

CDP ACHIEVES OVER 360 HOURS OF CONTINUOUS OPERATION; HIGH PLANT RELIABILITY & METHANE CONVERSION

Highlights

- Over 360 hours of CDP continuous operation achieved with stable production and uptime of over 97%
- Methane to hydrogen conversion surpassing previous campaigns and approaching design values
- Process and reactor performance test program in-line with expectations
- Substantive quantities of graphite produced; quality optimisation in progress prior to supply to commercial partners

PERTH, AUSTRALIA; 27 September 2024: Hazer Group Ltd ("Hazer" or "the Company") (ASX: HZR) is pleased to provide an update on the Company's Commercial Demonstration Plant ("CDP"). The Company confirms that the CDP performance test program is progressing well and continues in line with expectation for completion by the end of 2024.

Following minor plant optimisation and modifications, 362 hours of continuous operation has been achieved with extended periods of controlled catalyst injection. This recent test campaign has resulted in some significantly positive results for Hazer's technology, including:

- 1. methane to hydrogen conversion has increased and approaching design values providing further confidence in commercial scale-up;
- 2. feed gas flow rate and procedural optimisation has enabled stable operation, controlled reactor pressure differential and fouling avoidance; and
- 3. substantive production of Hazer graphite for advanced customer testing.

At the centre of Hazer's technology success is the adoption of a fluidised bed reactor ("FBR") which is a proven scalable technology in the refining and metallurgical industries. Hazer's foresight to re-purpose a FBR and the substantial research and development that has been undertaken, positions Hazer as a leader in the methane pyrolysis space. While further testing is ongoing, these results reinforce Hazer technology scalability to large, single train capacities capable of providing a de-risked technology for industrial sized application. The Company has extensive global patent coverage, which includes over 70 patents and patent applications across 5 discrete technologies underpinning the Hazer process.

The CDP has provided valuable technical de-risking of the commercial scale technology. Production uptime over 97% in the recent test campaign underpins the resilience of the Hazer Process and material selection.

At the time of announcement, the CDP was in a planned shutdown undergoing its statutory plant and reactor inspection program following over 800 hours of reactor operation. The Company is pleased to report that inspection results, thus far, have been positive. Material selection for the reactor and hot equipment have performed well under process conditions and provide confidence in the design for commercial deployment.

Forward Program

With the achievement of over 360 hours of production, the current reactor testing program is nearing completion. Following the maintenance and inspection program, a final 2024 CDP campaign will focus on production of high-purity graphite to complete orders for larger scale application testing. This is scheduled to be completed in CYQ4.

In the interim, engineering work associated with the integration of the next generation reactor and heat exchange equipment will be completed. This reactor concept is in advanced stages and has been developed to enable the scale up of the technology to commercial levels of more than 20ktpa of hydrogen production.

Installation and testing of the next generation reactor at the CDP will commence in 2025 and will provide early data to validate the commercial design for the large commercial scale projects, including FortisBC in Canada.



Figure 1: Graphite shipment to FortisBC



Figure 2: Next generation reactor vessel

Commercialisation Strategy

The CDP results are concurrently being used to advance Hazer's four existing commercial projects with FortisBC, POSCO, ENGIE, Chubu Electric / Chiyoda Corporation. In addition, the commercial demonstration plant has enabled extensive discussions with new customers and strategic partners with interest in Hazer's technology and is strengthening validation of its industry leading position in catalytic methane pyrolysis technology.

The Company's first large scale commercial facility to be built in Canada with FortisBC under license is progressing well with the signing of the binding project development agreement earlier this year. Of strategic importance was the recent milestone of shipping 105kg of graphite to Fortis BC to be used for commissioning their small-scale test unit in November as part of the project development plan. FortisBC's test-rig has completed construction and will be installed on-site in Q4 for testing in early 2025 ahead of FID. Delivery of this graphite was a significant achievement for Hazer in de-risking international transportation and quality assurance.

As previously announced, our strategic partner Fortis BC is now funding our engineering efforts to progress the development and upcoming commissioning of their first small-scale trial facility in British Columbia.

Hazer CEO Glenn Corrie said, *"We continue to demonstrate Hazer's technology is at the forefront of innovation with excellent test program performance which is supporting our commercialization strategy. These strong operational milestones are a result of many years of technology development and scale-up success and continue to de-risk and demonstrate that Hazer's technology is fast approaching commercial readiness.*

Hazer is a leader in the global methane pyrolysis arena and is differentiated by some unique competitive advantages that culminate in a technology that is increasingly being viewed as a low-cost clean hydrogen solution for industry decarbonization at very large scale.

The CDP test program performance has been the enabler for many commercial discussions and we are focused on accelerating our commercial scale-up strategy to meet the growing demand for large scale applications in hard-to-abate sectors such as steel making, refining, petrochemicals and others"

[ENDS]

For further information or investor enquiries, please contact:

Corporate Enquiries

Hazer Group Email: <u>contact@hazergroup.com.au</u> Phone: +61 8 9329 3358

Media enquiries

WE Communications – Ana Harrop Email: <u>WE-AUHazer@we-worldwide.com</u> Phone: +61 452 510 255

About Hazer Group Ltd

Hazer Group is an Australian technology company, driving global decarbonisation efforts with the commercialisation of the company's disruptive world-leading climate-tech. Hazer's advanced technology enables the production of clean and economically competitive hydrogen and high-quality graphite, using a natural gas (or biogas) feedstock and iron-ore as the process catalyst.

Hazer Group Limited - Social Media Policy

Hazer Group Limited is committed to communicating with the investment community through all available channels. Whilst ASX remains the prime channel for market-sensitive news, investors and other interested parties are encouraged to follow Hazer on X (Twitter) (@hazergroupltd), LinkedIn, Facebook, and YouTube. Subscribe to HAZER NEWS ALERTS - visit our website at www.hazergroup.com.au and subscribe to receive HAZER NEWS ALERTS, our email alert service. HAZER NEWS ALERTS is the fastest way to receive breaking news about @hazergroupltd.

Forward-looking Statements

This announcement may contain certain "forward-looking statements" which may not have been based solely on historical facts but 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.

