Hazer Group Ltd
Suite 2, 29 The Avenue, Nedlands, WA 6009
PO Box 1458, West Perth WA 6872

HAZER'S HIGH PURITY GRAPHITE SHOWS STRONG PERFORMANCE IN LITHIUM-ION BATTERIES

- **Hazer's graphite shows excellent capacity and stability after 150 cycles**
- **Results are comparable to commercial graphite used in Li-ion batteries**
- **Modifying process conditions leads to graphite with increased performance**
- **Fewer processing stages required for Hazer graphite to be made suitable for Li-ion battery applications compared to alternatives**

PERTH, AUSTRALIA, 10th MAY 2018: Hazer Group Ltd (ASX:HZR) is pleased to announce that the non-optimised high purity graphite produced by the Hazer Process (Hazer graphite) has exhibited strong performance against fully-optimised commercial graphite benchmarks in half-cell lithium-ion batteries.

Furthermore, test work has shown that changing the reaction conditions and iron ore catalyst properties during graphite production, can increase battery cycle performance without any major loss in capacity over extended cycles.

This process versatility and continued optimisation of the Hazer graphite product, potentially offers a high quality, low cost alternative to the rapidly growing lithium–ion battery market.

VERSATILITY OF HAZER GRAPHITE

Figure 1 on the following page illustrates that changing the reaction conditions and catalyst properties has the potential to increase battery performance, and demonstrates the ability to tune the Hazer Process to tailor graphite for specific lithium-ion battery applications.

Additionally, the Hazer graphite samples (all purified to 99.95%wt) show comparable performance against commercially available graphite that has been specifically made for Li-ion battery anodes. This includes natural spherical graphite (coated), and synthetic spherical graphite (uncoated). The performance ranges of all tested commercial samples are shown as the shaded grey area.

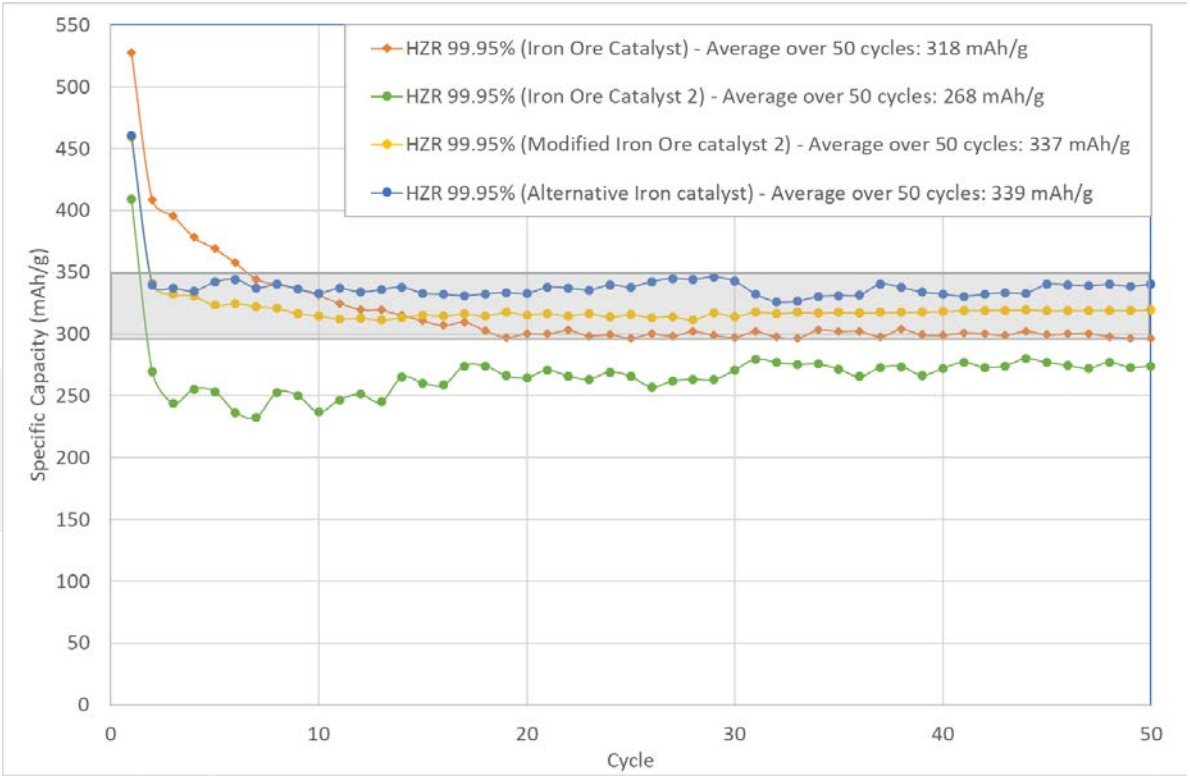

Figure 1: Specific discharge capacity of Hazer's synthetic graphite in comparison to readily available commercial graphite (grey area) for lithium-ion battery applications at rate of 0.2 C after 50 cycles.

Having the versatility to tailor graphite properties provides a gateway for future optimisation of the Hazer graphite for lithium-ion battery products via process and post treatment solutions (such as coating), as well as tailored applications in other graphite markets.

LONGEVITY AND STABILITY OVER 150 CYCLES

Building on the positive 50 - 100 cycle results released in March 2017, the Hazer graphite with 99% purity (having only undergone primary purification) has shown no loss in capacity after 150 cycles, as seen in Figure 2 on the following page.

The Hazer graphite with 99.95% purity (using different catalysts) also exhibited strong performance across 150 cycles against commercially available graphite benchmarks which were specifically designed and optimised for lithium-ion battery applications.

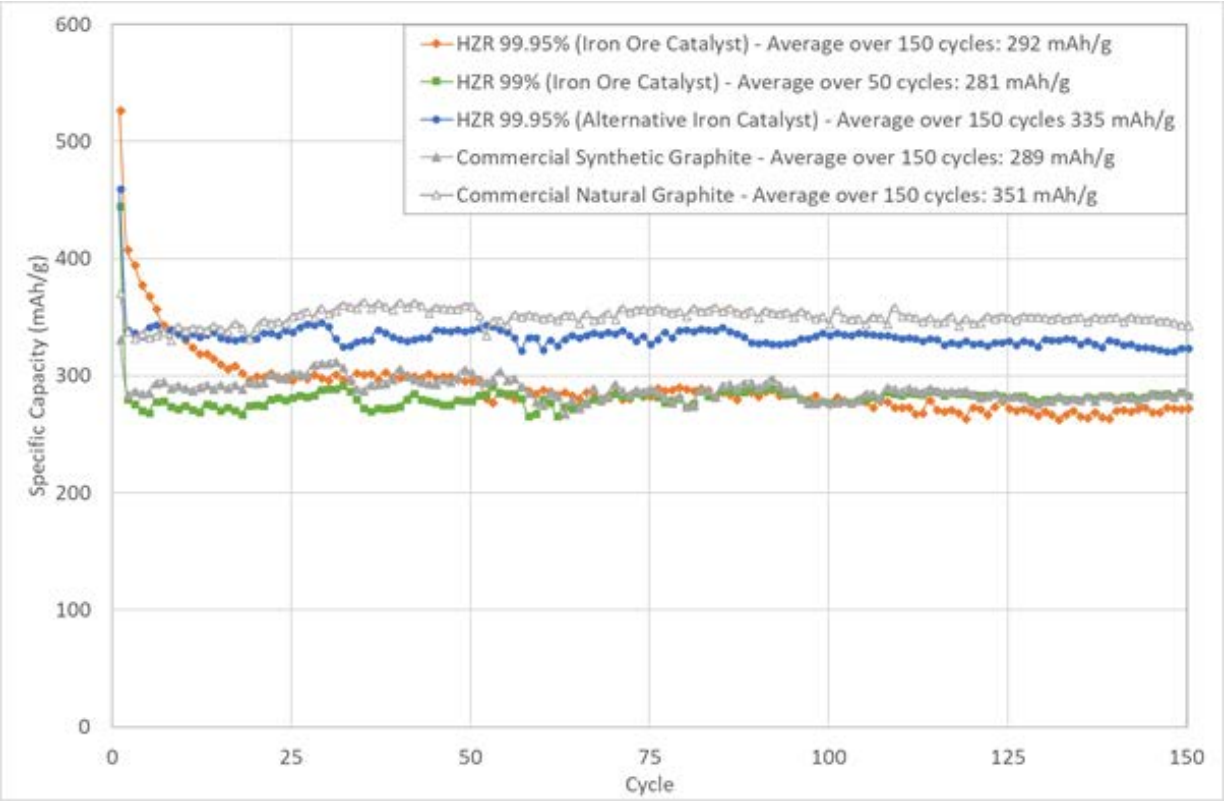

Figure 2: Specific discharge capacity of Hazer's non-optimised synthetic graphite in comparison to readily available commercial synthetic graphite for lithium-ion battery applications at rate of 0.2 C after 150 cycles.

Hazer's Acting Chief Executive Officer, Mark Edwards said;

"These results are very encouraging considering we haven't treated the Hazer graphite other than primary purification. We can maintain stability without having to apply coatings like some of the benchmark materials we tested."

Small changes in overall capacity from cycle to cycle are normal and drifts in the cycle data are common for laboratory-based results. The results also show that catalyst choice can provide further performance improvements.

REDUCED GRAPHITE PROCESSING STAGES AN ADVANTAGE FOR HAZER

As results in this announcement have shown, the Hazer graphite only requires one processing stage to achieve strong performance in lithium-ion batteries. This is a drastic reduction relative to the current natural and synthetic alternatives, which can require 5-7 stages as seen in figure 3 below.

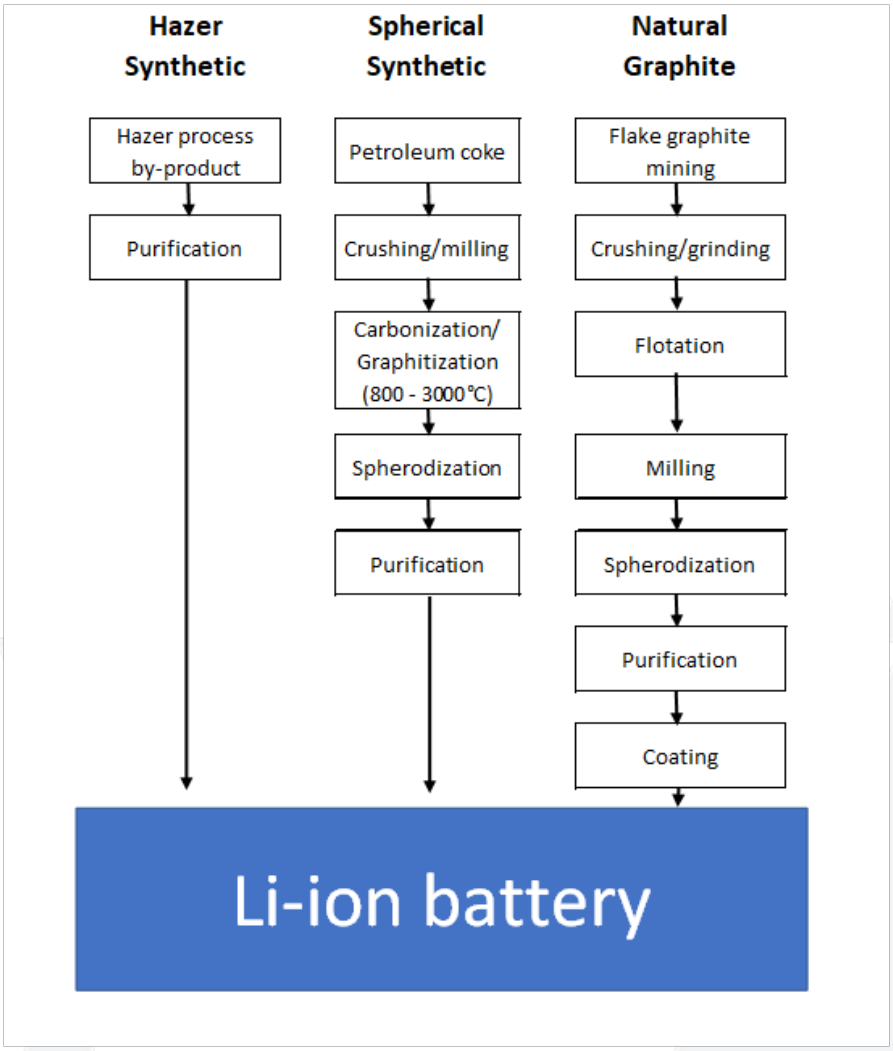

Figure 3: Due to the unique nature of the Hazer graphite, the processing stages required for application within batteries are drastically reduced relative to the current natural and synthetic alternatives.

Hazer's Chief Technical Officer, Dr Andrew Cornejo said:

"It is the simplicity of the Hazer Process that gives it an edge over its competitors. Hazer graphite requires less stages of post processing in comparison to the commercial alternatives because of the ability to tailor the 'raw' graphite to better suit the end application. This not only allows the graphite to be further optimised, but also allows it to be modified to suit a variety of markets both existing and 'blue-sky'. Furthermore, less graphite post processing stages can potentially result in better economics and a smaller carbon footprint."

FUTURE DEVELOPMENT WORK

Today's encouraging results provide a foundation for continued development of the optimum processing conditions needed to manufacture graphite for lithium-ion batteries, as well as potential applications in other graphite markets.

[ENDS]

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 feedstocks, into hydrogen and high quality graphite, using iron ore as a process catalyst.

For further information, investor or media enquiries, please contact:

Michael Wills – Hazer Group
Email: mwills@hazergroup.com.au
Phone: 0468 385 208

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 Twitter (@hazergroupltd), LinkedIn, Google+ and Youtube.