

16 March 2016
Australian Securities Exchange Announcement

Leaf & Andritz complete successful evaluation of Glycell™ pretreatment on Empty Fruit Bunch Biomass

Highlights

- Joint evaluation by Leaf and Andritz show improved recovery of sugars using Glycell™ process
- Andritz nominates Leaf's Glycell™ process as one of its preferred pretreatments of Empty Fruit Bunch Biomass

Leaf Resources and Andritz (a globally leading supplier of plant, equipment, and services for pulp and paper and other industries) undertook work to evaluate Glycell™ pretreatment technology on the specific biomass known as Empty Fruit Bunch (EFB) at pilot scale in Springfield, Ohio.

EFB is an abundant, low cost feedstock in palm oil producing countries like Malaysia, Indonesia, Thailand and others. Approximately 20 million metric tons are "generated" annually by palm oil mills in Malaysia, between 22-23 million metric tons in Indonesia and over 2 million tons in Thailand.

The process included EFB material that had been applied to a proprietary material washing and resizing stage designed by Andritz.

At high solids saccharification, the cellulose to glucose (C6 sugar) conversion yield of 91% total yield at 72hrs for Glycell™ treated EFB was 13% higher on average than using a dilute acid process. Xylan (C5 sugar) to xylose conversion yield of Glycell™ treated EFB increased by 10% (75% cf. 66%) following 72 hours of saccharification retention when compared to using a dilute acid process.

The report concludes the Glycell™ method of pretreatment is recommended for maximizing sugars from EFB.

The successful pretreatment of EFB now means that the Glycell™ process has produced superior results on: EFB, sugar cane bagasse, wheat straw and various hardwoods including Eucalyptus Globulus, Poplar and American mixed hardwoods. Work continues on softwood species.

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SUSTAINABLE PRODUCTS FROM PLANT BIOMASS

Leaf Chief Operating Officer Alex Baker, who oversaw the project on Leaf Resource's behalf, said "It is a great outcome and shows the value of collaborating with Andritz. Leaf is very pleased that Andritz identifies the Glycell™ process as one of the preferred pretreatment for EFB, and look forward to working with Andritz to deploy our superior technology package. Opening up project opportunities in Malaysia and other oil palm growing countries in the ASEAN region is important to our commercialisation goals."

ENDS

About Leaf Resources Ltd (ASX: LER)

Leaf Resources is commercialising the Glycell™ process.

The Glycell™ Process is an innovative technology that uses a low cost, recyclable, biodegradable reagent glycerol, in a simple process that breaks down plant biomass into lignin, cellulose and hemicellulose at low temperature and pressure. The cellulose is then converted to cellulosic sugars through enzymatic hydrolysis and the lignin, hemicellulose and glycerol become valuable co-products.

Cellulosic sugars are a major feedstock for green, renewable biobased chemicals, bioplastics and biofuels, products whose markets are multi \$billions and fast growing. Many biobased products can now economically replace petroleum based products.

The Glycell™ process can produce cellulosic sugars at under \$50 per tonne when co-products are included. This compares with \$220 per tonne for sugars produced from the conversion of corn starch, the cheapest alternative and \$280 per tonne for raw sugar.

By dramatically reducing the cost of the main feedstock for bio based chemicals, plastics and biofuels, the Glycell™ process has the potential to change the face of global renewable production.

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