

ASX:FYI OTC:FYIRF

May 2021

FYI HPA Presentation
OTC
Metals and Mining

DEVELOPING A WORLD CLASS INTEGRATED HIGH QUALITY ULTRA-PURITY ALUMINA (HPA) PROJECT

DISCLAIMER



CAUTIONARY STATEMENT

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The DFS referred to in this presentation is a study of the potential viability of the Cadoux 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 and modifying factors set out in the DFS announcement and the appended summary of the DFS released to ASX on 8 April 2021. 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 US\$202 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. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the DFS. The contents of this presentation 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 presentation. Some statements in this presentation 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 augrantee of future performance. When used in this presentation, 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 presentation nor any information contained in this release or subsequently communicated to any person in connection with this presentation is, or should be taken as, constituting the giving of investment or financial advice to any person. This presentation does not take into account the individual investment objective, financial or tax situation or particular needs of any person.

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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 within the DFS announcement 8 April 2021 and is available to view on the Company's website at www.fyiresources.com.au

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 www.fyiresources.com.au.

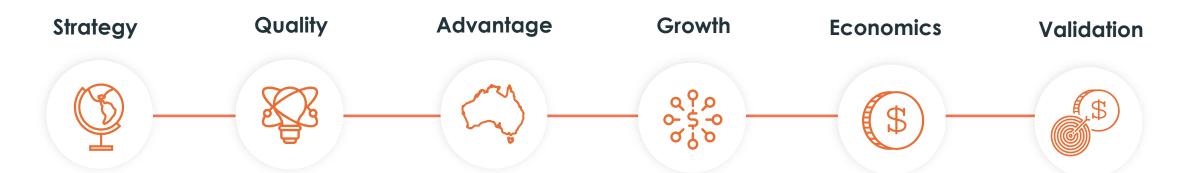
General

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the findings in the relevant market announcements continue to apply and have not materially changed and that all material assumptions and technical parameters underpinning the estimate in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original announcement.



FYI RESOURCES HPA DEVELOPMENT

OUR STRATEGY IS BUILT UPON CORE PRINCIPLES



Developing an integrated HPA project with the goal of becoming a leading producer of quality Al₂O₃

Innovative and
efficient flowsheet
demonstrated
through rigorous
R&D and Pilot Plant
testwork and
validated by
positive response of
major market
participants

Tier 1 jurisdiction
Fully integrated
Validated HPA
Infrastructure
Ethical source
Low carbon print
Single source
provenance

Multiple growth markets: LEDs and EVs are driving a significant rise in demand for HPA DFS confirms
Compelling
NPV & IRR
long-life
operation with
industry-low opex
and capex,

Robust HPA strategy culminates in excellent DFS with \$80m financing package from PE



FYI HAS A COMMITMENT TO HPA EXCELLENCE

- FYI has committed three years to developing a leading HPA process flowsheet and market strategy
- Championed by expert hydrometallurgical project management team (metallurgical and process engineering)
- HPA development testwork performed in Australia, Germany and US to optimise product quality and characteristics
- Successfully developed disruptive, cost competitive, ultra high purity, superior quality alternative HPA process
- DFS studies demonstrate top tier economic and investment case
- FYI HPA product quality and purity is verified through multiple HPA market participant validation and request for qualification engagement
- Quality strategy culminating in attracting tier 1 interest and support
 - Alcoa JV MOU
 - Leading HPA industry participant engagement (off-take / development)
 - Achieving 5N product bringing industry attention
- On going process and product development to maintain optimal production efficiencies and project economics



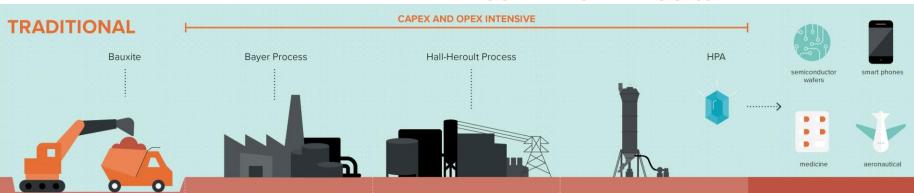


INNOVATING HPA PRODUCTION

STAGE 2

REFINING

CONVENTIONAL PROCESS



STAGE 3

PROCESSING

STAGE 1

- HPA derived from aluminium via bauxite is extremely capex and opex intensive
- Inefficient 1880's process design
- Inconsistent end-product quality
- High level of unwanted impurities
- High carbon footprint, Low ethical sourcing

END PRODUCT

DEFINED QUALITY

No product provenance or traceability

FYI'S INNOVATIVE METHOD

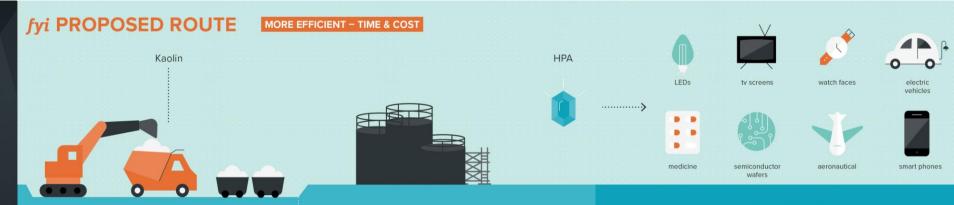
STAGE 4

HYDROLISING AND CALCINATION

- HPA derived from kaolin environmentally low impact
- Simplified flowsheet, significantly reduced capex and opex

STAGE 1

- Innovative and integrated processing flowsheet and basic chemistry refined Cadoux ore characteristics
- Consistent ethically and responsibly sourced quality HPA product
- Dependable supply for long term contracts



STAGE 2

HCL LEACH AND PRECIPITATION

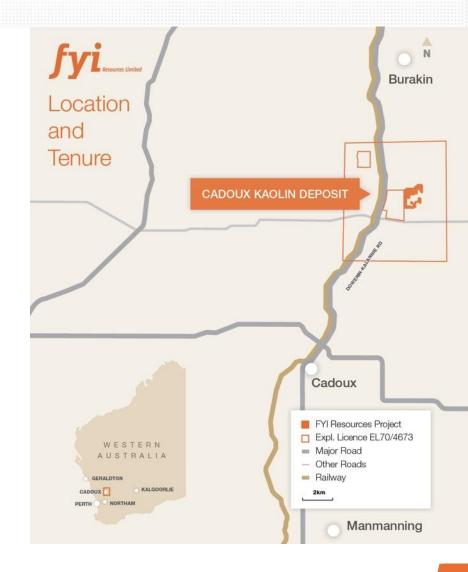
END PRODUCT

VARIABLE QUALITY



CADOUX KAOLIN PROJECT - LONG LIFE ASSSET

- The Cadoux Kaolin Project area boasts **excellent infrastructure**
- Deposit geology is ideal shallow, flat lying, low strip, free digging, homogenous excellent quality & easily accessible
- Extensive drilling, **well understood geology -** detailed mine study completed, reserves calculated, first 3 years of grade control completed
- Ideal characteristics quality, grade and low deleterious elements extremely amenable to HPA processing
- 100% owned project area private land, no native title. **Permitting completed.**
- Resource supports > 100 years production / Reserve of 3.2 million tonnes grading 24.8% Al_2O_3 supports DFS mine life of 25+ years





DETAILED HPA PRODUCT DEVELOPMENT

The Pilot Plant Has Validated FYI's HPA Flowsheet

- Purpose of facility is to trial FYI's innovative HPA flowsheet design
- Engineered to demonstrate and observe process flowsheet from "end to end"
- Testing of materials handling and materials of construction
- Further optimising system design and capacity
- Confirming equipment and process circuit requirements
- Assist in quantifying future production Capex and Opex parameters
- Lowering overall project risk by verifying process efficiency, yields and target grades
- HPA product sent to potential customer groups for product qualification and applications assessment









KWINANA REFINERY SITE

ENHANCEMENTS BENEFITING FYI HPA PROJECT DEVELOPMENT

- Fully integrated production within Western Australia
- Support from Western Australian State Government through Lead Agency - Department of Jobs, Tourism, Science and Innovation
- Founding member and participant in the Future Battery Industry CRC (FBI-CRC)
 - Development of HPA specialty battery applications suitable to FYI HPA
 - HPA key market development
- Prime positioning in Kwinana Industrial Area (KIA)
 - Ideal infrastructure and support
 - Reduction in raw material waste
 - Leverage with other KIA proponents (inputs and outputs)
 - Improve project economics









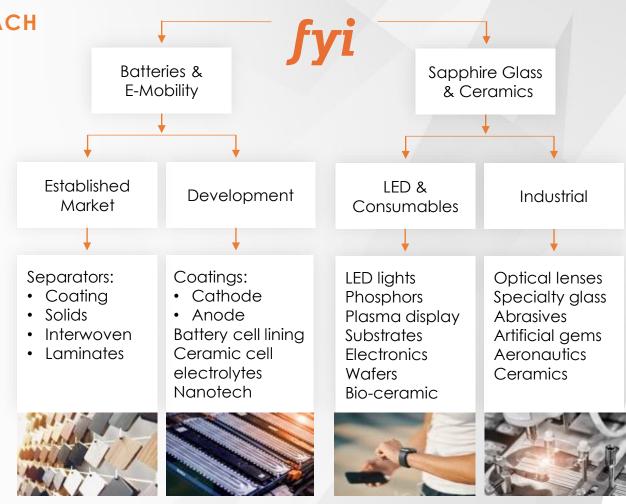




FYI HPA TARGET MARKETS

FYI HAS A DEFINED HPA OFF-TAKE MARKET APPROACH

- FYI is an emerging producer of high quality, high purity HPA
- FYI standard product is ultra pure 99.99% (4N) and 99.999%
 (5N) material with extremely low deleterious elements
- Key markets have been identified and targeted for compatibility with FYI's quality HPA
- Market determinants include:
 - Purity (4N or 5N)
 - Characteristics (ie crystal size, density, surface area)
 - Jurisdiction diversity
 - Application
 - Pricing
- FYI is developing alternative HPA product applications in collaboration with its research partners
- FYI is also advancing different variations of final product to suit different market application specifications



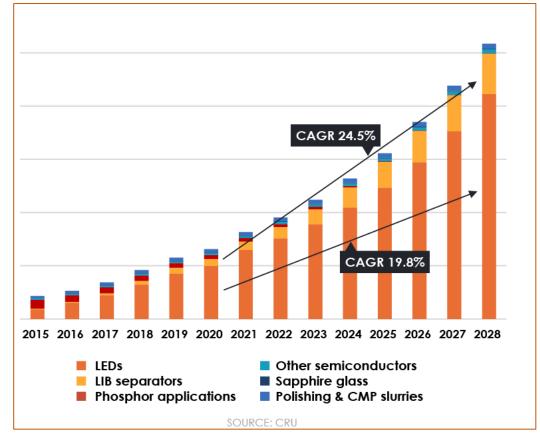


HPA MARKET OVERVIEW

GLOBAL HPA MARKETS ARE CONSOLIDATING

- HPA growth has been invigorated in response to global investment in EV's as post COVID19 stimulus incentives
- New applications and technologies have created increased demand and market opportunities
- The current global 4N HPA market demand is ~30ktpa 2021; this is expected to increase to >104ktpa by 2028*
- The market for HPA is witnessing dramatic consumer driven growth, with the HPA market forecasted to be US\$4.49Bn by 2022**

GLOBAL HPA MARKET OUTLOOK





STRONG FOCUS ON MARKET ENGAGEMENT

FYI IS HEAVILY ENGAGED IN PRODUCT MARKETING AND SECURING OFF-TAKE

Strong focus on market engagement in key Market jurisdictions



Structured approach targeting off-take and potential financing



Multiple rounds of meetings conducted
(Taiwan/South Korea/Japan/ Europe/ USA/UK)



HPA trial product sent by request to market participants (HPA customers, traders)



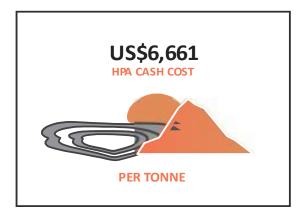
Detailed product development trials to meet customer specifications

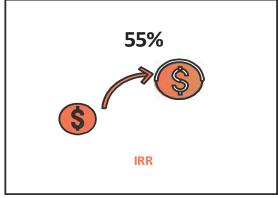


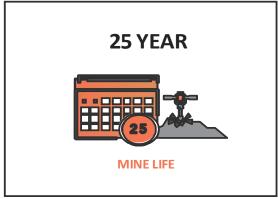


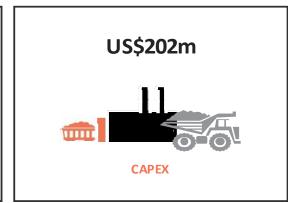
DFS OUTSTANDING PROJECT ECONOMICS SUMMARY

POST TAX



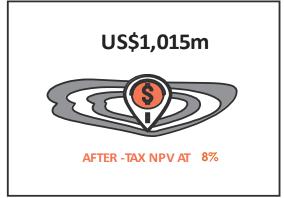


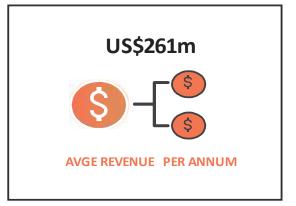












10,000 TPA HPA

US \$26,400/-T (4N + 5N) HPA

15% PRODUCTION IS 5N

Refer ASX announcement 8th April 2021



MAJOR MILESTONE - ALCOA HPA PROJECT MOU



ALCOA SUMMARY

- HPA project JV MOU signed with Alcoa September 2020
- Alcoa attracted to FYI:
 - Innovative and efficient HPA process
 - Depth and degree of R&D
 - Outstanding development success
 - Industry leading project economics
 - Impressive level of market progress
- Alcoa is one of the worlds leading alumina producers:
 - Globally recognized and highly accomplished
 - >100 years of alumina experience
 - Fortune 500 company
 - Leading industry operator and innovator
 - Technically driven attracted to FYI quality strategy
 - Global reach and relationships

FYI AND ALCOA HPA JV OBJECTIVE

- JV collaboration to build upon FYI's innovative HPA flowsheet and growth strategy
- JV to continue increasing project quality and value
- Collective JV alumina and HPA experience combine to create leading industry strategy
- Jointly develop new products and markets
- Leverage off separate and joint:
 - Technical knowledge and experience
 - Production capabilities
 - Marketing reach
 - Continuous improvement philosophy
- Improve on project capex and opex HPA strategy by joint development
- High ESG standards and targets



KEY ACHIEVEMENTS - PROJECT ENHANCEMENTS & DE-RISKING

- Alcoa JV MOU attracts world class alumina attention
- DFS confirmed Cadoux as a world-class HPA project
- Process flowsheet optimised to increase efficiencies + reduce Capex & Opex
- Metallurgical results exceeded 99.99% target HPA*
- Mining Lease granted and permitting completed
- Advancing HPA offtake negotiations with potential customers

- Industry validation of FYI HPA quality
- Pilot plant success validates and de-risks the project
- Project Reserves** providing > 50 years mine-life
- Kwinana "Battery Alley" refinery site approved
- Focused on fast-tracking development and construction
- Major strategic financing arranged.
 Negotiations for balance of project funding is underway



HPA PROJECT SUSTAINABILITY

- High ESG standards are becoming pre-requisites for HPA off-take counterparties
- FYI embraces best practice approach to HPA project development
- FYI HPA has total provenance authentication and traceability of their 100% integrated process
- High environmental and social standards and governance
- HPA project developed to maximise green and sustainable practices
- Distinct environmental advantages over current traditional supply (Alkoxide - bauxite / Aluminium)
 - Low environmental footprint
 - Reduction in raw material waste
 - Low toxic waste
 - Extensive recycling (inputs and outputs)
 - Approximately 50% reduction in greenhouse gas production / ton HPA
 - Approximately 40% reduction in processing energy consumption / ton HPA
- Contribute to clean and renewable industries (directly and indirectly)
 - Reduce fossil fuel dependency
 - Reduction of carbon gas emissions
 - Supplier to other sustainable and environmentally conscious industries (EV, LED)





PROJECT DEVELOPMENT SCHEDULE





FYI - INVESTMENT INTO EMERGING GROWTH SECTOR



Strategically funded and leveraged for growth



Robust integrated strategy founded on sound technical principles and project de-risking



Ideal project delivery timing coinciding with forecast market growth



Compelling integrated technical and geographical business model advantages



Partnering with tier 1 industry groups to become a dominant HPA produces



Best-in-class project economics with lowest quartile capex and opex



Ground floor entry to an emerging growth sector with significant upside





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FOR FURTHER DETAILS PLEASE CONTACT:



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FYI HPA - KEY DFS PROJECT ECONOMICS

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ITEM	UNIT	AMOUNT
HPA production	Тра	10,000
Production grade	Al_2O_3	> 99.99%
Capital cost (capex)	US\$m	202
Operating cost (opex)	US\$/t	6,661
Project NPV (@8%)	US\$m	1,015
Project IRR	%	55
Assumed HPA selling price / t	US\$/t	26,400
Annual revenue	US\$m	261
Operating margin	US\$/t	19,739
Annual EBITDA (avg)	US\$m pa	186
Total project revenue - life of project (~25 years)	US\$bn	4.7
Capital intensity	US\$/t	20,200
Project payback	years	3.2
Exchange rate	A\$:US\$	0.75

