

16th July 2020

Australian Securities Exchange Announcement

Leaf Resources to acquire sustainable chemical company Essential Queensland

- **Essential Queensland Pty Ltd is a sustainable and renewable pine chemical producer utilising a proprietary organic solvent extraction technology;**
- **Proposed 100% scrip-based acquisition;**
- **Acquisition brings two highly compatible technologies together producing sustainable & renewable products produced from woody biomass;**
- **Combined technologies create a stronger merged position to address large and growing global markets for pine chemicals and renewable industrial chemicals; and**
- **Secures near-term cash earnings and growth opportunities while providing longer term opportunities based on Glycell technology.**

Leaf Resources Limited (ASX: LER) (**Leaf** or the **Company**) is pleased to announce that it has entered into a conditional Share Sale Agreement to acquire all of the issued capital of Essential Queensland Pty Ltd (**EQ**), an Australian private company, which utilises proprietary extraction technology to produce sustainable and renewable pine chemicals for sale into global markets (**Acquisition**).

Transaction Summary

EQ was established in early 2017 to develop and commercialise sustainable extraction and processing technology to produce pine chemicals.

Since establishment, EQ has developed a proprietary process to extract rosin and terpenes from pine logs, producing the highest quality, clean gum rosin and terpenes which are used in a multitude of consumer products, including perfumes, cosmetics, food additives, adhesives, disinfectants, synthetic rubbers and printing inks. The global market for pine chemicals was estimated to be approximately US\$10 billion in 2018 and growing at a rate of ~1% p.a. above world growth rates [Pine Chemicals Association].

EQ believes its natural extraction process gives it a competitive advantage over other producers in terms of efficiency/cost of production, sustainability and quality.

In 2019, EQ commissioned a pilot plant with 4,000 tonne through-put capability at its Apple Tree Creek site in Isis Central, Queensland. Currently, EQ is constructing an 8,000 tonne per annum commercial scale pine chemical plant on the same site. The new fully funded plant is

expected to be commissioned in the final quarter of this calendar year, with full operating capacity expected in April 2021.

In addition, EQ has secured supply of pine logs from an existing sustainable pine plantation to meet production requirements. This supply provides EQ with full control of the logs from harvest to production and includes delivery to EQ's Apple Tree Creek site at commercial rates.

EQ also has experienced industry management personnel with significant ownership positions in the business.

LER and EQ Technology Synergies

Leaf and EQ technologies enable the replacement of petroleum-based chemicals and plastics with the aim of moving society towards the bio economy. EQ and Leaf have highly aligned goals and aims. Both Leaf and EQ:

- (a) focus on sustainable and renewable products produced from woody biomass; and
- (b) possess proprietary organic solvent extraction technologies.

Accordingly, the Company believes the Acquisition is highly complementary to LER's current technology, projects, and operations and presents a significant opportunity for short-term and long-term growth to enhance shareholder value.

Further, LER notes that there is an established commodity market for pine chemicals, with multiple large customers and strong demand for quality products and it is the view of the boards of LER and EQ that following completion of the Acquisition, LER and EQ will be well positioned to exploit this market.

EQ's growth strategy as the lowest cost producer in the global pine chemical market includes potential brownfield expansion at the existing site as well as the development of multiple commercial scale extraction plants at different locations in Australia and overseas. This too, is complementary with the Company's growth strategy of providing sustainable product to the large and growing global markets for renewable chemicals.

Key terms of the Acquisition

In consideration for the Acquisition, the Company will issue, subject to obtaining shareholder approval:

- (a) 1,017,258,033 fully paid ordinary shares in the Company (**Shares** or **LER Shares**) at a deemed issue price of 0.02 per LER Share in consideration for the acquisition of all of fully paid ordinary shares on issue in EQ;
- (b) 34,455,861 options to acquire Shares (**Options**) in lieu of the cancellation of EQ's existing options on issue in EQ, comprising:
 - (i) 9,705,861 Options exercisable at \$0.03 per Option on or before 31 October 2021; and

- (ii) 24,750,000 Options exercisable at \$0.026 per Option on or before 1 March 2025; and
- (c) 33,000,000 performance rights in the capital of the Company that, subject to the satisfaction of certain milestones, vest on 1 July 2023 and expire on 31 August 2023 in lieu of the cancellation of the existing performance rights on issue in EQ.

The Acquisition is conditional on the satisfaction of a number of conditions precedent including, the Company obtaining all required shareholder and regulatory approvals necessary for implementation of the Acquisition (including, under the ASX Listing Rules and Corporations Act) and if required, LER re-complying with Chapters 1 and 2 of the ASX Listing Rules and being reinstated to trading on the ASX in accordance with ASX Listing Rule 11.1.3. The Company will make submissions to the ASX regarding the application of Chapter 11 of the ASX Listing Rules to the Acquisition as soon as possible and will update shareholders in due course. Until such time as a decision is received and in the case of a determination that ASX Listing Rule 11.1.3 applies, until the securities of the Company are reinstated to trading on the official list of the ASX, the Company will be suspended from quotation.

The material terms and conditions of the Acquisition are set out in *Schedule 1*.

Proposed post-Acquisition business

If approved, the Acquisition will result in a business that leverages complementary technology platforms to address large and growing global markets for a range of sustainable chemical products.

The extraction process employed by EQ results in a cellulosic ‘waste’ product that is a potential feedstock to LER’s proprietary Glycell process for producing clean industrial sugars. LER is currently progressing a proposal to establish a commercial Glycell biorefinery in Queensland, having successfully completed pre-feasibility studies to support the project.

Leaf Chairman, Mr Doug Rathbone said the proposed acquisition of Essential Queensland will provide shareholders of both companies with increased growth opportunities.

“Essential Queensland’s ability to generate a sustainable revenue stream in the short term provides Leaf with much needed stability while we continue to pursue longer term opportunities relating to the commercialisation of our Glycell technology. In turn, the potential exists for the Glycell process to add significant value to Essential Queensland’s business model by extending its by-products into additional downstream markets.

“On completion of this acquisition, Leaf in its first year (FY21), anticipates having significant revenue with a capacity expansion plan that should generate strongly growing revenues over coming years.”

Mr Rathbone also said Leaf has been impacted by COVID-19-related delays to its plans for a Glycell biorefinery to be established in Malaysia.

“We will continue to keep the Malaysia project under review, however we have a more realistic opportunity to progress our Queensland biorefinery proposal in the near term and the combination of both Leaf’s and Essential Queensland’s technology platforms considerably strengthens that proposal.”

He said the business moving forward will have a clear focus on capitalising on large and growing global markets for sustainable processes that produce ‘clean’ chemicals used by a wide range of downstream manufacturing industries.

Background - Essential Queensland Pty Ltd:

Overview:

Essential Queensland Pty Ltd has developed a new natural extractive process to treat pine logs producing high quality, clean gum rosin and terpenes at significantly lower cost than existing global supply.

Pine rosin and terpenes are used in a multitude of consumer products touching almost all spheres of our consumer lives, from perfumes and cosmetics to food additives, adhesives, disinfectants, synthetic rubbers to automobiles and printing inks.

Essential QLD expects market demand and price of Pine Chemicals to continue to grow in line with worldwide demand for sustainable renewable chemicals. This view is supported by diminishing sources of supply of pine chemicals due to high cost of extraction and inefficient “old world” supply practices, particularly the high labour-based tree tapping production methods.

Essential QLD has proven the technology during 2018-2019 via a pilot plant. The pilot plant was decommissioned and dismantled in March 2020 to make way for the new commercial plant.

Essential QLD is currently constructing an initial 8000 tonne per annum commercial scale pine chemical extraction plant at the Apple Tree Creek site. Commissioning of the plant is scheduled for October 2020.

Full operating capacity of the commercial plant is expected by April 2021. Once the initial plant is established, the Company has both brown field expansion opportunities and has already identified suitable areas for new greenfield operations both domestically and internationally.

Patented technology:

Essential QLD has developed a unique pine chemicals extraction technique producing pure products which encompasses significant know-how. EQ has freedom to operate and has lodged global provisional patent applications in June 2020.

Competitive Advantage:

Essential QLD's products are organically extracted eliminating harmful waste streams and chemical contaminants in the end products. This makes EQ products suitable for all downstream processing including food grade products.

EQ's process has the following advantages:

- High efficiency state-of-the-art extraction compared to existing operators
- Low cost production
- Ability to produce a number of products including the highest quality natural rosin and terpenes, to meet changing market conditions
- Quality of product will produce a premium to quoted market prices.

Pine Chemical Market snapshot:

These pine chemical products are used in a wide array of consumer goods including paints, inks, adhesives, perfumes, flavours in soft drinks and food, fragrances in soaps and household cleaners, disinfectants, food additives, vitamins, automobile tires, and many more applications. Consumers touch, smell, and consume pine chemical products every day.

Pine Chemicals directly account for over \$10 billion in annual revenues. This industry is growing at approximately 1% above world growth per annum (with some sectors at 4-5% growth per annum).

The pine chemical market generates annual revenues of US\$10bn per annum. Main producers are in North America, Europe, China, South America. The rest of the world (ROW) includes Central America, India, Indonesia, Japan, Pakistan, Russia, South Africa, Vietnam.

Essential QLD sources pine logs from plantations, extracts and distils terpenes and rosin (gum rosin & terpenes) at a cost to produce at a significantly lower cost than existing supply. Essential QLD believes it will be one of, if not the lowest cost producer in the global market.

Essential QLD believe its new supply will fulfill the current demand supply deficit and ultimately replace the existing high cost seasonal producers, in particular, "Tappers" production, which currently makes up 25-30% of global supply.

This ASX announcement has been authorised by the board of directors of Leaf Resources Limited.

Schedule 1 – Material Terms and Conditions of the Acquisition

Material terms of the Acquisition Agreement:

- (a) **Conditions:** Completion of the Acquisition is subject to and conditional upon satisfaction of the following conditions precedent:
- (i) LER and EQ entering into a loan agreement in respect of the advance of \$600,000 by EQ to the Company (the terms of which are summarised below);
 - (ii) LER entering into service agreements with each of Messrs Ramon Mountfort and Grant Yeatman (or their nominees) on terms to be agreed;
 - (iii) each shareholder of EQ executing a binding share sale and purchase agreement with LER in relation to the sale of all of the shares in EQ held by them;
 - (iv) LER and each of the relevant shareholders of EQ executing cancellation deeds in relation to the cancellation of the options and performance rights in the capital of EQ held by those shareholders in consideration for the issue of options and performance rights in the capital of LER;
 - (v) EQ obtaining all third party approvals required in relation to change of control provisions;
 - (vi) LER obtaining, all shareholder, regulatory and third party approvals and consents necessary to allow it to complete the Acquisition (including, for the issue of the consideration securities and adoption of an employee incentive scheme pursuant to the ASX Listing Rules and Corporations Act);
 - (vii) if required, LER satisfying the requirements of ASX Listing Rule 11.1.3 and receiving a letter from ASX confirming that ASX will grant conditional re-quotation of the LER Shares to trading on the official list of ASX, on terms acceptable to LER;
 - (viii) EQ having net debt of less than \$1,500,000;
 - (ix) LER converting all outstanding amounts owing to directors and officers of the Purchaser as at 30 June 2020 to LER Shares at a deemed issue price of \$0.02 per LER Share;
 - (x) LER having net debt of less than \$1,100,000; and
 - (xi) such other conditions as are considered customary for an agreement of this nature.
- (b) **Restraint:** Mr Ray Mountfort, will be subject to a restraint for up to three (3) years after the termination of his employment or engagement with LER and or EQ.
- (c) **Board Representation:** Upon completion of the Acquisition, EQ shall be entitled to appoint no less than four (4) suitably qualified directors to the board of LER. LER will procure the resignation of two (2) agreed members of its current Board.

The Acquisition Agreement contains such other terms as are considered standard for an agreement of its nature (including, representations and warranties, indemnities and confidentiality provisions).

Other than Mr Ken Richards who is a common director of Leaf and EQ, there are no related parties of the Company or existing shareholders in the Company that are involved in the Acquisition (i.e. are shareholders or directors of EQ).

Loan Agreement

Material terms and conditions of the Loan:

- (a) **Loan:** subject to satisfaction of the Condition (defined below), \$600,000 is to be advanced by EQ to LER for the repayment of existing debt and general working capital.
- (b) **Condition:** The advance of the Loan is conditional on execution of binding documentation by LER and EQ in respect of the Acquisition (the **Condition**).
- (c) **Interest:** Interest will accrue a rate of 10% per annum and is repayable in cash on the Maturity Date (defined below).
- (d) **Term:** 12 months from the date of advance of the Loan (**Maturity Date**).
- (e) **Repayment:** The Loan and all accrued but unpaid Interest is repayable on the Maturity Date. The Company may elect to make early repayment of the Loan and accrued but unpaid Interest in full and without penalty at any time.
- (f) **Security:** The Loan is secured over all of Leaf's present and after-acquired property (it includes anything in respect of which Leaf has at any time a sufficient right, interest or power to grant a security).
- (g) **Negative pledge:** Leaf will covenants that it will not, without the prior consent of EQ:
 - (i) deal with, sell or otherwise dispose of or part with possession of;
 - (ii) create, permit, suffer to exist, or agree to, any interest or encumbrance (other than an encumbrance in favour of EQ) over;
 - (iii) incur any further debt; or
 - (iv) attempt to do anything set out in paragraphs (i) to (iii), in respect of any of its assets except, in the case of (i) and (iii), in the ordinary course of its business or as otherwise agreed.

The Loan contains such other terms as are considered standard for an agreement of its nature

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About Leaf Resources Ltd (ASX: LER)

Leaf Resources is one of the world's leading companies in converting plant biomass into industrial sugars. Our proprietary process for converting biomass-to-functional industrial sugars enable a myriad of downstream technologies to produce 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

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