

26 April 2017

Australian Securities Exchange Announcement

Shareholder Update

- **Leaf makes strong progress towards the deployment of its first commercial facility**
- **Site in Malaysia chosen and application process commenced**
- **Biomass source identified with both Malaysian federal and state governments assisting in securing supply for Leaf's commercial scale plant**
- **Additional development milestones achieved including FEL2 engineering study on Glycell™ process by Amec Foster Wheeler, and independent technical review by leading engineering firm Leidos**
- **Novozymes agreement progresses with testing on Leaf's material confirming results achieved with Andritz**

Leaf Resources (ASX: LER, "Leaf" or the "Company") continues the commercial development of its technology with world leading partners in the biochemical industry and Leaf is pleased to provide an update to shareholders on its activities and progress with key partners as the Company moves towards the deployment of its first commercial facility.

Malaysia

Leaf has made significant progress in Malaysia as it secures key milestones required to develop its first commercial project in that country following the signing last year of a Memorandum of Understanding with Agensi Inovasi Malaysia (AIM) and a Letter of Facilitation and Collaboration with Malaysian Bioeconomy Development Corporation (ASX announcement 25th October 2016).

The Leaf Development team (JV between Leaf Resources and Claris) has recently completed a further round of consultations with the Malaysian federal and state governments, which included discussions around potential sites, biomass options and pricing and government support for a second generation (2G) sugar facility, producing cellulosic sugars from biomass and linked with a bio-chemical facility.

The Malaysian federal and state governments, represented by AIM and Sarawak State Planning Unit, have identified a selection of viable locations for a bio-hub development in the state of Sarawak, Malaysia. The development of the Sarawak bio-hub is a key part of Malaysia's National Biomass Strategy, which aims to increase Gross National Income by RM\$30 billion, reduce carbon emissions by 12% and create an additional 66,000 new high-value jobs.

This initiative is also in line with the State's aspiration to develop Sarawak into the Premier Biomass Processing Hub for the Region, as outlined in the Sarawak Biomass Industry Development Plan (SBIDP) – a strategy launched by the Honourable Prime Minister of Malaysia in 2016. Leaf has now identified a site within this development region and has commenced an application process for a site that is suitable to host Leaf's first commercial facility.

In a letter to Leaf Developments, AIM acknowledged the importance of having a second-generation sugar facility as part of the Sarawak bio-hub development and stated their support for Leaf to be part of this development.

AIM has also agreed to assist in securing a quantity of no less than 300,000 bone dry metric tonnes ("BDMT") per year of acacia woodchips as the initial biomass supply for Leaf's project.

It is probable that the first facility will have a 100,000 BDMT capacity, hence there would be sufficient biomass supply available to expand the initial facility.

Pathway to a plant

Leaf has also recently completed a number of technical milestones that will form part of a final project proposal that are key milestones on the development pathway to its first project. A summary of these is outlined below:

Independent Engineers Report (Technical review)

As part of the package of data for the financing of our initial plant, financiers would require an Independent Engineers Report (IER) from a reputable engineering company. The IER looks at the feasibility of the technology to be applied and the capability of the project to meet the technical inputs of the financial model.

Leidos Engineering (formerly known as RW Beck), and its principal Dr. Herb Kosstrin, are extremely well respected in the market and they have just released their technical review report for the Leaf Resources Glycell™ technology. The technical review is a subset of the full IER, which is focused on the technology and its feasibility. Their conclusion was that Leaf has demonstrated the feasibility of producing glucose syrups, and recovering glycerol for sale or for recycling within the process. They have made several minor suggestions on future testing to facilitate the final design for the plant.

FEL2 Study

Leaf has recently received a final report from multi-national engineering consultancy Amec Foster Wheeler on their Front End Loading L2 (FEL2) study. The FEL2 study provides a costing for a greenfield plant within a tolerance of -30%/+50% in line with engineering protocols of FEL2 studies. It is the final study before the site specific FEL3 engineering work.

Pleasingly the study confirms Leaf's previous FEL1 estimates, based on similar assumption. The report gives a target cost of a 100,000 BDMT plant with utilities and infrastructure provided externally is confirmed at US\$166M. The total direct costs contributing to the target cost were established at US\$133M. These costs are based on the estimation and factors of building a plant in SE USA.

Next Steps

Following the technical review and FEL2, Leaf will now work towards completing an FEL3 engineering study, together with the associated operation of an integrated demonstration facility.

Leaf has initiated discussion with BPF of Holland on hosting the integrated demonstration facility. Leaf has used the BPF facility previously and it provides the best mix of equipment and process capability to undertake this study. The integrated demonstration facility will provide advanced engineering data and confirm all three components of Leaf's technology as outlined below:

- Biomass through to slurry (Digestion);
- Conversion of solids from the slurry to sugars (enzymatic hydrolysis);
- Recovery of C5 sugars and glycerol (via SMB chromatography).

All these processes have previously been tested independently by leaders in the field and the integrated demonstration facility will confirm the processes in one location for a period of time and deliver data that will be utilised as input to an FEL3 study.

FEL3 is a site-specific study and is the final engineering study which delivers plans and costs for the construction of the plant at the chosen site.

The FEL3 is integral in the final construction contract and all the previous pieces of work will assist in procuring the necessary requirements for a suitable engineering, procurement and construction (EPC) contract with a reputable engineering firm.

Novozymes update

As the initial part of their Enzyme Research Agreement with Leaf (announced 7th December 2016), Novozymes has now completed their testing on Leaf's pre-treated substrates and have confirmed high enzymatic digestibility of such pre-treated substrates produced at Andritz. This now gives Novozymes baseline data to work from, and an understanding of how enzymes perform in Leaf's hydrolysis process as they look to provide Leaf with a specific enzyme package for our process.

Outlook

Leaf will continue to advance the development of its first commercial scale facility in Malaysia, and continue its discussions with the Malaysian federal and state governments. At the same time the Company is committed to exploring additional opportunities with new and existing partners who have identified the potential that Glycell™ presents in reshaping the green chemicals industry.

“We continued to record important milestones in the first quarter of 2017, as we progress towards the development of our first commercial scale production facility, including commencing an application process for a site in the state of Sarawak, Malaysia and identifying the source of biomass that will be the feedstock for the potential development in Malaysia,” said Leaf Managing Director Ken Richards.

“These developments, alongside the validation we have achieved through recent testing by leading engineering firms Leidos and Amec Foster Wheeler, and leading enzyme provider Novozymes, bring us ever closer to our goal of a commercial scale project and we look forward to providing shareholders with additional updates as they are available.”

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About Leaf Resources

Leaf Resources is one of the world's leading companies in converting plant biomass into fermentable sugars. Our proprietary process for converting biomass-to-functional industrial sugars enable a myriad of downstream technologies for the production of renewable chemicals that will substitute petrochemicals used in manufacturing today. With our project development and continued technical innovation we are building a robust global business centered on renewable carbon containing products to deliver environmental and economic benefits to our shareholders and our planet. More on www.leafresources.com.au