



26 October 2018

ASX:14D

QUARTERLY SHAREHOLDER UPDATE

HIGHLIGHTS

- **\$16.3 million IPO and ASX listing**
- **10MWh TESS-IND first stage commissioning results better than anticipated**
- **November construction start agreed with SA Water for 10MWh GAS-TESS installation**
- **North American power companies respond positively to 1414 Degrees exhibits at American Electrification 2018 conference**
- **R&D tax incentive payment of \$2.5m from ATO**
- **First 35 cent options exercised**

1414 Degrees Limited (ASX:14D) is pleased to provide its third quarter 2018 update.

IPO

Following a successful \$16.3 million IPO, the Company's shares and options commenced trading on the ASX on 12 September 2018. At the date of this report 34% of the issued shares are held in escrow. Over 2,000 new shareholders subscribed, joining over 100 seed shareholders who contributed more than \$10.5m in the past 18 months. In all the Company has now raised over \$30m including grants from the Commonwealth Government through AusIndustry, and the SA Government's Renewable Technology Fund (RTF).

PROJECTS

10MWh TESS-IND commissioning

Commissioning is a multi-stage process to verify performance of individual components, refine operability of the control systems, and optimise power generation. Successful commissioning will result in efficient automated operation.

The first stage of the TESS-IND commissioning included several multi-hour runs of the turbine producing up to 200kW even though the silicon store was hundreds of degrees below its target operating temperature.

Running on hot air alone, the turbine produced electricity for runs of up to four and half hours, achieving a combined heat power (CHP) efficiency of 68%. These results were better than anticipated at this very early stage with low store temperature.

The first load of silicon phase change material has now been installed to test latent heat performance. The store temperature will be progressively increased to cycle the heat store with turbine runs through to early November. This will enable our engineers to fine-tune for maximum efficiencies at operational temperature. The results are expected to be reported later in November.

For more information see ASX Announcement of 12 September 2018

GAS-TESS project for SA Water

In October 1414 Degrees' and SA Water signed the Project Development Agreement ('PDA'), to commence construction for the Company's GAS-TESS device at SA Water's Glenelg Wastewater Treatment Plant.

Civil works contractors have now been appointed to prepare the site for the installation of the GAS-TESS. Breaking of the ground at the SA Water site is scheduled to begin in November 2018.

The installation at the Glenelg Wastewater Treatment Plant is the first installation of a 1414 Degrees product at a commercial site. The GAS-TESS system will demonstrate its effectiveness by storing energy generated from methane biogas harvested from the SA Water Glenelg Wastewater Treatment Plant. It will deliver heat energy for SA Waters' digesters and electricity for general operations. It will also enable time shifting of electrical generation with the aim to assist SA Water in achieving their zero net electricity costs by 2020 target.

The GAS-TESS device will be transported to the Glenelg Wastewater Treatment Plant from the Company's Lonsdale workshop in late November 2018.

For more information see ASX Announcement of 17 October 2018

TESS pilots

The Austcor & Pepe's Ducks installation projects are awaiting owner approvals. Austcor has proposed a larger site for the installation of a TESS-IND device. Pepe's Ducks are reviewing engineering options.

BUSINESS DEVELOPMENT

Electrification 2018 conference USA

A large North American power utility arranged for 1414 Degrees to exhibit at the Electrification 2018 Conference organised by the Electric Power Research Institute, which represents 90 per cent of the power utilities in the USA.

At the conference, held in California, the Company's technology attracted attention from representatives of global power companies and utilities. Many delegates had not seen an energy storage product with the compact and versatile qualities of 1414 Degrees' thermal energy storage system (TESS), and were surprised by its advanced stage of development.

The Company's experience at the Electrification Conference is paralleled by approaches from European utilities.

The Company continues to investigate opportunities for the shortest path the revenue.

For more information see ASX Announcement of 13 September 2018

CORPORATE

New appointments

Mr Julian Zhu has been appointed as Financial Controller. Mr Zhu has significant experience in a number of senior finance roles, including with ASX listed companies.

An internal restructure created positions for a Business Development Manager and Project Analyst.

The Company is at an advanced stage of the recruitment of a Chief Operations Officer, an Electrical Engineer, and a Technical Assistant, and expects to make appointments to these roles in the short term.

R&D Tax Incentive Payment

After the close of the quarter, the Company received a \$2.5m R&D refund, boosting cash reserves. The R&D Tax Incentive refund relates to the development of 1414 Degrees' TESS devices, and covers the R&D activities for the year ended 30 June 2018.

Exercise of Options

The Company is pleased that a number of shareholders have shown support to the Company and have exercised IPO Options.

Executive Chairman, Dr Kevin Moriarty commented *'The September 2018 quarter has been a significant quarter for the Company with the listing on the ASX, successful commissioning of the TESS-IND, and significant progress with commercial opportunities. There is much activity happening in all areas of the business, particularly there is a lot of work being undertaken on the development of our product offering. We are looking forward to seeing work on the installation of the GAS-TESS at SA Water's Glenelg site in the near term.'*

FOR FURTHER INFORMATION PLEASE CONTACT:

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ABOUT 1414 DEGREES LIMITED

1414 Degrees is working to create a sustainable energy future, where energy is available to all, at all times. Its clean energy storage is set to reduce energy costs by increasing the efficiency of renewable generation and stabilising grid supply. The 1414 Degrees thermal energy storage system (TESS) is unlike any other energy storage system in the world.

1414 Degrees' technology stores energy generated from electricity or gas and supplies both heat and electricity in the proportions required by consumers. It is unique in its combination of low cost, flexibility of location, scalability, and sustainability. Following years of effort by the Company's engineering team and the successful development of its commercial demonstrator, the Company is commercialising its scaled up products.

For more information please visit www.1414degrees.com.au