

# **CORPORATE AND BUSINESS UPDATE**

FYI Resources Ltd (ASX: FYI) ("FYI" or "the Company") wishes to provide the following update to the market.

#### **Update**

The COVID-19 pandemic has had a substantial effect on individuals, communities and businesses. In response to the containment measures being undertaken in Australia and most other countries, FYI has implemented a number of actions to ensure the safety of its staff and to preserve shareholder funds, while maintaining positive progress of the Company's high purity alumina (HPA) project.

As from the first of March, the Non-Executive Directors have agreed to suspend payment in cash of their director fees. The Managing Director has also suspended his salary. Corporate overheads have been reduced to maintain operations. Lower priority expenditure has been curtailed including non-essential R&D activities.

The measures that FYI is taking reflects our commitment to our shareholders and broader stakeholders. The measures emphasise our determination to progress the development of the Company's HPA project and to build upon the success of our recently released Definitive Feasibility Study (DFS).

Additionally, over the last several weeks, management, staff and project contractors have adjusted work practices in accordance with Government regulations for virus containment and social distancing. Despite the new working arrangements, the Company continues to operate day to day with a "business as usual" mindset with minimal disruptions.

# **OPERATIONS**

#### **HPA Definitive Feasibility Study**

The Company released the results of the DFS for the HPA project on 11 March 2020. Based on the results of the DFS, the HPA project has a NPV of US\$543 million and IRR of 46%. This valuation was calculated based on high quality metallurgical test work, including pilot plant trials, and extensive process flowsheet design. The engineering design and cost estimate of US\$189m was undertaken to a degree of accuracy of -5% / +10% to underpin the robust result.

It is FYI's intention to continue development of the integrated HPA project via its clearly defined pathway and to crystallise the value demonstrated in the DFS for its shareholders.

# **Business Continuance**

Despite the business uncertainty caused by the Covid-19 virus, FYI's business development continues relatively normally with minor adjustments following the implementation of various cost reduction and work practice strategies to address the various challenges.

FYI's priority is to continue investing in the Company's long-term development so that we are ready to capitalise when the market cycle rebounds.



# **Customer Engagement**

Following the release of the DFS result and the success of pilot plant trials, FYI has a high level of confidence in the technology and process flowsheet and the Company's ability to produce a superior quality HPA product.

As well as validating the production process flowsheet, the pilot plant trials produced representative HPA samples generated from FYI feedstock that could be provided to potential customers. This gives potential customers the confidence to test and qualify FYI's product with surety of product provenance and quality.

FYI has been actively engaged in the marketing of its HPA since the prefeasibility study release in late 2018. Customer response to our HPA product has been very favourable and we look to building up the relationships and continuing the qualification and tailored specification with potential customer groups.

This focus is essential to our progress, and whilst we are witnessing some altering of business arrangements from our counterparties, FYI is maintaining a "business as usual" approach as close as possible to our HPA project schedule.

## Continued product development

A number of parties that have been engaged in FYI's HPA qualifying process requested additional product finishing of the HPA samples. This request focuses on the physical properties of the end product to suit individual requirements in processing and packaging. FYI is examining different product types to be able to supply product to individual customer specifications.

#### **HPA Project Funding**

Currently there is a high level of market interest in the battery and associated power storage sectors – largely driven by Lithium-ion battery applications and the rapidly developing Electric Vehicle (EV) market. Additionally, HPA is experiencing increased demand from its broader, more traditional markets.

The Company's financial case set out in the DFS coupled with the internally generated (via the pilot plant) high quality and grade HPA product samples and long mine life (>25 years reserves) is considered an attractive proposition to financiers as they seek robust long-term investment opportunities.

To date FYI has secured a standby equity financing facility for up to A\$80m which will primarily be directed towards addressing the equity component of the US\$189m project capital requirements (refer announcement 11 March 2020).

FYI is continuing to explore additional project financing options to complete the financing package for the Company's integrated HPA project including one or more of the following: equity, traditional debt, off-take financing, project joint venture, strategic partners and project supported financing.



# **HPA Market Outlook to 2026**

The global HPA market was valued at US\$1.1 billion in 2018. The HPA market is projected to reach US\$5.1 billion by 2026 at a CAGR of 21.7% between 2019 to 2026 as forecasted by Allied Market Research – market report 2019.

Supporting Allied's long term market view, in 2018, CRU estimated that 4N+ (99.99% Al<sub>2</sub>O<sub>3</sub>) demand would grow from approximately 19,000tpa to approximately 95,000tpa by 2025. Following further research, CRU now suggests the HPA market could grow at 30% GAGR to 272,000tpa in 2028 "...if sufficient supply were available. The demand for ceramic coated separators in lithium-ion battery applications is genuine and will rapidly proliferate, as more energy-dense batteries arrive to serve the surging electric vehicle (EV) market..." (CRU – HPA market report 2019).

The HPA market is segmented based on purity (4N, 5N, 6N), technology and application. Provenance and guarantee of quality and corporate, social and environmental responsibility will be increasingly important to customers. By technology, this essentially means the manner of production and refining being: 1) the traditional route from bauxite and refining via hydrolysis; or 2) from hydrochloric acid leaching and precipitation – this being FYI's innovative process design pathway.

The HPA market is mainly driven by the development, adoption and uptake in applications such as Lithium ion batteries and static power storage, semiconductors, LED plasma and smartphone display screens, phosphor and specialty glass, various electronics applications, optical lenses and bio-ceramics etc.

In addition to the growth in the broad market diversity of HPA applications, additional global legislative and environmental regulations are promoting HPA produced from alternative sources rather than to the current hydrolysis supply. This is exemplified by the increasing worldwide trend to implement stringent environmental restrictions on bauxite mining and related operations due to their disproportional environment and carbon footprints. This will result in disruptions to traditional production of HPA from bauxite and the hydrolysis process over the mid to long term.

Additionally, governments are also continuing to implement, and enforce, strict emissions control to curb carbon levels from power generation and reduction in combustion engines usage.

These factors combine to provide additional opportunity for an alternative cheaper, more environmentally suitable production of HPA sourced from kaolin.

Authorised for release by Managing Director, Roland Hill.



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#### **About FYI Resources Limited**

FYI is developing a long life fully integrated high quality, high purity alumina (HPA) production project for both general / traditional and niche markets. FYI's corporate objective is to position itself to be a significant producer of HPA within these rapidly developing markets which include applications in LED, electric vehicle, smartphone and television screen as well as other associated high-tech product markets.

On the basis of its recently released DFS and the robust economic business case for production of HPA, FYI's Cadoux project, north-east of Perth in Western Australia, entails controlled production of a 100%-owned feedstock source, mined on a schedule to match supply requirements of a proposed refinery at Kwinana, south of Perth. FYI's ability to control the integrated process should ensure product quality, consistency and provenance – an increasingly important product selection criteria for customers who rely on knowing the origins and record of ownership in a product's supply chain.

The foundation of FYI's HPA strategy is the innovative and integrated processing flowsheet utilising moderate temperature and atmospheric pressure technologies. These factors combine resulting in world class HPA project potential.

#### **Cautionary Statements**

#### **Substance of DFS**

The DFS referred to in this announcement is a study of the potential viability of the Cadoux Kaolin Project. It has been undertaken to understand the technical and economic viability of the Project.

The DFS assumes as a 25 year Project life based only on Proved and Probable Ore Reserves (100%).

The DFS is based on the material assumptions outlined elsewhere in this announcement and the appended summary of the DFS. These include assumptions about the availability of funding. While the Company considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by this DFS will be achieved.

To achieve the range of outcomes indicated in the DFS, funding in the order of A\$189 million will likely be required. Investors should note that there is no certainty that the Company will



be able to raise the amount of funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of the Company's existing shares.

It is also possible that the Company could pursue other "value realisation" strategies such as a sale, partial sale or joint venture of the Project. If it does, this could materially reduce the Company's proportionate ownership of the Project.

# General and forward-looking statements

The contents of this announcement reflect various technical and economic conditions, assumptions and contingencies which are based on interpretations of current market conditions at the time of writing. Given the nature of the resources industry, these conditions can change significantly and without notice over relatively short periods of time. Consequently, actual results may vary from those detailed in this announcement.

Some statements in this announcement regarding estimates or future events are forward-looking statements. They include indications of, and guidance on, future earnings, cash flow, costs and financial performance. Such forward-looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. When used in this announcement, words such as, but are not limited to, "could", "planned", "estimated", "expect", "intend", "may", "potential", "should", "projected", "scheduled", "anticipates", "believes", "predict", "foresee", "proposed", "aim", "target", "opportunity", "nominal", "conceptual" and similar expressions are forward-looking statements.

Although the Company believes that the expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties, and no assurance can be given that actual results will be consistent with these forward-looking statements.

The contents of this release are also subject to significant risks and uncertainties that include but are not limited those inherent in mine development and production, geological, mining, metallurgical and processing technical problems, the inability to obtain and maintain mine licences, permits and other regulatory approvals required in connection with mining and processing operations, competition for among other things, capital, acquisitions of reserves, undeveloped lands and skilled personnel, incorrect assessments of the value of projects and acquisitions, changes in commodity prices and exchange rates, currency and interest rate fluctuations and other adverse economic conditions, the potential inability to market and sell products, various events which could disrupt operations and/or the transportation of mineral products, including labour stoppages and severe weather conditions, the demand for and availability of transportation services, environmental, native title, heritage, taxation and other legal problems, the potential inability to secure adequate financing and management's potential inability to anticipate and manage the foregoing factors and risks.

All persons should consider seeking appropriate professional legal, financial and taxation advice in reviewing this announcement and all other information with respect to the Company and evaluating the business, financial performance and operations of the Company. Neither the provision of this announcement nor any information contained in



this announcement or subsequently communicated to any person in connection with this announcement is, or should be taken as, constituting the giving of investment or financial advice to any person. This announcement does not take into account the individual investment objective, financial or tax situation or particular needs of any person.

## **Competent Persons Statements**

#### **Ore Reserves**

The information in this report that relates to Ore Reserves is based on information compiled by Mr. Steve Craig, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Steve Craig is a full-time employee of Orelogy Consulting Pty Ltd and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". The information is extracted from the Ore Reserve announcement released 29 October 2018 and is available to view on the Company's website at <a href="https://www.fyiresources.com.au">www.fyiresources.com.au</a>.

#### **Mineral Resources**

The information in this report that relates to Mineral Resources is based on information compiled by Mr Grant Louw, under the direction and supervision of Dr Andrew Scogings, who are both full-time employees of CSA Global. Dr Scogings is a Member of the Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists. He is a Registered Professional Geologist in Industrial Minerals. Dr Scogings has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the "Australasian Code for the Reporting of Exploration Results, Mineral Resources, and Ore Reserves". The information is extracted from the PFS announcement dated 25 September 2018 and is available to view on the Company's website at www.fyiresources.com.au .

# Metallurgy

The information in this report that relates to metallurgy and metallurgical test work is based on information reviewed and compiled by Mr Daryl Evans, a Competent Person who is a Fellow of the Australian Institute of Mining and Metallurgy (AuslMM). Mr Evans is an employee of Independent Metallurgical Operations Pty Ltd, and is a contractor to FYI. Mr Evans has sufficient experience that is relevant to this style of processing and type of deposit under consideration, and to the activity that he has undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves". Announcements in respect to metallurgical results are available to view on the Company's website at <a href="https://www.fyiresources.com.au">www.fyiresources.com.au</a>.