

# PETRATHERM QUARTERLY REPORT

September 2009

# Quarter three highlights

## Paralana

- > Federal Resources Minister launches Petratherm's flagship Paralana Joint Venture Project in South Australia
- > Drilling continues steadily and final installation of passive seismic array completed
- > \$435 million Renewable Energy Demonstration Program (REDP) announcement imminent

## Spain

- > Petratherm España begins extensive survey to pinpoint a potential well site in Tenerife
- > Cooperative agreement signed with governments in Madrid

## Corporate

- > Extraordinary General Meeting approves further share placement
- > Independent geothermal industry report shows early investment in building transmission lines will deliver substantial savings to national electricity customers
- > As at 30 September the Company held \$13.38 million in cash

## Review of Operations

Petratherm has reached several important milestones during the quarter with drilling of the first well steadily continuing at our flagship Paralana project in the northern Flinders Ranges.

Federal Resources Minister Martin Ferguson officially launched the project in early August on site with South Australian Premier Mike Rann also in attendance.

To date, the Paralana Joint Venture has received \$4.2 million under the Commonwealth Government's Geothermal Drilling Program toward the project.

In Spain, an important cooperative agreement was signed between Petratherm España and the Spanish Federal and Madrid Regional

governments to progress the 8MW Geo-Madrid District Heating Project. The company was also awarded three geothermal investigation permits covering the Canove, Montbui and Vic areas of Spain, near the city of Barcelona.

During August, Petratherm held an extraordinary general meeting where shareholders endorsed the recent placement of 9,636,250 shares.

Exploration and evaluation expenditures on a cash basis amounted to \$5.79 million during the quarter, primarily reflecting rig mobilisation and increased site activity at Paralana.

Of that expenditure, \$1.2 million was funded by our Joint Venture partners (Beach Petroleum and TRUenergy).

Under the JV, Beach Petroleum pay the first \$5 million toward the Paralana 2 well and TRUenergy pay \$3 million toward the well costs. Thereafter, the JV partners contribute to project costs based on their equity share of the project. The same arrangement applies for the Paralana 3 well.

Ongoing administration costs of \$0.68 million during the quarter reflect the increased level of activity arising from Paralana and the geothermal projects across the Company's growing portfolio.

As part of the funding agreement for the Federal Government's Geothermal Drilling Program grant, Petratherm has received \$4.62 million (inclusive of GST).

At the end of the quarter the Company held \$13.38 million in cash.

## Corporate, Industry & Regulatory

An announcement is expected soon on Petratherm's \$62.8 million funding application under the Federal Government's \$435 million Renewable Energy Demonstration Program.

Petratherm, on behalf of the Paralana Joint Venture partners Beach Petroleum and TRUenergy Geothermal, lodged its application in mid April to contribute towards the cost of building a 30MW commercial demonstration project at Paralana.

The company was later advised the application was assessed as eligible and would undergo a full merit assessment.

The REDP is a competitive grants program designed to accelerate the commercialization and deployment of renewable energy technologies for power generation across Australia.

### Report supports early transmission investment

During the period, Petratherm Managing Director Terry Kallis welcomed a new independent report showing geothermal has the potential to be the cheapest form of renewable energy.

Mr Kallis is also chairman of the Australian Geothermal Energy Association (AGEA) and AGEA's representative to the Australia Electricity Market Commission's Stakeholder Committee Review of Australia's Energy Market (in light of Climate Change policies and the renewable energy target).

The report by leading energy economics firm McLennan Magasanik Associates, (the company that advised the Federal Government on the design of the Carbon Pollution Reduction Scheme and Renewable Energy Target), was commissioned by AGEA.

It studied the cost benefit of connecting an electricity transmission line from Innamincka in northern SA via Olympic Dam near Moomba to Davenport near Port Augusta – taking in the geothermal energy projects of Geodynamics in the Cooper Basin and Petratherm in the Arrowie Basin in the northern Flinders Ranges.

The major finding of the MMA report was that it showed investing \$172 million in transmission would create savings of \$860 million for South Australian customers and \$2,800 million for customers of the National Electricity Market from 2011 to 2030.

### Funds arrive under drilling grant for Paralana

Petratherm on behalf of the Paralana JV Project was successful with its application under the Commonwealth Government's \$50 million Geothermal Drilling Program (GDP) and has since received \$4.2 million from the maximum grant amount of \$7 million.

The GDP provides for 60% upfront funding of which Petratherm's share is 69% or \$2,898,000 under the terms of the Paralana JV.



# Project Update

## Paralana

Our flagship Paralana project in South Australia is on track to deliver Australia's first commercial geothermal energy plant by 2011.

Some major milestones were reached during the quarter with drilling of the first deep injection well that started on June 30 successfully continuing.

Post reporting period, the minimum target depth of 3,600 metres had been achieved on October 22 and drilling was expected to be completed in early November.

The depth of the well as of October 28 was 3,822 metres

While preliminary temperature measurements will be taken, the well will take a few weeks to achieve temperature equilibrium due to having been drilled with mud cooled at the surface. Following logging, the well will be cased to total depth.

The project was officially launched in early August with our joint venture partners Beach Petroleum and TRUenergy Geothermal. A program to fracture rock and create an underground heat exchange reservoir will be developed once drilling is completed. Another well is planned to be drilled next year, followed by a plant on the surface.

The final installation of the passive seismic array was also completed during the quarter.

This array has captured natural background seismic information and will be used to record the location of micro-seismic events during rock fracturing for the underground heat exchanger.

The company is searching for hot fluid where there is potential for a conventional volcanic heat-based

project. Experienced international specialist Geosystems, has been contracted to conduct the month-long survey.

Petratherm España has three Geothermal Exploration Licenses (GELs) on Tenerife, the largest of seven islands in this Spanish archipelago off the west coast of North Africa and the Company is currently in discussion with interested potential joint venture parties.

The MT survey is an important step forward in the Company's work toward establishing a viable geothermal energy project on the island and it will provide valuable information on where the real potential on the island resides.

Tenerife provides a major opportunity to build a conventional geothermal project.

The island has a permanent population in excess of one million that can increase to 1.5 million during peak tourist season – placing a large demand on peak power generation in excess of 800 MW.

The island also has substantial transmission infrastructure close to Petratherm España's exploration licenses.



South Australian Premier Mike Rann, Petratherm Chairman Derek Carter and Federal Resources Minister Martin Ferguson at the Paralana launch

## Spain

### Tenerife

An extensive magnetotelluric survey across the volcanic island of Tenerife in Spain's Canary Islands started post the reporting period.

Petratherm España is working toward targeting the location of a deep production well site for geothermal power generation.

## Project Update

### Geo Madrid District Heating Project

An important cooperative agreement was signed with the Madrid Regional and Spanish governments to progress the 8MW Madrid Geothermal District Heating project.

The agreement provides for a committee comprising of representatives from Petratherm and the two Spanish governments. Its role is to expedite the remaining steps of the project required to achieve financial close.

Petratherm's Madrid GDH project has been highlighted as one of six renewable energy projects of interest within the Madrid Regional Government's Renewable Energy Cluster, which is seeking to advance renewable energy projects in the Madrid region.

### Barcelona

The remaining Barcelona applications covering the Canoves, Montbui and Vic areas were approved and three additional permits issued to Petratherm España.

Petratherm now has four geothermal investigation permits covering areas within the Valles and Abro Basins near the city of Barcelona.

The Montbui area is well known for its thermal spas. The permit areas are located approximately 30 kilometres north-northeast of Barcelona and in close proximity to major electricity transmission infrastructure with a capacity in excess of 2,000 MW.



The northern Flinders Ranges near our flagship Paralana project

### Safety, Environment & Community

Petratherm is continuing to upgrade and enhance its overall Safety, Health, Environment and Quality Management system to meet the needs of the Company's growing business operations.

### Website Updated

The Petratherm website has been upgraded and it is continually updated with our latest news and announcements. Find out more: [www.petratherm.com.au](http://www.petratherm.com.au)

### We have moved...

Petratherm has moved into new offices to accommodate our growing company.

We are now at Level 1, 129 Greenhill Rd, Unley, South Australia, 5061

### Annual General Meeting

The next Annual General Meeting for shareholders will be held on Thursday, November 26.

An electronic version of the Annual General Report can be viewed on our website.

## Corporate information

### Corporate office

Level 1, 129 Greenhill Road  
Unley, South Australia 5061  
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e. admin@petratherm.com.au  
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ACN 106 806 884

### Board of directors

Derek Carter – Chair  
Terry Kallis – Managing director  
Richard Hillis – Non executive director  
Richard Bonython – Non executive director  
Simon O’Loughlin – Non executive director

### Company secretary

Donald Stephens  
HLB Mann Judd (SA) Pty Ltd

### Stock exchange listing

Australian Stock Exchange  
(ASX code PTR)

### Share registry

Computershare Investor Services Pty Ltd  
Level 5, 115 Grenfell Street  
Adelaide, South Australia 5000

### Legal advisors

O’Loughlins Lawyers  
Level 2, 99 Frome Street  
Adelaide, South Australia 5000

### Auditors

Grant Thornton  
South Australian Partnership  
67 Greenhill Road  
Wayville, South Australia 5034

## Petratherm team

### Managing director

Terry Kallis

### Exploration manager

Peter Reid

### Business development manager

Jonathan Teubner

### Project manager – Paralana

Paul Jepsen

### Geophysicist

Louise McAllister

### Project geologist

Mathieu Messeiller

### Business accountant

Paul Smith

### Public & investor relations

Belinda Willis

### Office manager

Elena McRae

## Spanish team

### Manager – Spain

Raul Hidalgo

### Project geologist

Victor Guerrero

## Upcoming events

### Industry events

For further information on forthcoming events in the geothermal sector visit the PIRSA website at <http://geothermal.pir.sa.gov.au/news/events>