



12 February 2024

ASX:14D

## 1414 DEGREES SECURES \$2.5m GRANT FOR SiPHyR HYDROGEN TECHNOLOGY

1414 Degrees Ltd ("1414 Degrees", "14D", or the "Company") is proud to announce that it has been awarded a \$2.5m Cooperative Research Centres Projects (CRC-P) grant by the Australian Government to advance its SiPHyR technology for affordable low-carbon hydrogen production. This funding is part of a \$5.2m project, conducted in collaboration with the University of Adelaide (UoA), Woodside Energy, Vulcan Steel, and the Royal Melbourne Institute of Technology, to develop a methane pyrolysis reactor for cost-effective hydrogen production.

SiPHyR (SiBrick integrated Pyrolytic Hydrogen Reactor) combines methane pyrolysis - a high-temperature process that transforms methane into hydrogen gas and solid carbon, with 14D's proprietary silicon energy storage technologies SiBrick® and SiBox®. SiPHyR stands out in the lower-emissions hydrogen production landscape by circumventing the technical and cost challenges of capturing carbon dioxide from hydrogen produced via gas reforming, while requiring less electricity generation and transmission infrastructure than hydrogen produced via water electrolysis using renewable power.

The CRC-P grant builds on the Company's recent announcement (8 January 2024) that it has secured an exclusive licence from the UoA to commercialise its dual column fluid reactor technology. This reactor will be an integral component of SiPHyR.

The project aims to advance SiPHyR from its current Technology Readiness Level (TRL) of 2 to TRL 5 within three years. A critical deliverable of this project is a detailed plan for a scaled demonstration at TRL 7 within two years of this project's completion, ensuring the technology's readiness for commercialisation.

### AUTHORISED BY:

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

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### ABOUT 1414 DEGREES LIMITED

1414 Degrees is an innovative clean energy company specialising in thermal energy storage solutions to decarbonise high temperature industry and power generation. 1414 Degrees' SiBrick® is a mass manufacturable silicon thermal storage which harnesses silicon's extremely high energy density. The SiBox® latent heat battery, one of several applications for SiBrick, provides consistent, carbon-free heat at high temperatures from renewable sources.

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

For more information, please visit [www.1414degrees.com.au](http://www.1414degrees.com.au)



#### 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.

For more information, please visit [www.1414degrees.com.au](http://www.1414degrees.com.au)