





ASX:14D

# September 2024 Quarterly Activity Report

#### Highlights

- Oversubscribed SPP raised \$1.08 million to fast-track projects
- Secured up to \$4.7 million from Lind Partners to fund SiBox® installations
- Submitted proposals to multiple Australian manufacturers to integrate SiBox and reduce gas use
- Advanced SiPHyR<sup>™</sup> hydrogen project with CRC-P funding and Woodside partnership
- Progressed transmission agreement for 140MW battery in Aurora Energy Precinct

**1414 Degrees Ltd** (ASX: 14D) ("1414 Degrees", "14D', or the "Company") is pleased to release its Quarterly Report for the period ending 30 September 2024.

#### Chairman's Letter

Dear Shareholders, followers and collaborators,

I am pleased to share with you the latest update on the progress of your Company. We are grateful for continued support from our shareholders, Woodside Energy Technologies Pty Ltd (Woodside) and the Australian Government to continue developing our SiBox system for commercial readiness.

Our hydrogen strategy is generating industry interest because it is focused on efficiently decarbonising the existing natural gas supply that most manufacturers rely upon to generate heat.

During the quarter, a further \$5.8 million was made available to advance our projects, providing the Company with sufficient funding for its commercial objectives.

Industrial customers continue to approach us seeking solutions to decarbonise their heat supply, using renewable electricity. The SiBox system continues to stand out as a highly effective energy storage solution for customers to meet their emissions reduction targets.

SiBox is unique in having publicly demonstrated a stable high-temperature heat supply from intermittent renewable sources, with the added benefit of minimising energy costs through independent charging and discharging. Its compact, modular design also allows customisation to meet the specific needs of diverse industries.

We are collaborating with leading industrial equipment suppliers to tailor solutions for several potential customers. The current customer focus is medium temperature processes, which present fewer risks and require minimal disruption to existing operations. Successful commercial operation of SiBox in this temperature range will pave the way for supplying higher temperature solutions as customer confidence grows and emissions reduction targets mature.

With this growing confidence in commercial prospects and the firming of SiBox market opportunities, we have been arranging finance for this pivotal time of your Company's evolution. Up to \$5 million is now available for our expansion under the Federal Government's Industry Growth Program, and several of the industries who have engaged with us are also planning to access their own grants for the first stage of their emissions reduction campaign. Furthermore, Woodside retains its option to finance commercialisation of SiBox to earn up to 49% interest in our SiBox Intellectual property.

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Shareholders supported our recent share purchase plan which closed over target. We also secured up to \$4.7 million in institutional investment from Lind Partners to support our growth as we transition from project development to contract execution for SiBox installations in industry.

I am confident that the strength of our funding and the growing commercial prospects of our Company will be reflected in both market capitalisation and share price performance.

Our Aurora Energy Precinct joint venture development of a large grid connected battery (BESS) has continued to make progress despite increasing regulatory hurdles for projects. We remain actively involved with both national and international infrastructure companies willing to invest in development and operation of the BESS. We continue to work with Hannam and Partners to realise this opportunity for our shareholders.

While the economic challenges associated with producing hydrogen through electrolysis become clear (canvassed in recent media coverage), the benefits of 1414 Degrees' proposed turquoise hydrogen, are expected to attract increased attention. We plan to produce hydrogen by decarbonising natural gas, offering an easier and lower-cost route to emissions reduction for existing industrial infrastructure. The funding from the SPP has allowed us to accelerate development of our SiPHyR hydrogen production technology.

With our growth now securely funded, I look forward to reporting substantial commercial progress for your Company and thank you for your continued support.

Dr Kevin Moriarty

Kenn Morean

Executive Chairman

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During the quarter, 14D evaluated new commercial opportunities, submitted proposals and responded to tenders from manufacturers. Below is a summary of key initiatives.

#### Key Achievements:

- Our team attended key events, including the Renewable Energy Conference, engaging in productive discussions with potential customers and partners.
- Ongoing customer discovery and market research has confirmed an immediate market for SiBox in lower-temperature applications seeking to transition from fossil fuel-based processing.
- We are actively engaging international markets, with industries in Asia showing interest in thermal energy storage solutions. Site visits to evaluate these are planned for the next quarter.

#### **Active Projects**

We submitted proposals to multiple Australian manufacturers to reduce their gas usage with SiBox systems.

Some examples include:

- site visits by engineers to scope requirements, and preparing cost estimates for a scalable SiBox solution to reduce natural gas consumption in industrial steam production (with discussions on carbon offset considerations and financing options ongoing),
- a pre-feasibility report to integrate SiBox, following a technical visit to a manufacturing operation (with next steps involving a deeper energy analysis),
- a significant opportunity to facilitate the transition of steam processes in large-scale energy production, with plans to secure government grants to support implementation.

#### Future Outlook:

The Company is developing partnerships with integration and engineering contractors to refine cost estimates and enhance our ability to deliver competitive solutions. We are also working with project finance providers to structure financing solutions for future projects.

## SiPHyR<sup>™</sup> HYDROGEN TECHNOLOGY

There was significant development of our SiPHyR technology. Leveraging the \$2.5 million CRC-P grant awarded earlier this year, we have accelerated our derisking and development efforts in collaboration with our partners, Woodside, the University of Adelaide, and the Royal Melbourne Institute of Technology (RMIT).

We are also pleased to welcome Dr. Farzad Poursadegh as our new Development Manager – Hydrogen. His expertise will be instrumental in advancing the SiPHyR project and achieving our goal of producing cost-effective, turquoise hydrogen.

The initial phase, funded by 1414 Degrees, aims to accelerate the design and operation of a high-pressure reactor to optimise methane conversion and carbon capture. We will provide an update on trial results in the upcoming period

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#### SiBrick<sup>®</sup> DEVELOPMENT

The Company continues to develop SiBrick, our proprietary thermal energy storage solution, to further optimise performance, cost-efficiency, and scalability. These enhancements ensure SiBrick meets the evolving demands of industrial customers and maximises long-term value, strengthening our competitive position in the market.

During the quarter, we successfully commissioned a new 300tonne brick press (pictured left), marking a significant milestone in SiBrick development. This press enables faster, more efficient production of prototype and pre-commercial bricks, positioning the Company for mass production and aligning with our broader decarbonisation strategy.

The Company continues to advance SiBrick towards large-scale deployment through its joint venture with Refratechnik Steel GmbH. This collaboration has progressed mass manufacturing testwork to further refine the design of SiBrick, ensuring the product meets the technical and commercial requirements of heavy industry.

The focus remains on achieving optimal energy storage capacity, mechanical integrity, and thermal performance while ensuring cost efficiency for future customers.

## **AURORA ENERGY PRECINCT**

Work continues on the Aurora Energy Precinct, with a focus on securing critical transmission access for the project. We are currently in the final stages of negotiating a transmission connection agreement, and we look forward to updating shareholders on these developments.

#### **CORPORATE AND FINANCIAL**

A Share Purchase Plan (SPP) during the quarter closed over target, raising \$1.08 million to support fasttracking SiPHyR development, the Aurora BESS project, commercialisation of SiBox technology, and mass production trials for SiBrick. Approximately 17.9 million new shares were issued at a price of \$0.06 per share. We extend sincere thanks to all shareholders for their continued support.

An announcement on 16 September 2024<sup>1</sup> confirmed a new funding arrangement with Lind Global Partners II LP for up to \$4.7 million in institutional investment to 1414 Degrees. This funding will support the Company as it transitions from project development to executing commercial SiBox installations and other growth initiatives. The flexible financing model ensures that 1414 Degrees can manage equity dilution while

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<sup>&</sup>lt;sup>1</sup> https://cdn-api.markitdigital.com/apiman-gateway/ASX/asx-research/1.0/file/2924-02852952-2A1548569



maintaining access to capital necessary for scaling operations. The partnership further enhances the Company's financial stability and prepares it for key commercial milestones in the coming quarters.

Your Company ended the quarter with \$3.4 million in cash, an increase of \$1.6 million from the previous quarter. As required by ASX Listing Rule 4.7C3, the Company notes that \$81,000 was paid to related parties during the quarter. These payments were Directors Fees.

#### AUTHORISED BY:

Dr Kevin Moriarty, Executive Chairman on behalf of the Board of Directors

For investor enquiries or further information, please contact: info@1414degrees.com.au or +61 8 8357 8273

#### ABOUT 1414 DEGREES LIMITED

1414 Degrees is a leader in industrial decarbonisation with its cutting-edge silicon-based solutions, enabling the alignment of energy supply with demand, fostering the widespread adoption of renewable energy. Our key technologies include:

**SiBrick®:** thermal energy storage technology safely and efficiently stores renewable electricity as latent heat, available for use on demand.

**SiBox®:** facilitates the transition to sustainable industrial processes, SiBox delivers consistent, high-temperature heat. It can be seamlessly retrofitted into heavy industry processes, offering a viable alternative to conventional energy sources.

SiPHyR<sup>™</sup>: methane pyrolysis reactor with integrated storage. SiPHyR will produce low-emission hydrogen and solid carbon using renewable energy sources.

1414 Degrees has showcased its capabilities through successful pilot projects that highlight the reliability and effectiveness of its solutions. SiBox has proven its ability to deliver high-temperature air or steam on demand from stored heat. The development of SiPHyR underscores our commitment to innovation and sustainability.

In 2019 the Company made the strategic purchase of the Aurora Energy Project (AEP) located near Port Augusta, South Australia. The project is a long-term renewable energy initiative to deliver reliable electricity to the region and National Electricity Market. The AEP has approval for 14D to pilot and demonstrate a large commercial scale version of the SiBox technology.

For more information, please visit <u>www.1414degrees.com.au</u>

#### Forward-looking statements

This announcement includes forward-looking statements which may be identified by words such as 'anticipates', 'believes', 'expects', 'intends', 'may', 'will', 'could', or 'should' and other similar words that involve risks and uncertainties. These forward-looking statements are based on the 1414 Degrees' expectations and beliefs concerning future events as at the date of this announcement. Forward-looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of 1414 Degrees, which could cause actual results to differ materially from such statements. 1414 Degrees makes no undertaking to update or revise the forward-looking statements made in this announcement to reflect any change in circumstances or events after the date of this announcement.

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# Appendix 4C

# Quarterly cash flow report for entities subject to Listing Rule 4.7B

# Name of entity

1414 Degrees Limited			
ABN Quarter ended ("current quarter")			
57 138 803 620		30 September 2024	

Cor	solidated statement of cash flows	Current quarter \$A'000	Year to date (3months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) research and development	(233)	(233)
	<ul> <li>(b) product manufacturing and operating costs</li> </ul>	(12)	(12)
	(c) advertising and marketing	(22)	(22)
	(d) leased assets	(1)	(1)
	(e) staff costs	(333)	(333)
	(f) administration and corporate costs	(880)	(880)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	6	6
1.5	Interest and other costs of finance paid	(19)	(19)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	304	304
1.8	Other (provide details if material)		
	<ul><li>Partner project contributions</li><li>Other</li></ul>	365	365
1.9	Net cash from / (used in) operating activities	(825)	(825)

2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) businesses	-	-
	(c) property, plant and equipment	(14)	(14)

ASX Listing Rules Appendix 4C (17/07/20) + See chapter 19 of the ASX Listing Rules for defined terms.

Cons	olidated statement of cash flows	Current quarter \$A'000	Year to date (3months) \$A'000
	(d) investments	-	-
	(e) intellectual property	-	-
	(f) other non-current assets	-	-
2.2	Proceeds from disposal of:		
	(a) entities	-	-
	(b) businesses	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) intellectual property	-	-
	(f) other non-current assets	-	-
2.3	Cash flows from loans to other entities	(180)	(180)
2.4	Dividends received (see note 3)	-	-
2.5	Other (return of rental bond)	63	63
2.6 Net cash from / (used in) investing activities		(131)	(131)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	2,403	2,403
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	(73)	(73)
3.5	Proceeds from borrowings	264	264
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)	(23)	(23)
3.10	Net cash from / (used in) financing activities	2,571	2,571

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3months) \$A'000	
4.	Net increase / (decrease) in cash and cash equivalents for the period			
4.1	Cash and cash equivalents at beginning of period	1,819	1,819	
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(825)	(825)	
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(131)	(131)	
4.4	Net cash from / (used in) financing activities (item 3.10 above)	2,571	2,571	
4.5	Effect of movement in exchange rates on cash held	-	-	
4.6	Cash and cash equivalents at end of period	3,434	3,434	

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	3,434	1,819
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)		
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	3,434	1,819

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	81
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
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.		

7.	<b>Financing facilities</b> 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.	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 (Insurance Premium Funding) 264		264	
7.4	Total financing facilities	-	-	
7.5	Unused financing facilities available at q	uarter end	-	
7.6	Include in the box below a description of eac rate, maturity date and whether it is secured facilities have been entered into or are prop include a note providing details of those fac	l or unsecured. If any add osed to be entered into af	itional financing	
	14D has funded its insurance premiums through Hunter Premium Funding. The loan is unsecured, with a 10-month maturity. Interest charged on the loan balance comprises of a flat rate of 3.32% and an annual percentage rate of 8.8%.			

8.	Estima	ated cash available for future operating activities	\$A'000	
8.1	Net cas	sh from / (used in) operating activities (item 1.9)	(825)	
8.2	Cash a	nd cash equivalents at quarter end (item 4.6)	3,434	
8.3	Unused	d finance facilities available at quarter end (item 7.5)	-	
8.4	Total a	vailable funding (item 8.2 + item 8.3)	3,434	
8.5	Estima item 8.	ited quarters of funding available (item 8.4 divided by 1)	4	
		Note: if the entity has reported positive net operating cash flows in item 1.9, answer item 8.5 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.5.		
8.6	If item 8.5 is less than 2 quarters, please provide answers to the following questions:			
	8.6.1 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?			
	Answei			
	8.6.2 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?			
	Answei	r:		
	8.6.3	8.6.3 Does the entity expect to be able to continue its operations and to meet its business		

objectives and, if so, on what basis?

Answer:

Note: where item 8.5 is less than 2 quarters, all of questions 8.6.1, 8.6.2 and 8.6.3 above must be answered.

# **Compliance statement**

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

30 October 2024

Date:

The Chairman of the Board

#### Notes

- 1. 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 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 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 standard applies 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.