



# Magnis Resources

L I M I T E D

FOR RELEASE  
13 February 2018

## JOINT DEVELOPMENT AGREEMENT SIGNED WITH LITHIUM-ION BATTERY SEPARATOR LEADER CELGARD

- Celgard, LLC ["Celgard"] is a global market leader of separators for lithium-ion batteries
- Agreement with Celgard covers battery plants in which Magnis has ownership including New York [USA], North Rhine Westfalia [Germany] and Townsville [Australia]
- Celgard possess over 40 years of experience in the lithium-ion battery sector
- The first lithium-ion battery produced by Magnis board member Distinguished Professor M. Stanley Whittingham used a Celgard® separator
- Celgard is a wholly-owned subsidiary of Polypore International, LP, an Asahi Kasei Company with more than 30,000 employees around the world, the Asahi Kasei Group serves customers in more than 100 countries.

Magnis Resources Limited ["Magnis" or the "Company"] [ASX: MNS] is pleased to announce that it has executed a Joint Development Agreement with Celgard, a global leader in separator technology for lithium-ion batteries.

### Background

To ensure reliable future manufacture of lithium-ion batteries [LIB], Magnis, with partner C4V, is currently conducting testing and qualification programs for optimisation of materials and components used in LIB production. Separators, which are critical to the performance and safety of batteries, are continually evolving and it is important to select an experienced and stable supplier with a track record for leading technology.

### Joint Development Agreement

A Joint Development Agreement was executed between Magnis and Celgard for the supply of advanced separators to lithium-ion battery production plants that are being developed by Magnis and its respective partners including C4V.

For personal use only

Both companies will closely collaborate with the goal of realising mutual benefits, particularly on innovation, purchase and supply commitments, and technology.

Under the agreement, a minimum of 70% of the separator used by Magnis plants is to be provided by Celgard.

Separators provide critical performance benefits at the battery level. Over the past several years Magnis has built comprehensive anode designs to optimise battery performance for power and/or energy applications such as electric drivetrain or grid storage. Working directly with the global leader Celgard would enhance Magnis' commercial offering to produce high performance and cost-effective batteries and would also assure a secure and sustainable supply of a critical component that enhances Magnis product.

**Magnis' Chairman Frank Poullas commented:** "Today's announcement is further confirmation of Magnis' growing status in the global Lithium-ion battery sector and follows the recent announcement of fast tracking production in New York with the acquisition of lithium-ion battery plant equipment and assets."

"Celgard's involvement in all plants, in which Magnis has ownership, is further testament to the skills and resources that we are combining to ensure the success of all our projects. Celgard is a global leader in separator technologies with large-scale production capabilities in the United States. This fits right at the core of Magnis' vision to create an ex-Asia supply chain in the production of quality product for our Gigafactory customers."

"Currently we are qualifying over 15 components in our New York facility from over 35 suppliers throughout the whole lithium-ion battery supply chain that are involved in our projects."



Figure 1 – Cylindrical cells produced by Magnis part-owned consortium using Celgard® Separator

For personal use only

## About Celgard, LLC and Asahi Kasei

Celgard, LLC specialises in developing, manufacturing and marketing dry-process microporous membrane used as separator in various lithium-ion batteries that play a critical role in the performance, life and safety of lithium battery cells. Celgard® performance characteristics are especially suited to hybrid and electric vehicles.

Celgard is a wholly-owned subsidiary of Polypore International, LP, an Asahi Kasei Company. For more information, visit [www.celgard.com](http://www.celgard.com).

The Asahi Kasei Group is a diversified group of companies led by holding company Asahi Kasei Corp., with operations in the material, homes and health care business sectors. Its electronics operations include a broad range of high-performance energy/electronics materials such as the Hipore™ lithium-ion battery separator, photosensitive dry film used in the production of printed wiring boards, and photomask pellicles used in the production of LCD panels and semiconductors. With more than 30,000 employees around the world, the Asahi Kasei Group serves customers in more than 100 countries. For more information, visit [www.asahi-kasei.co.jp/asahi/en/](http://www.asahi-kasei.co.jp/asahi/en/).

**Travis Peluso**  
Investor Relations Director  
Magnis Resources Limited  
Ph: +61 411 404 814  
[www.magnis.com.au](http://www.magnis.com.au)