



LEAF RESOURCES LIMITED

Sustainable products from plant biomass

Australian Securities Exchange Announcement

5th November 2014

Leaf Resources' Glycell™ FT trial data supports second product offering

Highlights

- Glycell™ process produces suitable pulp for cardboard manufacture
- Opens up multiple opportunities for Glycell™ process in the pulp industry
 - Retrofitting to existing plants
 - Add-on plants at existing facilities
 - Greenfield sites for smaller biomass resources

The Directors of Leaf Resources are pleased to announce results of development work undertaken at the Andritz pilot plant facility in Springfield, Ohio. Andritz is a globally leading supplier of plant, equipment, and services for pulp and paper and other industries.

The trials have focused on developing the Glycell™ process on industrially available equipment on several different biomass inputs including Blue gum (*Eucalyptus globulus*) and waste sugar cane (bagasse) for both the cellulosic sugars pathway (Glycell™ CS) and the fibre markets (Glycell™ FT).

Glycell™ CS produces cellulosic sugars effectively and efficiently that are highly suitable as a input into the fast growing bio-based chemicals market.

The results now available to the Company, have demonstrated that using the Glycell™ FT process on hardwood, a competitive pulp for the corrugating medium market can be produced. This result supports our second product offering, Glycell™ FT and further builds our technology applications.

The corrugating medium market are cardboard manufacturers that utilise wood pulp (cellulose) with suitable properties for the manufacture of cardboard. Specifically the pulp produced by the Glycell™ FT process has good compressive strength and is anticipated to be very suitable for use in cardboard fluting cores and this will open up attractive opportunities within the cellulose pulp markets.

Sample pulps were tested against a battery of specific pulp characteristics and compared to a typical specification of pulp used for corrugating medium (cardboard) production. The Glycell™ pulps gave a similar range of results, to that produced using alkali digestion of mixed US southern hardwoods i.e. a current benchmark. All pulp testing was performed by the Andritz Pulp Testing Laboratory and where applicable, using TAPPI Official Test Methods, TAPPI Provisional Test Methods, or TAPPI Useful Test Methods.



LEAF RESOURCES LIMITED

Sustainable products from plant biomass

Ken Richards, CEO of Leaf Resources, said:

These results are further validation of the commercial potential of the Glycell™ process. They show that we have two strong and viable commercial products from the one process: a cellulosic fibre product as well as a cellulosic sugar product.

The commercial opportunities for the environmentally friendly Glycell™ FT process are threefold: we can retrofit our process to existing pulp plants, we can add on a new plant to existing facilities or we can establish new greenfield sites.

Its exciting times at Leaf Resources as we move forward on the commercialisation strategy for this innovative Australian technology.

About Leaf Resources Ltd (ASX: LER)

In virtually every industry, consumer demand for greener more natural products is fuelling a surge of interest in bio-based alternatives to replace oil based products.

Leaf Resources is commercialising the Glycell™ pretreatment technology: The first essential part of the process on a path to bio-based products.

The Glycell™ Process is an innovative technology that uses a low cost, recyclable, biodegradable reagent glycerol, in a simple process, to break down plant biomass into lignin, cellulose and hemicellulose at low temperature and pressure.

Cellulose, a critical building block for many bio-based products, produced by the Glycell™ processes can be used directly as cellulose fibre, chemically converted to cellulose derivatives or converted to cellulosic sugars using enzymatic hydrolysis. These cellulosic sugars can then be converted to bio-based materials, bio-plastics and green chemicals, the markets for which are extremely large and fast growing.

Leaf Resources commercialisation strategy is to partner with industry leaders across the breadth of product supply chains that will bring synergies and speed to the commercial adaption of our production process technology in a capital-efficient manner. Leaf sees this path as an effective means of deployment to multiple plants in diverse settings and the opportunity to further innovation in both product and process technologies.

Contacts:

Ken Richards (Managing Director)
Jay Hetzel (Chairman)

M: +61 403 385 051
M: +61 413 045 478