



**PETRATHERM LIMITED**  
**ABN 17 106 806 884**

## **\$0.8 million South Australian Government Grant for Petratherm's GeoSolar project**

Petratherm is pleased to advise that its GeoSolar project has been offered a \$794,268 grant under the Premier's Science and Research Fund (PSRF). The innovative project aims to reduce the cost of solar thermal technology by up to 40% through the integration of solar thermal, geothermal and combustion technologies.

The GeoSolar project is an initiative being pursued in conjunction with the University of Adelaide's highly regarded Centre for Energy Technology and involves a team led by Professor Gus Nathan.

Premier Mike Rann recently announced in a government news release that the grant offer is one of "five important research projects that are an investment in South Australia's future".

Petratherm has established GeoSolar Limited, a 100% owned subsidiary company of Petratherm Limited, and has entered into an exclusive agreement with the University of Adelaide to develop the integrated technology.

The project aims to design and develop an integrated solar, geothermal and combustion system to achieve high efficiency base load power generation.

The key innovation of the project is the use of an integrated boiler that exploits all of the various energy sources in a manner that reduces capital costs to achieve a critical breakthrough in cost and efficiency in solar thermal technology.

The prevalence of solar, geothermal and gas resource in SA provides a major opportunity for SA to further enhance its leadership in renewable energy technologies.

The GeoSolar technology, when developed, has been assessed as having the potential to:

- reduce capital cost of Concentrated Solar Thermal generation by 40% per MWh over a 30 year project life compared to equivalent state of the art systems, and;
- reduce CO<sub>2</sub> emissions from the boiler relative to existing natural gas combustion technologies by 46% and approximately 80% relative to coal based generation

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The grant offer by the PSRF is an exciting first step in the funding arrangements for the three year research and development program required for the GeoSolar project. The PSRF grant is conditional on achieving satisfactory funding to cover the three year work program.

Over the coming months Petratherm Limited (through GeoSolar Limited) and the University of Adelaide plan to secure additional Commonwealth and State Government grant funding, including but not limited to, up to \$5 million grants available under the Australian Solar Institute Program and R & D funding from Renewables SA.

The GeoSolar technology, when developed, is expected to have considerable local, national and international market potential. The local market in SA provides an ideal opportunity to fully test the technology at pilot and demonstration scale in the longer term.

Future updates on the GeoSolar project will provide further detail on the integrated technology, planned work program, market potential and broad economics.

Yours faithfully



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Managing Director

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