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ASX:FYI | OTC:FYIRF

## FYI AND ALCOA SIGN BINDING JV TERM SHEET FOR FYI'S HPA REFINING PROJECT

### Key points

- FYI and Alcoa sign a binding Terms Sheet for development of HPA refining project to create market leading integrated high quality HPA business
- Forecast construction costs for primary HPA production facility expected to be met by Alcoa contributions
- Joint development terms agreed including alignment on HPA growth options, development framework and pathway to future joint venture
- Development and funding path to construction and production agreed and de-risked
- Agreed HPA project strategy has potential global implications for HPA production, including downstream opportunities

FYI Resources Ltd (ASX: FYI) ("FYI" or "the Company") is pleased to announce that it has entered into a binding Term Sheet with Alcoa of Australia Limited (Alcoa) for the joint development of FYI's high quality alumina (HPA) project. The term sheet sets out the pathway to a future joint venture, subject to final investment decisions by both parties.

A joint development with Alcoa is considered by FYI to be the surest pathway to de-risk and progress the development of the project and to ensure its success once in production. The involvement of Alcoa will help to transform the HPA project from the current R&D and design stage to reality.

The execution of the binding Term Sheet Agreement follows the finalisation of the MOU review period as outlined in previous announcements of 8<sup>th</sup> September 2020 and 6<sup>th</sup> May 2021. The Term Sheet formalises the two companies' intent to jointly develop FYI's demonstrated innovative, high quality, HPA project.

The joint development is expected to unlock significant project value by combining Alcoa's technical expertise and experience in the construction and operation of refining facilities with FYI's innovative HPA processing flowsheet, industry knowledge and customer contacts. It will progress FYI's long term HPA strategy as outlined in the Company's definitive feasibility study of March 2021.

### Key project attributes include:

- Project framework: clear development and funding pathway to HPA production
- De-risked phased development planned includes:
  - large scale demonstration plant
  - primary production facility



## Project Phases

The Term Sheet contemplates the following three phases for the development of the project of which FYI would own 35% and Alcoa would own 65%.

The parties would fund their pro-rata share of project capital and development costs, with Alcoa to make additional contributions to the demonstration and production facility construction costs, subject to final investment decisions, in consideration for its 65 percent ownership of the project.

Any cost overruns or underruns will be apportioned pro-rata to equity entitlements.

**Phase one:** Detailed design of an estimated 1,000 tpa demonstration facility and additional production trials over 2021 and 2022. Estimated cost at phase 1 is US\$7m. On completion of Phase one each party would make a decision whether or not to proceed to Phase two.

**Phase two:** Subject to a positive investment decision planned for 2022, the parties would enter into an unincorporated joint venture and the demonstration facility would be constructed, and detailed engineering undertaken for a full-scale HPA plant that would produce 8,000 tpa. The estimated total cost of stage 2 is approximately US\$50m.

Upon entering phase two, Alcoa would contribute the first US\$5m of FYI's funding requirement in relation to Phase 2 construction costs by sole funding the first US\$14m of costs associated with the construction of the demonstration facility.

On completion of Phase two each party will make a decision whether or not to proceed with Phase three.

**Phase three:** Subject to a positive investment decision planned for 2023 the parties could establish an incorporated joint venture company and construction for the full-scale plant would commence. The full-scale facility (engineering and construction) is currently projected to cost approximately \$200m, subject to further engineering studies.

Upon entering phase three, Alcoa would contribute the first US\$68m of FYI's funding requirement in relation to Phase 3 construction costs by sole funding the first US\$194m of costs associated with the construction of the full-scale facility.

Based on current forecasts, Alcoa's contributions would cover the primary production facility construction costs.

The parties expect to finalise the formal agreements including the Joint Venture Agreement, the Joint Venture Management Agreement, a Shareholders Agreement and other supporting agreements, as part of the phase two final investment decision.

## Project de-risking

The Parties have agreed to a clear development pathway incorporating the parallel development of both a demonstration plant (with capacity of ~1,000tpa HPA, in a location yet to be confirmed) and the primary production facility (with capacity of ~8,000tpa HPA). The demonstration and primary production facilities would be based on FYI's proven HPA process flow sheet design. Both parties may re-assess the proposed joint venture strategy and growth options based on the outcome of final investment decisions.

The parties are targeting development and construction of the demonstration plant and primary facility to commence as soon as practical following final engineering completion.



**The key HPA project parameters and benefits include:**

- Alcoa to be Manager of the development activities, including the proposed future JV
- The joint development activities to leverage off Alcoa's established structure – allowing immediate access to development skills and expertise.
- Accelerated development schedule agreed
- Joint development committee representation to be Alcoa 3 x members / FYI 2 x members
- Alcoa will pay US\$2.1m for their 65% pro rata share of pilot plant trials to be conducted during phase one.
- The incorporated entity becoming a material HPA producer and pursuing HPA related growth and downstream development opportunities.
- A future JV would be the exclusive entity for both parties' respective HPA interests
- 5N, growth opportunities and downstream HPA applications will be jointly explored
- Both parties would license their respective IP and technologies to the proposed future JV
- Alcoa, as project manager, to market the HPA globally
- Global marketing reach based on already established relationships with off-take groups, direct battery manufacturers, vehicle manufacturers and niche market groups
- A future JV would potentially position both parties to be at the forefront of the HPA refining industry
- The JV to maintain high ESG standards and sustainability commitments

**FYI Resources Managing Director, Mr. Roland Hill stated** "Coming to joint development terms on our HPA project is a transformational event for FYI. The strong alignment between the parties and resulting HPA business case is outstanding. Today's agreement brings the possibility of production closer to reality without further material dilution to our shareholders. FYI considers that a future JV forms a robust structure capable of delivering the high quality HPA strategy, as outlined in the DFS, at a time when the international HPA market is forecast to grow in line with the world's e-mobility uptake and emerging HPA applications.

FYI considers that the project has potential for scaled increases in production across multiple jurisdictions including North America and Europe

FYI would like to thank Alcoa for the company's professional and dedicated work throughout the due diligence stages and commercial discussions. We look forward to working together to form a material HPA business to realise our vision for HPA."

**HPA Growth and Product Development**

The parties will continue to explore new HPA product and downstream opportunities to enhance market prospects through the evaluation of potential customer requirements and the innovation, production and commercialisation of broader HPA applications.

This product development extends to bespoke refining and finishing of HPA products previously developed, opportunities already identified in the market and downstream and value-add products.

**Commitment to ESG reporting**

In 2020, FYI made a commitment to commence Environmental, Social, and Governance (ESG) reporting as a tangible first step in building robust sustainability credentials based on the Company's HPA process. FYI will continue working toward making disclosures against the World Economic Forum universal ESG framework. FYI will demonstrate its disclosure progress by continuing to provide separate quarterly ESG updates and make our disclosures available in the public domain.



### **HPA Sole Focus**

The joint venture and any incorporated entity will be the sole vehicle for all HPA related activities for the parties. Joint development of past and future technologies and intellectual property of both companies will be held under the JV.

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This announcement is authorised for release by Roland Hill, Managing Director

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### **About Alcoa**

Alcoa is a global industry leader in bauxite, alumina, and aluminum products, and is built on a foundation of strong values and operating excellence dating back more than 130 years to the world-changing discovery that made aluminum an affordable and vital part of modern life.

Since developing the aluminum industry, and throughout our history, our talented people have followed on with breakthrough innovations and best practices that have led to efficiency, safety, sustainability, and stronger communities wherever we operate.

### **About FYI Resources Limited**

FYI's is positioning itself to be a significant producer of 4N and 5N HPA in the rapidly developing high-tech product markets.

FYI applies both an ESG and economic overlay of the Company and its operations to ensure long-term sustainable and shareholder value is created via the development of the Company's innovative, high quality, ultra-pure HPA project.

HPA is increasingly becoming the primary sought-after input material for certain high-tech products principally for its unique properties, characteristics and chemical properties that address those applications high specification requirements such as LED's and other sapphire glass products.

The longer-term driver for HPA, with forecasts of >17% CAGR\*, is the outlook for the burgeoning electric vehicle and static energy storage markets where the primary function is in the use as a separator material between the anode and cathode in batteries to increase power, functionality and safety of the battery cells.

The foundation of the HPA strategy the Company's moderate temperature, atmospheric pressure innovative process flowsheet. The strategy's quality attributes combine resulting in world class HPA project potential.

\* CRU HPA Industry Report 2021