

## HAZER COMMERCIAL DEMONSTRATION PROJECT UPDATE

**PERTH, AUSTRALIA; 20 JANUARY 2022:** Hazer Group (ASX: HZR) is pleased to provide the following update regarding the Hazer Commercial Demonstration Project (CDP or Project), currently under construction at Woodman Point Water Recovery Facility, WA.

As advised on 10 December 2021, a defect was identified in the reactor vessel being manufactured in China for the Hazer CDP Project, resulting in the reactor vessel being unsuitable for use. This critical piece of equipment is a specialised bespoke design, utilising an advanced alloy steel (Inconel 617) that is suitable for the temperature, pressure and process conditions of the Hazer Process. Following this event, the Hazer team, our supplier (FFF Australia) and the manufacturing mill in China, with the support of independent experts, have reviewed the cause of the manufacturing failure and determined improvements to the proposed manufacturing method and scope. Amongst other changes, we have reduced the size of the proposed forging and will now manufacture the reactor in two sections which will be welded together in final fitting. This reduction in forging length will reduce the risk of the manufacturing defect encountered in the first manufacture being repeated. We have approved the remaking of the reactor vessel and expect that the reactor will be completed and shipped for delivery to Australia around July 2022, approximately 6 months later than the original schedule.

The CDP is a key step in demonstrating the scale-up and commercialisation of the Hazer technology. The project program includes a rigorous testing schedule that will demonstrate the continuous operation of the process with the full integration of all required sub-systems (such as catalyst injection, gas-solids separation, heat recovery and process control) and derive the engineering data (including confirmation of fluidisation characteristics at larger scale, heat-transfer parameters and carbon emission parameters) necessary to support the scale-up of the process. The full operation of the Project will demonstrate the safe continuous production of low-emission hydrogen and graphite.

The Hazer team has reviewed the program for the completion of the construction of CDP, the commissioning plan and the proposed testing and operations program for the CDP to determine an optimised staged commissioning and testing process that reduces operational risk, and maximises value of early data. This testing program will be broken into multiple phases. The first phase will be carried out at reduced temperatures using a temporary carbon steel reactor (the “cold” reactor). This will allow commissioning of the solids handling, process control, safety and utilities systems, and will deliver initial process data to de-risk the start-up of the second phase, the hot commissioning and full operation of the CDP.

Based on the current activities, we expect that the completion of CDP construction and installation of the initial carbon steel cold reactor will be achieved by mid-2022. This will allow the first commissioning of the Project and commencement of initial testing program. Following this phase, the initial “cold” reactor will be removed and the hot-wall reactor installed. We anticipate that this will be achieved in 2H 2022, allowing production of hydrogen and graphite to commence before the end of 2022.

The additional manufacturing activities and the inclusion of the carbon steel reactor to allow the staged commissioning of the Project will result in additional costs of approximately \$1 million. With these additional costs, and continued cost pressures due to strong demand for materials and resources in Western Australia, we anticipate that the final completed cost of the Project will be at the top end of our previously indicated range of \$23 - \$25 million.

Geoff Ward, Chief Executive Officer of Hazer Group said “I’d like to acknowledge the hard work of the Hazer team, our suppliers and advisors in working through this challenging issue. We are fully focused on the successful completion of the Project and demonstrating the strength of our Hazer technology. Innovative, first-of-kind projects are challenging, particularly in the current operating environment. While it has been very disappointing to all to hit this issue so late in the Project, we are continuing to take all of the engineering and

operational learnings gained from these challenges to improve our program going forward. We are determined to deliver a rigorous program that will allow the scale-up of our technology to accelerate to meet the increasing global demand for low carbon hydrogen, and solutions to the decarbonisation of heavy industrial processes.”

This announcement was authorised for release by the Board of the Company.

**[ENDS]**

### **Forward Looking Statements**

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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.

### **ABOUT HAZER GROUP LIMITED**

Hazer Group Limited (“Hazer” or “the Company”) is an ASX-listed technology development company undertaking the commercialisation of the Hazer Process, a low-emission hydrogen and graphite production process. The Hazer Process enables the effective conversion of natural gas and similar methane feedstocks, into hydrogen and high-quality graphite, using iron ore as a process catalyst.

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