



# Petratherm Limited

Address by the Chairman  
Mr Derek Carter

Annual General Meeting  
29 November 2006

*To Shareholders and Guests*

## **Introduction**

Welcome to the second Annual General Meeting of Petratherm Limited.

It is a great pleasure to be here with you this morning to outline Petratherm's significant achievements over the past year, and to look forward to the exciting year ahead.

I do not propose to repeat the text of my Chairman's Report for Petratherm that is contained in the Annual Report, but rather to briefly review the highlights of reporting year, progress since that time and to outline the exciting future for Petratherm as an explorer and developer of geothermal energy.



## Highlights of 2005/2006

During the 2005/2006 year Petratherm Limited made significant progress towards achieving its stated mission which is to;

**“Explore and develop, emission free, commercially sustainable geothermal energy projects”**

The chronological highlights over the 2005/2006 year included,

- **September 2005** – Following shallow Phase 1 drilling, managed by Peter Reid and Betena Bendall, at the Paralana and Callabonna project sites, exceptional temperature gradients of 81 °C/km and 68 °C/km, respectively were confirmed.
- **January 2006** – Successful capital placement of \$1.97 million to fund the Phase 2 extension of the Paralana well.
- **May 2006** - Appointment of a Managing Director, Terry Kallis who has extensive experience in the power industry and renewable energy project development to complement the skills and capabilities of Petratherm’s Board and Management.
- **June 2006** – Successful Phase 2 drilling program completed within budget and ahead of schedule at Paralana with the geothermal test well being extended from 485 metres to 1807 metres where a temperature gradient of 50<sup>0</sup> C/km was recorded.

## Recent Achievements

Since the end of the reporting period the Company has continued to take further significant steps that have helped



position the Company for its next major stage of development and future growth. Those steps included;

- **August 2006** – Confirmation of world class thermal resource at Paralana and vindication of the Petratherm Exploration model, with temperatures of approximately 200 °C expected at a depth of 3.6 kilometres.
- **September 2006** – Completed a comprehensive pre-feasibility study and economic model for the Paralana Geothermal Energy Project. Concurrently a detailed competitor analysis was undertaken, a clear short and long term commercialisation path was developed for the Paralana Project and the Strategic Business Plan was enhanced and updated.
- **September 2006** – Moved into new offices on Greenhill Road to accommodate the growing needs of the Company.
- **November 2006** – Entered into a Memorandum of Understanding with Heathgate Resources to meet the growing electricity supply needs of their nearby, operating Beverley Uranium Mine from the Company's flagship Paralana Project.
- **November 2006** – Achieved project endorsement from the Asia Pacific Partnership on Climate and Clean Development (AP6) to undertake a study to "Identify high prospect geothermal energy projects in China".
- **November 2006**- Successful capital placement of \$ 2.08 M to fund the preparatory work for Phase 3 drilling at Paralana and ongoing working capital.



## **The Future**

The recent report commissioned by the British Government and prepared by Sir Nicholas Stern (Head of British Government Economics Service), on the Economics of Climate Change has triggered a new impetus across the world for greenhouse gas abatement. The issue of climate change has now been elevated to be amongst the top three current global political issues along with the international trade & economic development and the war in Iraq.

In Australia the issue of Climate Change has reached a new level of maturity and matters such as energy security, renewable energy technologies and carbon pricing mechanisms are receiving significant attention across the political spectrum.

The renewed emphasis on Climate Change matters in Australia creates an exciting environment for renewable energy technologies and in particular, technologies such as geothermal energy that have the potential to provide large scale, base load, zero emission electricity into the market.

Petratherm has positioned itself well to take advantage of the significant opportunities that are expected to arise here in South Australia, elsewhere in Australia and overseas.

## **Exploration Program**

The Company's key strength is its innovative Exploration Model that focuses on – **“shallow hot rocks close to market”**. The Model has been successfully applied to identify high prospect sites in South Australia, notably Paralana, Callabonna and Ferguson Hill.



In Australia a number of other states and territories are following the lead of the South Australia Government and in particular the initiatives of PIRSA, and are implementing legislative change to facilitate the exploration and development of geothermal energy.

Petratherm plans to judiciously expand its portfolio of high prospect geothermal projects in Australia and overseas. The Company will apply its Exploration Model to ensure careful selection of sites through proper consideration of the economic relationship between depth, temperature and location.

The Company will continue to explore for, and examine opportunities in countries, like China, where the combination of local geology and renewable energy policies are conducive to investment in geothermal energy.

### **Paralana Development Program**

The Company is now poised to enter its next major stage of development, the creation of an underground heat exchanger at the Paralana site which will involve drilling wells of between 3.5 and 4.0 kilometres.

The Company is well advanced in its preparations to develop a fluid circulation system at Paralana, which is the next key milestone in the commercialization plan. Petratherm has developed a unique strategy to lower risks and costs of both drilling and circulation processes by engineering the underground **heat exchanger within the insulating rocks** above the high heat producing granites (**the HEWI model**).

Development of the HEWI model will involve drilling of both injector and producer wells and the establishment of a



robust heat exchanger or, connecting fluid pathway, between the wells. Contract negotiations to secure a suitable rig to undertake the drilling of the first deep well are underway.

## **Paralana Commercialisation Plan**

As part of the Paralana pre-feasibility study work the Company has been investigating the optimum development (short and long term) path for the Paralana site. Paralana is favourably located just 11 kilometres from the Beverley Uranium Mine. The electricity needs of the mine are significant and are expected to grow substantially should nearby uranium deposits be exploited in the future.

Petratherm plans, under its MOU with Heathgate Resources – owner of the Beverley Uranium Mine- to develop an initial small scale plant of around 7.5MW to meet the local supply needs and has examined the potential for meeting growing local electricity demand of potentially, up to 30MW, equivalent to the needs of Pt. Lincoln.

In addition, the Company has commenced examining the potential for supplying large scale, base load power into the NEM region of South Australia and is targeting two entry points, namely Port Augusta and Olympic Dam. The large scale options, under examination include developments that range between 260MW and 520MW (up to 15% of the State's installed generation capacity).

As part of the commercialization plan the Company has been exploring Joint Venture opportunities, with discussions under way, and progressing well, with a number of interested third parties.



The Government makes available grants for both research and commercialisation and these avenues of additional funding are being monitored by the Company.

## **Conclusion**

Considerable progress has been made over the past 17 months and the Company is now entering an exciting stage of development at time when Australia and indeed the world is seeking new solutions to combat the expected severe effects of Climate Change.

I would like to thank the Board, Staff, Contractors and Consultants of Petratherm for the great contribution they have made to the development of the Company.

Finally, I would like to thank our shareholders for their keen interest and strong support of the Company and I look forward that continuing into the future.

Our Managing Director, Mr. Terry Kallis, will make an update presentation of the Company's activities after the conclusion of formal part of today's proceedings.