

## SHAREHOLDER UPDATE

ASX: HZR RELEASE: 27 November 2018

Dear Shareholder

Following last week's AGM and Board meeting, the Board of Hazer Group and I undertook a review of the company strategy and short-to-medium term plans. We felt this was appropriate given the recent management changes, the successful completion of the planned pilot testing schedule at our Fluidised Bed Reactor Pilot Plant, and the pause in the testing program as we re-located this plant from St. Mary's in Sydney to its new location on the Mineral Resource's site at Kwinana.

The second half of 2018 has been a very positive period for the company. We have achieved excellent test results from the FBR Pilot Plant and continue to progress with our R&D program including testing and analysis of our Hazer produced graphite by independent agencies and universities.

Operationally the team have operated the FBR Pilot Plant exceptionally well managing the safety and environmental aspects very professionally and demonstrating improved performance in the pilot plant as we apply improvements learned from initial trials. With the completion of the final runs in the planned test program in early November, the pilot plant has now been disassembled and packed for transport, with the first consignment arriving in Perth last week. We expect to have the FBR Pilot Plant re-assembled at its new home in Kwinana by Christmas, with the testing program resuming in January 2019.

The final runs of the FBR pilot plant have delivered excellent results during the past 2 months achieving some notable milestones and exceeding performance targets in key areas of hydrogen and graphite production rates, and hydrogen yields achieved. We have also made progress towards demonstrating fully continuous operations, with further testing of this anticipated in the 2019 program. The pilot program has demonstrated the robustness of the underlying reaction and our ability to make viable commercial products, providing myself and the Board with confidence to move into a commercial demonstration phase in 2019.

The Company's R&D program continues to progress focussing on catalyst selection trials and testing of our Hazer graphite to understand its properties and applications. Independent testing of graphite produced from the Hazer process by Australian research institutions has demonstrated strong performance of our graphite in battery and dry lubricant applications comparable, or in some cases exceeding the performance of existing materials, so encouraging us we will be able to secure customers in these, and other, market sectors.

The strong performance of the pilot plant and R&D testing has provided Hazer with an excellent platform to accelerate the development of the Hazer technology into the commercial demonstration phase in 2019. We have commenced a front-end engineering and design (FEED) study for a Commercial Demonstration Plant and a Concept Study for larger-scale Commercial Plants. In parallel to these studies, we continue to see a high level of interest in our technology from potential off-takers and commercial partners. With the completion of the FEED Study for the Commercial Demonstration Plant (CDP) by the end of this year, we are looking to secure hydrogen offtake and funding agreements that would allow us to commit to this plant by early to mid-2019. This would be a significant milestone for our Company.

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A Commercial Demonstration Plant would be a continuously operating, small scale plant producing commercial hydrogen for sale to industrial, transport or energy markets and commercial quantities of graphite. Our current concept envisages a plant capable of producing ~300 kg/day of hydrogen (~100 tpa) and approximately 1,050 kd/day of graphite (~375 tpa). This plant will allow us to demonstrate the safe ongoing operation of the Hazer Process, generate early revenue from hydrogen sales and allow us to grow graphite sales through having commercial quantities available to market. Based on our initial engineering studies we anticipate being able to build this plant for approximately \$10 million.

Thanks to the ongoing support of our shareholders, Hazer remains well funded. As at end of October the Company had \$5.2 million cash in the bank. We have recently completed our R&D Tax Incentive assessment and anticipate receiving a cash rebate of approximately \$1 million, slightly above the level of last year. This should be received towards the end of 1Q 2019. With this funding, we have sufficient resources to cover our underlying activities to beyond the end of 2019. As we look to fund the Commercial Demonstration Plant, in addition to our own resources, we will look to work with government, commercial partners and off-takers to support this project.

Overall interest in the hydrogen sector remains very high. I firmly believe the Hazer technology has a key role to play in the emerging long-term hydrogen economy. We are an example of “right technology at right time” to take advantage of the long-term growth in this industry, driven by the value of our products, our anticipated low production cost, our low emissions profile, and capability to provide flexible, scalable hydrogen manufacturing. This growing interest in the hydrogen economy is translating into material developments to support the growth of the industry. These include; the announcements of a Hydrogen Roadmap to develop a hydrogen export economy in Australia with reports published by the Government of Australia, CSIRO and Australia’s Chief Scientist, Dr Alan Finkel, the announcement of a \$20 million investment by Fortescue Metals group in a collaboration with CSIRO to commercialise hydrogen related technologies, and the announcement by ARENA (Australian Renewable Energy Agency) of its co-funding of two demonstration projects for production of “green” (low emission) hydrogen and hydrogen offtakes.

Myself and the team are fully committed to achieving the major milestones we have set out and taking Hazer into the next stage of its development in 2019, starting with securing the Commercial Demonstration Plant in 1H 2019.

I look forward to speaking with you further as we take Hazer forward in 2019.

Your Sincerely,

Geoff Ward  
Chief Executive Officer

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## **ABOUT HAZER GROUP LTD**

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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