

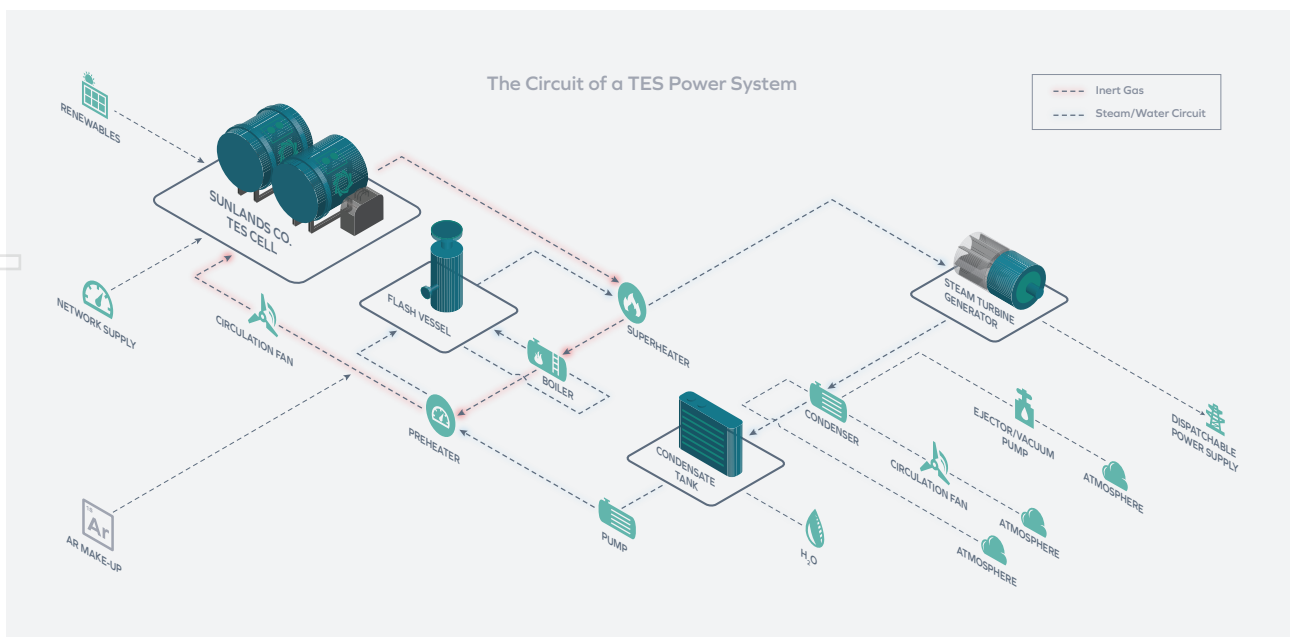


## Quantum Sunlands Partnership Thermal Energy Storage Pilot Project Update

Further to the Company's announcements regarding the Sunlands Co. long duration energy storage pilot plant project, the Company provides the following further information.

The pilot plant project involves critical test work to be undertaken by the Quantum Sunlands Partnership (QSP) in respect of various specifications of Uley coarse flake graphite required to form the thermal energy storage media. The independent test work program is being conducted by INEMET at its facility at the Technische Universitat Bergakademie Freiberg at a scale beyond the bench work scale completed in prior years. Successful completion of this work will ensure expedited commercialisation of the Sunlands Co. technology following the operational phase of the pilot plant.

QSP and the project engineers, ProTherm Systems, have completed the test work program methodologies which include thermal cycles at temperatures exceeding 2,000 degrees Celsius. The scope of this program has been extended beyond the coarse flake media and will include the heat transfer fluid, i.e., inert gas that is contained within Sunlands Co's thermal energy storage (TES) cells.



### ABOUT QUANTUM GRAPHITE LIMITED

QGL is the owner of the Uley flake graphite mineral deposits located south-west of Port Lincoln, South Australia. The company's Uley 2 project represents the next stage of development of the century old Uley mine, one of the largest high-grade natural flake deposits in the world. For further information, [qgraphite.com](http://qgraphite.com).

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The high operating temperatures of the program have been designed to simulate the very conditions within a TES cell during the charging and discharging phases of a TES cell. This program will provide additional valuable data beyond that collected during the Sunlands Co.'s Commercialisation Study which limited temperatures to 1,500 degrees Celsius.

Fresh samples have been prepared from Uley inventories and will be shipped immediately to Freiberg, Germany.

QSP estimates that initial results should be available by September 2022.

QSP has also expanded the Australian based team on the pilot project with additional engagements to assist ProTherm Systems and commence planning for the operational phase of the pilot plant.

**FOR FURTHER INFORMATION CONTACT:**

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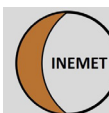


**QUANTUM SUNLANDS  
PARTNERSHIP**

**About The Quantum  
Sunlands Partnership**

QSP is a joint venture between the Company and The Sunlands Co. Ltd for the manufacture of coarse natural flake based thermal storage media. The coarse flake will be exclusively sourced from the Company's Uley mine. The finished media will be fitted within Sunlands Co.'s long duration energy storage cells.

<https://www.sunlandsc.com/>



**Institut für NE-Metallurgie  
und Reinstoffe**

**About INEMET**

The Institute for Non-Ferrous Metallurgy and High Purity Materials focuses on sustainable and innovative processes that rethink existing production processes. INEMET's dedicated team work toward a greener future and the revolutionizing of non-ferrous metallurgy.

<https://tu-freiberg.de/en/fakult5/inemet>