



27 April 2022

ASX: 14D

March 2022 Quarterly Activity Report & Appendix 4C

Highlights:

- Successful completion of SiBox demonstration module design and external validation modelling
- All major equipment specifications finalised and site preparation milestone approvals received from funding partner Woodside to now proceed with next phase of activities
- Further recognition for 1414 Degrees' long duration energy storage technology when announced as recipient of the SA Innovation Award at the 2022 CORE Innovation Hot 30 Awards
- Aurora Energy Project tenure refreshed following execution of amended Tripartite agreement with pastoral leaseholder and SA State Government Ministers
- Extensive work to update the Aurora project design and reconfirm the Battery Energy Storage System (BESS) following receipt of renewed pricing and scope from vendors
- External third party economic modelling of Aurora reviewed and confirms robust business case for Stage 1, 140 MW BESS project
- Preparations for selection of preferred vendor and technology completed for Aurora
- First instalment of Australian Federal Government's Modern Manufacturing Initiative grant received
- Maintaining disciplined funding position with \$4.5 million cash (zero debt) as at March 31st

Clean, scalable renewable energy storage developer 1414 Degrees Limited ("14D" or "the Company") (ASX: 14D) provides the following activity report and Appendix 4C for the period ending 31 March 2022.

Comments by Matt Squire, Chief Executive Officer of 1414 Degrees

The quarter has seen significant progression in both of our core renewable energy projects.

The successful completion of the site preparation activities for the SiBox demonstration module and subsequent confirmation by our funding partner Woodside Energy Technologies is a significant achievement. Testing of the phase change material (PCM) containment system in our furnaces has also confirmed our selection of materials and configuration. We are now moving ahead with final procurement of equipment and commencement of construction later in the year. It is a great credit to our technical team that the project has reached this milestone and I am proud of their hard work for shareholders.

High energy prices and geopolitical events have continued to reinforce our view that the world is in desperate need for an energy storage solution with the performance objectives of our SiBox design. Our focus remains on proving we have a system that can deliver reliable, high temperature renewable heat through the utilisation of the storage properties of molten Silicon. It was pleasing to receive further acknowledgement of our technology when the company was announced as the recipient of the SA Innovation Award, presented by the South Australian Department for Energy & Mining, at the 2022 CORE Innovation Hot 30 Awards. These awards recognise innovation across Australia's most important

industries: mining, energy, resources, oil & gas, space and defence. Further background for shareholders can be found here: <https://www.coreinnovationhot30.com.au/about>

The Aurora Energy Project near Port Augusta was also advanced significantly in the quarter. The development team worked closely with Ovida to update the project's work packages and renew engagement with vendors. Economic modelling commissioned by Ovida has also assisted in determining the optimal technical configuration of the project and confirmed our belief that Aurora is on track to be a robust investment opportunity. Our focus remains on selection of a preferred technical provider for the Stage 1 140MW/280 MWh BESS however the next stages of the project, Stage 2 (70 MW Solar) and 3 (150 MW Concentrated Solar), will also provide us with excellent future renewable investment opportunity.

Subsequent to the end of the quarter (and as announced to the ASX on April 5th) Ovida advised us that they were withdrawing from the exclusivity arrangement due to a strategic decision by their shareholders to no longer invest in unregulated electricity projects. Whilst this was disappointing the project has benefited from Ovida's involvement and the funds they provided will be put to use as we continue with the final approvals processes. In parallel we will consider the introduction of a new partner to the project and initial engagement with prospective participants has commenced with initial feedback being extremely positive.

The company remains in an excellent financial position with our cash balance increasing to \$4.5 million. We will continue to look at ways to minimise non-project expenditure and are committed to an ongoing disciplined approach towards the utilisation of shareholder funds.

Silicon based Renewable Energy Storage technology / SiBox Demonstration Module project

Substantial activity in the quarter has seen the continued progression of the SiBox project which is on track for construction later this year. Engineering design has now been finalised and major equipment specification is complete.

The first delivery of phase change material (PCM) has been received. The silicon based alloy is contained within the 14D storage media to provide high energy density thermal storage from latent heat. This delivery marks the first major component of the SiBox Demonstration Module. Additional PCM is in production along with the containment solution and are expected to arrive from overseas suppliers in Q3 2022. Testing and thermal cycling of our PCM containment system has continued throughout the quarter in our furnaces on-site. Results continue to support our selection of materials and optimised configuration for the SiBox.

Computational fluid dynamics (CFD) modelling of the SiBox performance was commissioned and completed by Royal Melbourne Institute of Technology (RMIT). This has successfully validated our internally developed design model with results providing further confidence in the SiBox design. These activities now provide us with detailed targeted performance parameters and will also be a key comparator when we assess our actual test data during future operation of the project.

The completion of our equipment specification and selection is also a major project milestone under our agreement with Woodside Energy Technologies. The satisfaction of this milestone will allow the next phase of activities to commence and associated funding to be provided. At the end of the quarter

\$500,000 had been received to date from Woodside out of the total \$2 million under our funding agreement.

Subsequent to the quarter's end, the tender has been awarded for the SiBox furnace, a core component of SiBox consisting of high-grade insulation to contain the storage media at 1400°C and integrate to the Energy Recovery System (ERS). Additionally, orders have been placed for other major equipment including the ERS heat exchanger.

Aurora Energy Project (AEP) – Port Augusta

Work continued on further advancement of the Aurora Energy Project (AEP) located approximately 30km north of Port Augusta in South Australia. The AEP has approvals for the development of: 140MW/280MWh battery energy storage system (BESS), 70MW Solar Photo-Voltaic (PV), 150MW Concentrated Solar Power (CSP) as well as a pilot for own thermal energy storage. The project is staged with our initial focus on Stage 1 being the development and connection of the 140 MW BESS to the adjacent 275kV transmission system.

During the quarter the AEP project tenure was restated following the execution of an amended Tripartite agreement between 1414 Degrees' subsidiary Silicon Aurora Pty Ltd, the pastoral leaseholders Buckleboo Nominees and requisite SA Government authority. This included the SA Minister for Environment and Water as well as the Minister for Primary Industries and Regional Development. The restated agreement replaces the 2019 document and provides for a 40 year project life from a start date that is more closely aligned with the current project timeframes.

Significant development activities were undertaken in conjunction with Ovida Infrastructure Pty Ltd (Ovida) under an exclusivity MoU executed between the parties on 20th December. These included:

- The updating of all project basic concept and design
- Reconfirmation of BESS suppliers and receipt of updated pricing and technical scope
- Commissioning (by Ovida) of independent economic modelling to assess the optimised economics of the Stage 1, 140 MW BESS in the NEM
- Review and confirmation of all technical inputs required for commencement of GPS modelling

In addition a submission was prepared in response to the ARENA advanced inverter (large-scale battery fund) Expression of Interest for future potential funding support.

Subsequent to the end of the quarter, Ovida advised on 5th April they were withdrawing from the exclusivity MoU due to a change in strategy of their shareholders. 1414 Degrees will receive a \$100,000 termination payment and retain all intellectual property generated since execution of the MoU. All past payments made by Ovida (including the initial payment of \$300,000 on signing the MoU) are retained by 1414 Degrees. The Ovida MoU was solely in relation to the development of the AEP and completely separate from 14D's Thermal Energy Storage System technology that is being developed with support from Woodside.

The AEP is held by 1414 Degrees through its 100% owned subsidiary Silicon Aurora Pty Ltd. The Company intends to continue to progress the development of the AEP which is a world class renewable energy opportunity. A Stage 1 FID decision for the BESS is targeted for early 2023 following completion of final approvals and agreements.

Corporate

As of March 31st 2022 1414 Degrees had the following capital structure:

- Shares on issue: 201,485,458
- Unlisted Employee Performance Rights: 2,150,000

The company has 11 employees with several of these working part-time.

Financial

At quarter end the Company held \$4.535million in cash and has no debt. The increase in cash balance of \$0.717million included payments received from Woodside Energy Technologies of \$0.3million, Ovida of \$0.3million and the receipt of \$0.880million being the initial instalment of the \$2.2 million grant awarded to 1414 Degrees under the Australian Federal Government's Modern Manufacturing Initiative in November 2021.

As required by ASX Listing Rule 4.7C3, the Company notes that \$24,000 was paid to related parties during the quarter. These payments were Directors Fees.

This announcement was authorised by the Board of 1414 Degrees Limited.

FOR FURTHER INFORMATION PLEASE CONTACT:

Matt Squire, Chief Executive Officer
+61 8 8357 8273
info@1414degrees.com.au

ABOUT 1414 DEGREES LIMITED

1414 Degrees is developing and commercialising its silicon-based thermal energy storage technology, SiBox™, to enable a clean energy future. SiBox will harness the extremely high latent heat capacity of silicon in its proprietary storage system. This will enable intermittent renewables to provide flexible, ultra-high temperature heat 24/7 for large industrial applications and to deliver reliable heat and power supply when required. It is envisaged that the flexibility of the SiBox™ modular development concept will also provide energy customers with the ability to optimise their energy systems in a way that maximises their utilisation of cheaper renewable power and simplifies their purchasing from wholesale energy suppliers.

The Company plans to commission a demonstration module of the SiBox™ technology in 2022 which will accelerate the commercialisation of SiBox™ as a competitive clean energy product. The Company has previously implemented pilots which have led to the refinement and evolution of its technology.

In 2019 the Company made the strategic purchase of the Aurora Energy Project (AEP) located near Port Augusta, South Australia. The focus of the project is to develop a long-term renewable energy project delivering reliable electricity to the region and NEM. Once ready for commercialisation, the AEP site will also allow 14D to pilot and demonstrate a large commercial scale version of the SiBox™ technology. For more information, please visit www.1414degrees.com.au

Disclaimer

1414 DEGREES LTD
ABN 57 138 803 620

ASX
14D

ADDRESS
136 Daws Road,
Melrose Park SA 5039

EMAIL
info@1414degrees.com.au

PHONE
+61 8 8357 8273



1414DEGREES.COM.AU

This announcement may contain certain "forward-looking statements" which may not have been based solely on historical facts, but rather are based on the Company's current expectations about future events and results.

Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, forward- looking statements are subject to risks, uncertainties, assumptions and other factors, which could cause actual results to differ materially to futures results expressed, projected or implied by such forward looking statements.

The Company does not undertake any obligation to release publicly any revisions to any "forward-looking statements" to reflect events or circumstances after the date of this announcement, or to reflect the occurrence of unanticipated events, except as may be required under the applicable securities laws.

Appendix 4C

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

Name of entity

1414 Degrees Ltd

ABN

57 138 803 620

Quarter ended ("current quarter")

31 March 2022

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers	-	172
1.2 Payments for		
(a) research and development	(95)	(187)
(b) product manufacturing and operating costs	(3)	(7)
(c) advertising and marketing	(11)	(42)
(d) leased assets	(1)	(3)
(e) staff costs	(544)	(1,791)
(f) administration and corporate costs	(180)	(1,876)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	4	13
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	896	1,726
1.8 Other (provide details if material)		
- Partner Project Contributions	600	800
- GST	87	69
- Other	5	3
1.9 Net cash from / (used in) operating activities	758	(1,123)
2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) businesses	-	-
(c) property, plant and equipment	(41)	(47)

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$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	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(41)	(47)

3.	Cash flows from financing activities		
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)	-	-
3.10	Net cash from / (used in) financing activities	-	-

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	3,818	5,705
4.2	Net cash from / (used in) operating activities (item 1.9 above)	758	(1,123)

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(41)	(47)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	4,535	4,535

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	4,535	3,818
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)	4,535	3,818

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	(24)
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. Financing facilities	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
<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>		
7.1 Loan facilities	-	-
7.2 Credit standby arrangements	-	-
7.3 Other (please specify)	-	-
7.4 Total financing facilities	-	-
7.5 Unused financing facilities available at quarter end		-
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)	758
8.2 Cash and cash equivalents at quarter end (item 4.6)	4,535
8.3 Unused finance facilities available at quarter end (item 7.5)	-
8.4 Total available funding (item 8.2 + item 8.3)	4,535
8.5 Estimated quarters of funding available (item 8.4 divided by item 8.1)	n/a
<i>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.</i>	
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?	
Answer: n/a	
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?	
Answer: n/a	
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: n/a	
<i>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.</i>	

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.

Date: 27 April 2022

Authorised by: By the Board
(Name of body or officer authorising release – see note 4)

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.