ASX Announcement | 7 November 2022
Hexagon Energy Materials Limited (ASX: HXG)

Drilling of high priority targets to commence at McIntosh Ni-Cu-PGE project

Highlights:

- **Drilling of high priority targets to commence at McIntosh Ni-Cu-PGE project with drill rig and field crew mobilising to site.**
- **Geophysical IP and EM surveys have identified bedrock conductors prospective for metallic disseminated to massive sulphide Ni-Cu-Co-PGE mineralisation.**
- **The potential for these prospects to host nickel sulphide mineralisation at depth is enhanced by the coincident nickel and copper soil anomalies over highly prospective geology in an under-explored terrane along strike from major mineral deposits.**

Hexagon Energy Materials Ltd (ASX: HXG; "Hexagon" or "the Company") is pleased to announce important upcoming mineral exploration at its McIntosh Ni-Cu-PGE Project in the East Kimberley Region of northern Western Australia. The current drill program has been delayed from the proposed September commencement date due to a protracted process in securing final heritage approvals.

The Priority 1 drill targets which include IP Anomaly A & B, which were discovered by Hexagon in an IP survey over the Greater Mellon Patch area conducted in 2021, along with Anomaly 22 and Anomaly 9 which were highlighted in a geophysical review over the project. The identified drill targets are prospective for metallic disseminated to massive sulphide Ni-Cu-Co-PGE mineralisation. (See HXG ASX Announcement 11 November 2021).

Chairman Charles Whitfield commented, "We are excited to finally be on the cusp of this much anticipated drill program. The administrative delays have been frustrating but the Company has made the most of the additional time to drilling by conducting additional ground work that should hopefully enhance the efficiency of our targeting. We look forward to being able to inform the market as to progress during the course of the program."

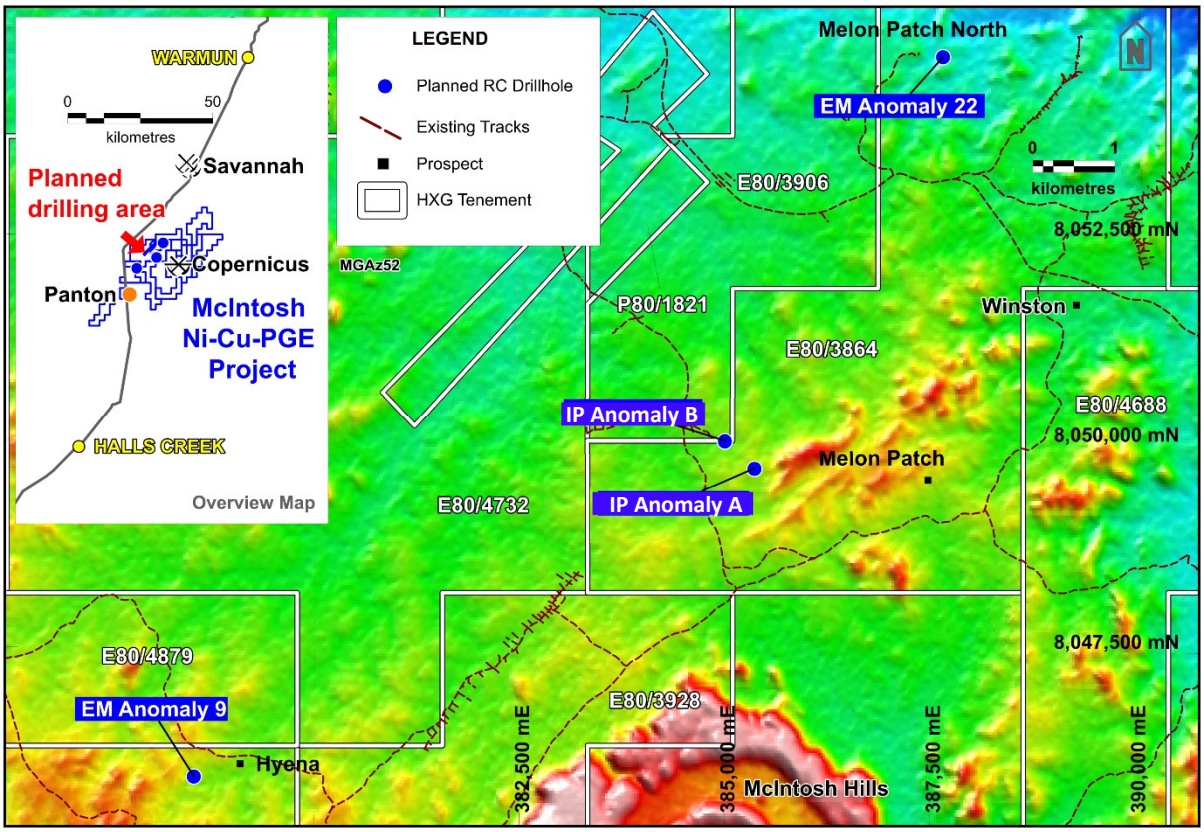

Figure 1: Ni-Cu-Co-PGE exploration drill targets.

Drill Program

The current drill program will be testing the following high priority geophysical anomalies (Figure1) –

- Two untested airborne electromagnetic (AEM) anomalies Anomaly 22 and Anomaly 9, and
- Two untested ground Induced Polarisation (IP) anomalies A and B.

Hexagon personnel and drilling contractor are currently mobilising to site with drill pad preparation being undertaken over the weekend, with drilling due to commence early next week.

IP Anomalies

The Melon Patch intrusion was identified as a priority Ni-Cu-PGE target by Hexagon in 2021 (see HXG ASX Announcement 28 June 2021). A Reconnaissance dipole-dipole IP/resistivity surveying of the northern margin of the Melon Patch mafic-ultramafic intrusive complex was completed in 2021) (see HXG ASX announcement 11 November 2021). The survey was designed to cover an area of strong Ni-Cu anomalism in soil geochemical sampling and to extend into the country rocks a sufficient distance to cover potential feeder dykes, structurally remobilised mineralization, etc.

A chargeability anomaly (A) was defined, close to a Ni-Cu stream sediment geochemical anomaly (anomaly A), with a second anomaly (B) thought likely to be associated with graphite, owing to its high conductivity.

Two in-fill survey lines of dipole-dipole IP/resistivity IP were read to the north of the existing line in August 2022. This follow-up was intended to provide a more accurate definition of the 3D geometry of the chargeable sources and their size than that provided by the reconnaissance lines.

The results of the infill IP survey now indicated that two previously separate IP Anomalies (A & B) may be part of the same geological body, with the conductivity varying across the body, which will be tested in the current drill program.

During the historical geophysical survey data review (see HXG ASX announcement 11 November 2021), two previously discounted AEM anomalies were identified which Hexagon will now test in the current program.

Helicopter EM Anomaly 22

AEM anomaly 22, lies within the Melon Patch North prospect, the geological mapping undertaken by Hexagon now has this anomaly situated within a remnant of the potential Panton Sill type intrusive, bound to the north by Tickalara Metamorphics and to the east by the Sally Down Suite (**Error! Reference source not found.**2).

Two previously reported rock chip samples MCI089 & MCI090 (see HXG ASX Announcement 11 November 2021), collected during historic geological mapping programs, returned anomalous Cu value with chalcopyrite and very fine-grained disseminated sulphides were observed in MCI090.

Historically, this anomaly had been dismissed as it had been thought to be graphite related. Modelling undertaken by Hexagon geophysical consultants on Anomaly 22 VTEM response indicates a complex, possibly folded, structure formed by moderately conductive bodies more consistent with matrix or net-texture rather than massive sulphide. Two plate conductors were modelled, and a single hole designed to test both model conductors within this current program.

Hexagon successfully applied for and secured funding through the Western Australian Government's Exploration Incentive Scheme to co-fund drilling. A total of $30,000 has been secured, with this funding used to cover part of the cost of drill testing Anomaly 22.

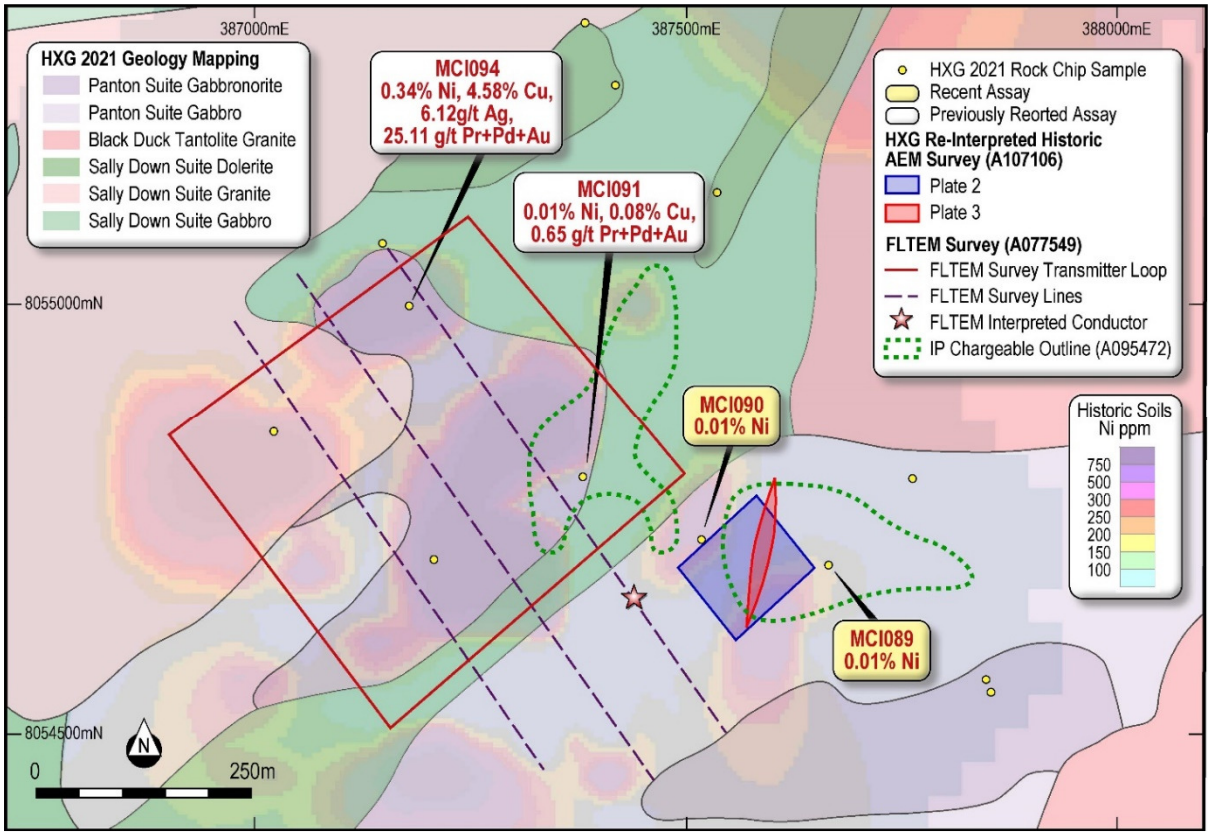

Figure 2: Melon Patch North Anomaly 22 with historic Ni soil anomaly contours overlaid. Anomaly 22 coincides with a Ni anomaly to the east of the historic drilling (See HXG ASX Announcement 28 June 2021).

Helicopter EM Anomaly 9

The Hyena prospects within the McIntosh Project (Figure 1) occur along the south-eastern margin of a roughly 2km wide exposure of the Wild Dog Creek Gabbro (WDCG). The WDCG contains scattered inliers of older Panton intrusive rocks. Several Ni soil anomalies occur around the margins of the WDCG intrusion, often near or coincident with the Panton intrusive rocks. Anomaly 9 lies on one of these interpreted intrusive contacts with a coincidental and historic Ni-Cu soil anomaly (See HXG ASX Announcement 28 June 2021).

Hexagon is currently liaising with the relevant stake holder to enable drill testing of targets highlighted from the soils program conducted by Hexagon in 2021 (See ASX HXG Announcement 21 March 2022), these include:

1. Panton Peridotite Targets

Anomalies to be followed up include 3.63g/t 3PGE, 0.35% Cu, 0.18% Ni (sample MIS0399) and 3.01 g/t 3PGE, 0.27% Ni (sample MIS0146). The untested southwestern portion of the high-grade surface soil geochemistry anomaly will be drilled in the upcoming program. The north-western part of the anomaly has significant historical drill intercepts of 1m @ 1.00g/t 3PGE in hole SMP002 and 20m @ 0.75g/t 3 PGE in hole SMP006 (Figure 3).

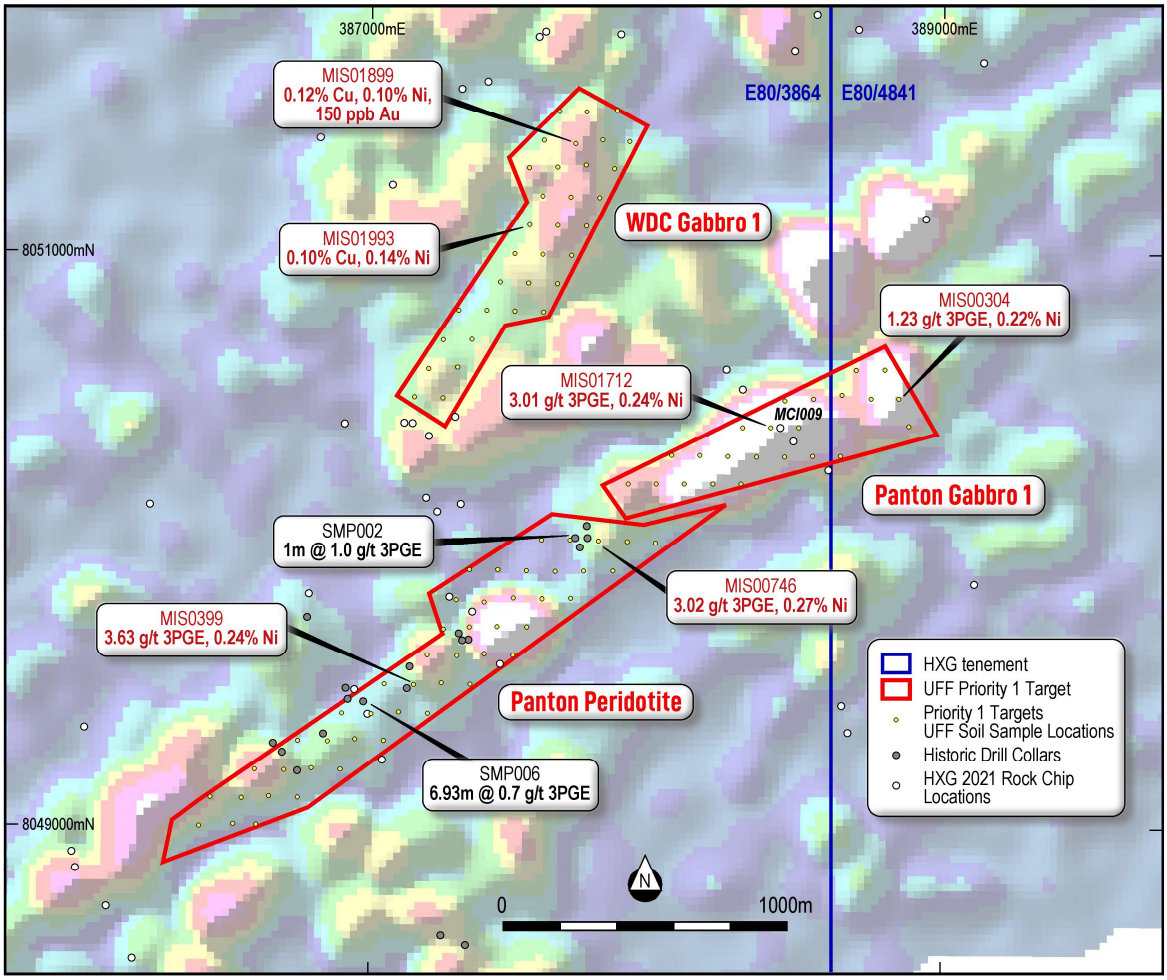

Figure 3: Red areas with highlighted significant UFF assay results and previously reported historic drill intercepts represent priority drill targets.

2. Panton Gabbro 1 Target

This 1.1km long, 350m wide PGE soil anomaly has results up to 3 g/t 3PGE, 0.24% Ni (sample MIS01712) and 1.23g/t 3PGE, 0.22% Ni (sample MIS00304).

3. Wild Dog Creek (WDC) Gabbro 1 Target

This 1.25km long, 320m wide PGE soil anomaly has results up to 0.12% Cu, 0.10% Ni, 150ppb Au (sample MIS01899) and 0.10% Cu, 0.14% Ni (sample MIS01993).

Soil Sampling Program

A further 1000 UFF soil sampling has been completed over the Togo & Mini M prospect, samples are currently with the lab with results expected in early 2023. This program is also being included in the CSIRO Ultra Fine soils program (see HXG ASX Announcement 19 August 2021).

Competent person's attributions

The information within this announcement that relates to Exploration Results and Geological data at the McIntosh Project is based on information compiled by Mr. Michael Atkinson and is subject to the individual consents and attributions provided in the original market announcements and reports referred to in the text of this announcement. Mr. Atkinson is not aware of any other new information or data that materially affects the information included in the original market announcements or reports referred, and that all material assumptions and technical parameters have not materially changed.

Mr. Atkinson is a consultant to Company and a member of The Australian Institute of Geoscientists. He has sufficient experience relevant to the styles of mineralisation and types of deposits under consideration and to the activities currently being undertaken to qualify as a Competent Person(s) as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results Mineral Resources and Ore Reserves and he consents to the inclusion of the above information in the form and context in which it appears in this report.

ABOUT HEXAGON ENERGY MATERIALS LIMITED

Hexagon Energy Materials Limited (ASX: HXG) is an Australian company focused on future energy project development and energy materials exploration and project development.

Hexagon 100% owns the McIntosh Nickel-Copper-PGE and Graphite project in Western Australia (WA) and the Halls Creek Gold and Base metals project in WA. On 14 February 2022 Hexagon announced a binding Graphite Mineral Rights Earn-in agreement (up to 80%) had been entered into with Critical Green Minerals Pty Ltd, with McIntosh graphite expected to become part of an ASX Initial Public Offering during 2022. In the USA, Hexagon has an 80 per cent controlling interest of the Ceylon Graphite project located in Alabama, over which South Star Battery Materials Corp. (TSXV: STS) on 7 December 2021 signed an Option to develop and earn-in up to 75% interest.

Hexagon also is developing a business to deliver decarbonised Hydrogen (blue Ammonia) into export and domestic markets at scale, with Hexagon's WA Hydrogen (WAH_2) project now being pursued by Hexagon.

Hexagon's plan is to use renewable energy in clean Hydrogen production to the greatest extent possible in its projects, transitioning from blue to green Hydrogen production on a commercial basis, over time. Supporting this strategy in January 2022 Hexagon signed a Memorandum of Understanding with renewable energy company FRV Services Australia Pty Ltd (FRV Australia) (51% owned by Fotowatio Renewable Ventures S.L. and 49% owned by OMERS Infrastructure part of OMERS Canadian defined benefit pension plan fund). FRV has almost 800MWdc of Australian PV assets built or under construction in Australia.

Hexagon's overarching goal for 2022 is to secure and leverage technical and commercial alliances by commodity across its project portfolio whilst maintaining a core focus on Northern Australian Future Energy Materials and Future Energy project developments, in-house. Figure 4 below summarises Hexagon's Strategy and Figure 5 shows the locations of Hexagon's projects.

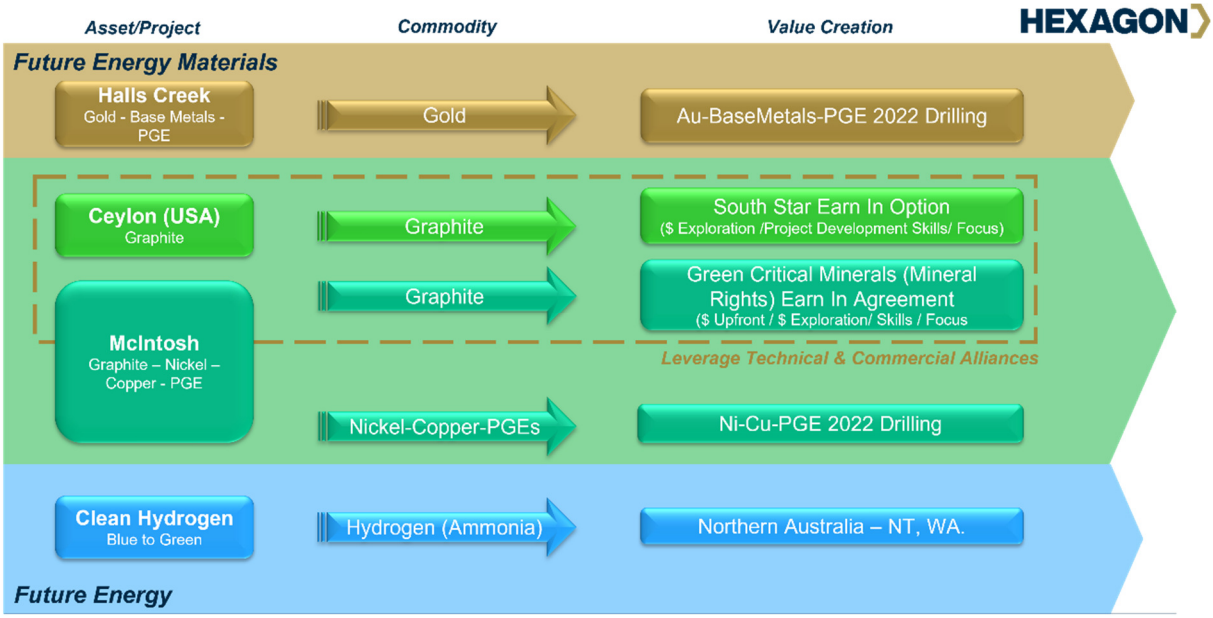

Figure 4: Hexagon's Strategy 2022.

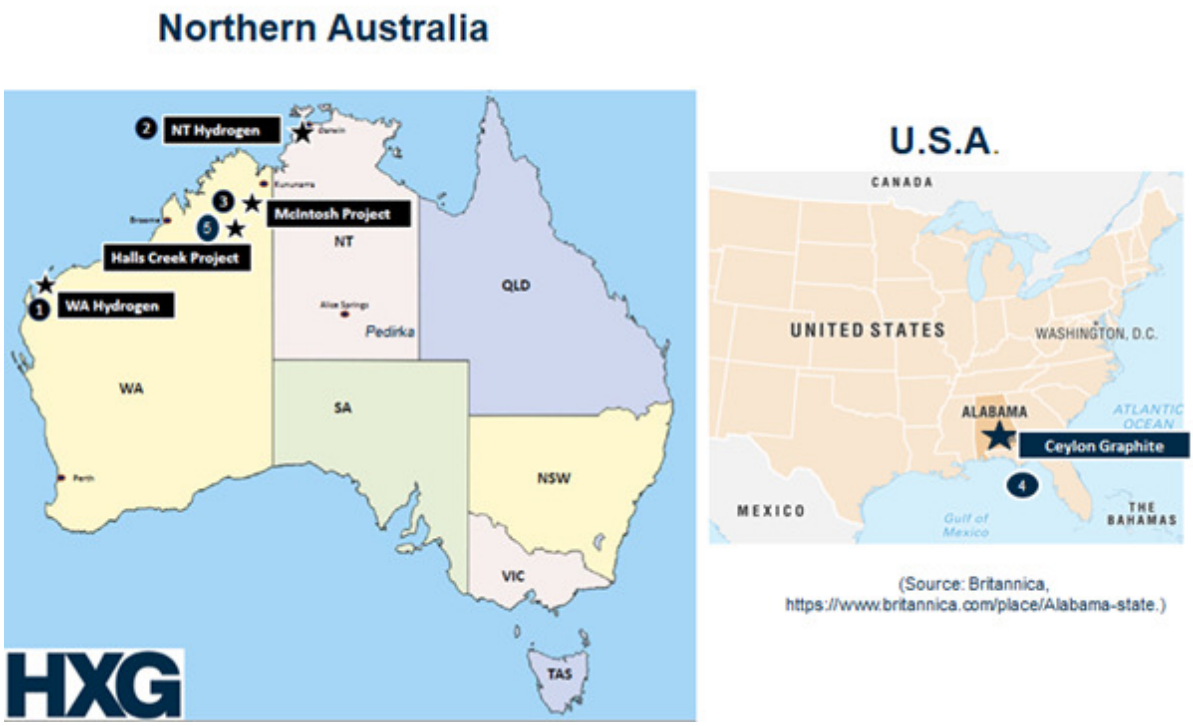

Figure 5: Hexagon project locations.

Authorisation

This announcement has been authorised by the Board of Directors.

To learn more please visit: www.hxgenergymaterials.com.au

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