited at the JM Energy booth of the International Rechargeable Battery Expo to be held at Tokyo Big Sight from March 2 to March 4, 2011.

\*1 Capacitance at  $-20^{\circ}\text{C}$  and  $-30^{\circ}\text{C}$  has been improved by 20% and 50%, respectively, from that of JM Energy's conventional products.

<Photo: JM Energy's new laminate cells>

