



31 January 2023

ASX:FYI | OTCQX:FYIRF

# FYI Resources Activity Report for the quarter ended 31 December 2022

## Highlights

- *FYI and Alcoa continue to progress HPA project development*
- *Kwinana, WA location selected for small-scale HPA production and demonstration site*
- *FID supporting work progresses*
- *Joint Venture operational and business readiness agreements being prepared*
- *Increased joint HPA product marketing program continues*
- *Downstream HPA battery anode architecture studies advance with positive testwork*
- *FYI continues to assess critical mineral opportunities*
- *Outstanding ESG progress with FYI's inclusion into United Nations Global Compact*

FYI Resources Ltd (ASX: FYI) ("**FYI**" or "**Company**") is pleased to release its Activities Report for the quarter ending 31 December 2022 (**Quarter**).

FYI has successfully developed an innovative process design to produce high quality, high purity alumina (**HPA**). This low carbon emission process is now progressing towards commercialisation in joint development with one of the world's leading alumina producers, Alcoa of Australia Limited (**Alcoa**). The project is to be majority funded by Alcoa through its capital commitment of US\$243 million of the estimated US\$250m project cost under the binding Terms Sheet (announcement 1 October 2021) to earn Alcoa a 65% interest in the HPA project.

## HPA Project Development

FYI and Alcoa as the joint development partners in the HPA project continued significant progress with the development of the Stage Two small-scale production / demonstration plant. This included both advancing the engineering and operational design, and scheduling of the HPA project as well as the supporting commercial, legal and marketing aspects of the project.

## Operations readiness

The joint development partners continued execution of the Stage Two project workstreams in conjunction with Hatch Engineering. Development focus was on activities targeted towards a final investment decision (FID) and commencement of a small-scale production facility, these include technology and engineering improvements that the joint development partners have developed and refined during the quarter.

The HPA workstreams being progressed by the joint development partners and Hatch include:

### **Small-scale production facility / Demonstration plant**

The joint development partners have endorsed a site in Kwinana, Western Australia, selected as best meeting the project criteria. The small-scale production and demonstration plant is designed for the following multiple purposes:



- Generating suitable volumes of high quality HPA for comprehensive market engagement and customer qualification purposes
- Observing operating parameters and scale-up factors for the commercial production
- On-going research and development of HPA materials and product finishing.

### **Ancillary workstreams**

Supporting the development of the small-scale production and demonstration plant, the joint development partners have continued to progress:

- **Engineering and design**  
Hatch Engineering have finalised the JDP engineering and design workstreams for the small-scale production and demonstration plant. These are currently being reviewed ahead of FID1.
- **Technology development**  
The joint development partners continue to refine, test and improve various elements of the process design.
- **Development schedule**  
The development schedule is being examined by the joint development partners to be truncated to allow for early works and procurement of long lead capital items and development permitting
- **Statutory approvals**  
Permitting and statutory approvals for the small-scale production and demonstration plant commenced during the quarter.
- **HPA product finishing**  
Client directed product finishing and broader HPA product studies continue under the JDP development to increase and diversify HPA product range options.
- **Waste and water recycling**  
The HPA process design incorporates sustainable production practices through the flowsheet engineering. The joint development partners will continue to refine these input designs to optimise the process for operational efficiencies.
- **Energy reduction and recycling**  
Energy is a key input into the HPA process. Design enhancements of the flowsheet to reduce, recycle and recovery of energy is a continual improvement process to maximise operational efficiencies and reduced carbon emissions.

### **Business and Corporate Preparedness**

Additional Stage Two project activities being progressed by the JDP include:

#### **Comprehensive product marketing**

The joint development partners are targeting specific market segments for HPA offtake. Increased customer outreach to established, emerging and niche market segments continues to provide market assurance as well as product development guidance. These opportunities include sapphire glass, LEDs / micro-LEDs and electric vehicle (battery components) as well as other niche market opportunities arising as HPA becomes an increasingly important and sought-after product in the critical minerals sector.



The joint development partners also undertook the following marketing activities in support of the project development:

- *Comprehensive market analysis*
- *Qualification samples forwarded to potential customer*
- *European critical minerals meeting with industry participants*

### **Innovative Downstream HPA Development**

The joint development partners are exploring broader downstream value-add market opportunities for HPA which are consistent with FYI's longer-term business plan and the joint HPA development strategy with Alcoa.

One such opportunity is with ASX-listed graphite company, EcoGraf Limited (ASX: EGR), whereby FYI is undertaking collaborative innovative development utilising high quality FYI HPA as the performance enhancing material for lithium-ion battery architecture.

The objective of the HPA focused development is to increase the operational performance, reliability, longevity, safety and cost effectiveness in high power density batteries primarily for electric vehicles (EVs).

FYI and EGR have conducted further battery development during the quarter and will report on the results shortly, once the results have been collated and assessed. The testwork and battery development has focused on:

- High quality HPA coating and doping on graphite anodes
- HPA specialty coated lithium battery separators

FYI believe there is significant market opportunity in the US and Europe with demand expected to grow 30% pa with leading industry research group BMI Research reporting sales prices for coated anodes ranging between US\$5,000 to US \$10,000 per tonne with premium coated anode commanding higher prices (refer [www.benchmarkminerals.com/](http://www.benchmarkminerals.com/)).

### **Environment Social Governance (ESG)**

ESG is a fundamental principal to FYI's business model. FYI believes the ability to manage ESG risks and opportunities is increasingly important to FYI's license to operate, the shaping of its business and the future impact on the Company's bottom line. Providing sustainable options, visibility and accountability is equally important to our potential customers as well as other stakeholders.

FYI acknowledges its responsibilities as an emerging low carbon producer and the project's sustainability and ESG obligations

During the quarter, FYI was accepted as a member into the United Nations Global Compact in Australia (UNGC). The UNGC is a network of 16,000 businesses from more than 60 countries who share in best practices and emerging solutions for ESG. FYI will adopt the UN SDG goals as our ESG framework as they are a vital set of business values that strongly align with FYI's Sustainable Development Goals (SDGs)

Further information on UNGC is available by visiting: [www.unglobalcompact.org](http://www.unglobalcompact.org).



## ESG Reporting and Quarterly ESG Activity Summary

### FYI's December 2022 Quarterly ESG Progress Report

#### FYI Resources

ASX:FYI

##### Progress

**P** In progress  
**C** Completed  
**N** Not applicable

#### Period Comparison (Period 6 vs 7)

##### Governance

		Period 6 (Jul to Sep 2022)		Period 7 (Oct to Dec 2022)	
Code	Description	Status	Progress (A1-A5)	Status	Progress (A1-A5)
GOVERNING PURPOSE					
GO-01-C1	Setting purpose	VERIFIED	C C C C C	VERIFIED	C C C C C
QUALITY OF GOVERNING BODY					
GO-02-C1	Governance body composition	REPORTED	C P C P C	REPORTED	P C P C C
STAKEHOLDER ENGAGEMENT					
GO-03-C1	Material issues impacting stakeholders	VERIFIED	C C C C C	VERIFIED	C C C C C
ETHICAL BEHAVIOUR					
GO-04-C1	Anti-corruption practices	VERIFIED	C C C	VERIFIED	C C C
GO-04-C2	Mechanisms to protect ethical behaviour	VERIFIED	C C	VERIFIED	C C
RISK AND OPPORTUNITY OVERSIGHT					
GO-05-C1	Integrating risk and opportunity into business process	VERIFIED	C C P C C	VERIFIED	C C C C P

##### Planet

		Period 6 (Jul to Sep 2022)		Period 7 (Oct to Dec 2022)	
Code	Description	Status	Progress (A1-A5)	Status	Progress (A1-A5)
CLIMATE CHANGE					
PL-01-C1	GHG emissions	REPORTED	C C P	REPORTED	C C P
PL-01-C2	TCFD implementation	VERIFIED	N C N	VERIFIED	C N N
NATURE LOSS					
PL-02-C1	Land use and key biodiversity areas	REPORTED	C N N C N	REPORTED	N N C C N
FRESHWATER AVAILABILITY					
PL-03-C1	Water consumption	REPORTED	N P N N P	REPORTED	N N N P P

##### People

		Period 6 (Jul to Sep 2022)		Period 7 (Oct to Dec 2022)	
Code	Description	Status	Progress (A1-A5)	Status	Progress (A1-A5)
DIGNITY AND EQUALITY					
PE-01-C1	Diversity and inclusion	REPORTED	C C C C C	REPORTED	C C C C C
PE-01-C2	Pay equality	REPORTED	P C C P	REPORTED	P C P C
PE-01-C3	Wage level	REPORTED	P P	REPORTED	P P
PE-01-C4	Child, forced or compulsory labour	REPORTED	C	VERIFIED	C
HEALTH AND WELL-BEING					
PE-02-C1	Health and safety	REPORTED	P C	VERIFIED	P C
SKILLS FOR THE FUTURE					
PE-03-C1	Training provided	REPORTED	P C	REPORTED	C P

##### Prosperity

		Period 6 (Jul to Sep 2022)		Period 7 (Oct to Dec 2022)	
Code	Description	Status	Progress (A1-A5)	Status	Progress (A1-A5)
EMPLOYMENT AND WEALTH GENERATION					
PR-01-C1	Rate of employment	REPORTED	N N	VERIFIED	N N
PR-01-C2	Economic contribution	VERIFIED	C C	VERIFIED	C C
PR-01-C3	Financial investment contribution	VERIFIED	C C	VERIFIED	C C
INNOVATION OF BETTER PRODUCTS AND SERVICES					
PR-02-C1	Total R&D expenses	VERIFIED	C	VERIFIED	C
COMMUNITY AND SOCIAL VITALITY					
PR-03-C1	Total tax paid	VERIFIED	C	VERIFIED	C

## FYI's December Quarterly ESG Progress Report (continued)

<



## Quarter Activities Summary

### Activities achieved during December Quarter Include:

- ✓ Hatch Engineering advances Stage Two development, completing design workstream
- ✓ Small scale production / demonstration site selected and endorsed by joint development partners
- ✓ JDP team structure and head count increased; more hires to come
- ✓ Successful JDP targeted product market qualification and assessment activities
- ✓ HPA doped battery anode studies completed. Further studies progressing
- ✓ Identifying downstream critical minerals opportunities synergistic to FYI's low carbon future minerals objectives
- ✓ ESG annual audit finalised and positive re-rating awarded
- ✓ Inclusion into United Nations Global Compact and recognition of ESG standards
- ✓ Successful overseas critical minerals business opportunities meeting held with strategic potential customers.

### Planned March Quarter Activities Include:

- Hatch to incorporate Stage Two engineering improvements for FID1
- Pre-FID1 activities to be finalised
- Augment HPA JDP project team headcount further
- Progress project schedules, statutory approvals and permitting for small-scale production and demonstration plant
- Extensive HPA product marketing initiatives to continue
- Client directed HPA product generation
- HPA product marketing and assessment continued
- Progress ESG objectives and continual improvement
- HPA coated battery anode and separator testwork reviewed and test program revised
- Continue to review critical minerals opportunities.

### Treasury

The Company ended the December Quarter with a cash balance of ~ \$10.1 million (September: \$10.8 million).

### ASX Additional Information

ASX listing rule 5.3.1 and 5.3.2 - Exploration and evaluation cash payments (net of GST) during the quarter were approximately \$1.1 million. Details of exploration, evaluation and development activities during the December 2022 quarter are set out in this report.

There were no substantive mining production activities during the quarter.

ASX listing rule 5.3.5 - Appendix 5B, Section 6.1 – description of payments: During the quarter approximately \$151,000 was paid to Directors for director fees and applicable superannuation.

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

Roland Hill  
Managing Director  
Tel: +61 414 666 178  
[roland.hill@fyiresources.com.au](mailto:roland.hill@fyiresources.com.au)



## Interest in Mineral Tenements as at 31 December 2022

Tenement	Location	Interest at the beginning of the quarter	Interest at the end of the quarter
E70/4673	Western Australia	100%	100%
M70/1388		100%	100%
WMM SPLs (6)	Thailand	100% (under application)	100% (under application)

### 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 to 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



## Appendix 5B

### Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

FYI Resources Limited

ABN

85 061 289 218

Quarter ended ("current quarter")

31 December 2022

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
<b>1.</b>	<b>Cash flows from operating activities</b>		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(1,131)	(1,570)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(201)	(390)
	(e) administration and corporate costs	(309)	(534)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	50	68
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	888	888
1.8	Other (provide details if material)	-	-
<b>1.9</b>	<b>Net cash from / (used in) operating activities</b>	<b>(703)</b>	<b>(1,538)</b>

<b>2.</b>	<b>Cash flows from investing activities</b>		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) exploration & evaluation	-	-
	(e) investments	-	-
	(f) other non-current assets	-	-



<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (6 months) \$A'000</b>
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	-	-

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	-	-

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	10,812	11,647
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(703)	(1,538)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	-
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	<b>Cash and cash equivalents at end of period</b>	<b>10,109</b>	<b>10,109</b>

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	2,109	2,812
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (term deposit)	8,000	8,000
5.5	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>10,109</b>	<b>10,812</b>

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	151
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
<i>Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.</i>		

7.	Financing facilities <i>Note: the term "facility" includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.</i>	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	<b>Total financing facilities</b>	-	-
7.5	<b>Unused financing facilities available at quarter end</b>		-
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(703)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	-
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(703)
8.4	Cash and cash equivalents at quarter end (item 4.6)	10,109
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	10,109
8.7	<b>Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>	14.4
	<i>Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.</i>	
8.8	If item 8.7 is less than 2 quarters, please provide answers to the following questions:	
8.8.1	Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
	Answer: N/A.	
8.8.2	Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
	Answer: N/A.	
8.8.3	Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?	
	Answer: N/A.	
	<i>Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.</i>	

## Compliance statement

- This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- This statement gives a true and fair view of the matters disclosed.

Date: 31 January 2023

Authorised by: Roland Hill, Managing Director  
(Name of body or officer authorising release – see note 4)

## Notes

- This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An

---

**Mining exploration entity or oil and gas exploration entity quarterly cash flow report**

---

entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.

2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.