



ASX Announcement | 22 December 2021
Hexagon Energy Materials Limited (ASX: HXG)

Hexagon's Clean Hydrogen Project Pre-Feasibility Study Completion Date set for February 2022

Key Highlights:

- The final stage of work for Hexagon's Pre-Feasibility Study (PFS) for its Northern Territory "Pedirka" Hydrogen Project has now been defined and agreed with a completion date set for 28 February 2022.
- The final stage in completing the PFS will be expanded to allow for the assessment of a range of potential project improvement opportunities that were identified as part of the PFS to date.

Further to Hexagon Energy Materials Limited's (ASX:HXG) ("Hexagon" or "the Company") recent "*Substantial Progress Made on the Northern Territory (Pedirka) Clean Hydrogen Project Pre-Feasibility Study*" announcement dated 14 December 2021, Hexagon is pleased to announce that a revised completion date has been established for the Pre-Feasibility Study (PFS) in relation to Hexagon's Northern Territory (Pedirka) Hydrogen Project, "NT H2 Project" or "the Project", with the time frame for completion being the end of February 2022.

The recent PFS update announcement set out progress that has been made through the PFS over the past six months including technology selection, plant design and engineering, plant capital and operating expenditure estimates, as well as cost estimates for raw material, materials handling and transportation.

Work to date has also progressed avenues for decarbonisation including potential access to large quantities of low-cost renewable electricity providing the energy input in feedstock conversion, which would potentially lower carbon emissions and handling costs through Carbon Capture and Storage (CCS).

The PFS work to date clarified the critical success factors for any clean hydrogen project development by Hexagon. These are:

- Access to commercially proven, at scale hydrogen carrier production technology e.g., Ammonia;
- Having the capacity to leverage pre-established port and transportation infrastructure for end-product export and in modular plant and equipment import, and ensuring project site proximity to this port;
- Access to pre-established long term capacity Carbon Capture and Storage (CCS) reservoirs and associated infrastructure, ideally multiple sites, creating competitive tension and pricing on CCS costs or charges;
- Sustainable access to multiple, large scale, low-cost energy sources, both for use as plant feedstock and for the energy to convert feedstock to hydrogen or a hydrogen carrier. This includes access to

large-scale low-cost renewables. This would lead to a reduction in carbon emissions, materials handling and transportation, driving costs down;

- Environmentally and socially responsible and sustainable access to water;
- Best practice stakeholder engagement, including with landowners and communities;
- Binding long-term end customer offtake contracts, ideally as part of strategic project partnership; and
- Having a robust, de-risked commercial project returns profile to underpin the securing of project development financing through to Final Investment Decision (FID).

The Hexagon Board is focused on establishing the best way forward for Hexagon to deliver its Clean Hydrogen strategic objectives, ensuring that all of the potential improvement opportunities that have been identified through the PFS are thoroughly assessed and, as appropriate, incorporated in the PFS recommendations delivered on completion.

Hexagon's ultimate goal is participation in the large, global, emerging clean hydrogen market to deliver large quantities of clean hydrogen into Asian markets. Achieving this objective will deliver substantial value for shareholders and establish a strong foundation on which we can grow a substantial business.

What is critically important for Hexagon is that a lowest risk (technically and commercially) and lowest cost clean hydrogen project, with the highest potential for commercial success, is progressed as a result of the PFS.

The Board and Management team at Hexagon looks forward to updating shareholders and the market on the final results and outcomes of the PFS by the end of February 2022.

Authorisation

This announcement has been authorised by the Hexagon Board of Directors.

FOR FURTHER INFORMATION, please contact:

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ABOUT HEXAGON ENERGY MATERIALS LIMITED

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

Hexagon is developing a business to deliver decarbonised hydrogen into export and domestic markets. The Pre-Feasibility Study for the NT (Pedirka) H₂ Project located in Australia's Northern Territory, utilising gasification and Carbon Capture and Storage (CCS) is in progress.

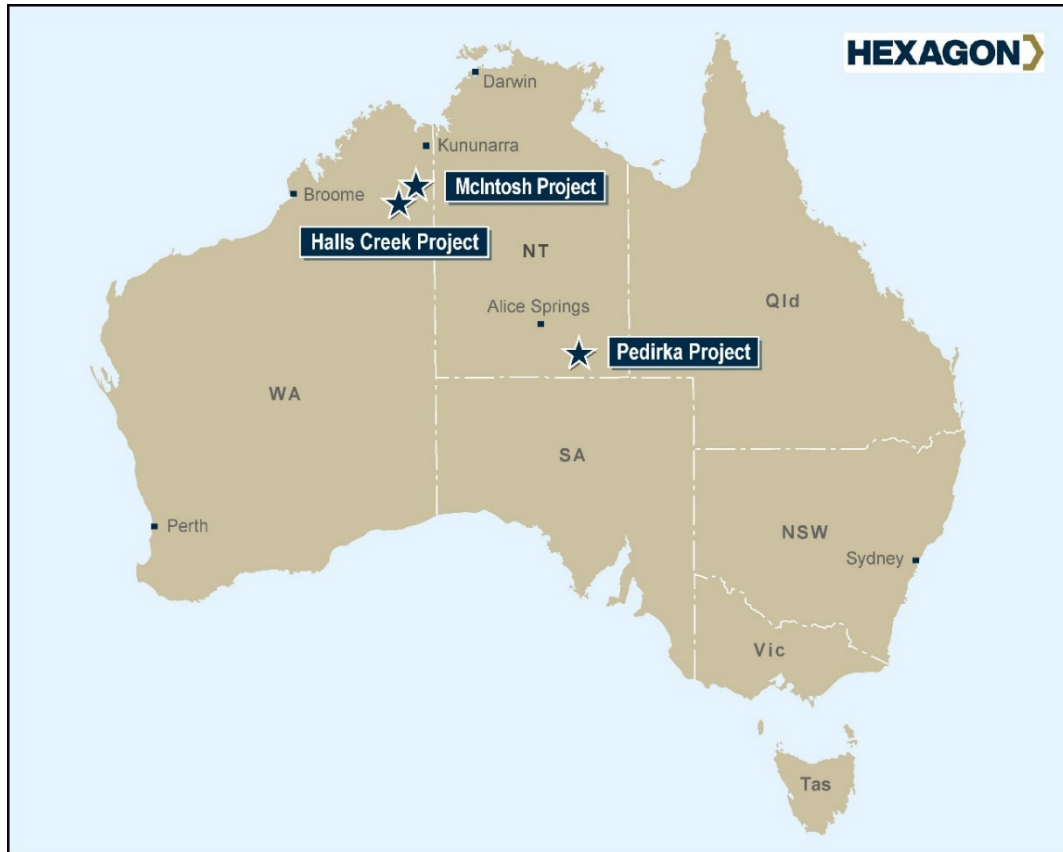
Hexagon's plan is to progressively increase its renewable energy inputs and lower its carbon emissions as it transitions from blue to green liquid hydrogen production, on a commercial basis, over time.

Hexagon also owns the McIntosh Nickel-Copper-PGE and Graphite project in Western Australia (WA) and the Halls Creek Gold and Base metals project also in WA. In the US, Hexagon has an 80 per cent controlling interest of the Ceylon Graphite project in Alabama, in which South Star Battery Materials Corp. (TSXV: STS) on 7 December 2021 signed an Option to earn up to 75%. TSXV approval of this deal has subsequently been received.

Hexagon is actively progressing value accretive transactions consistent with its strategy, skill set, and focus on clean energy materials and clean energy.

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

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Hexagon's Australian project locations