



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

## Spanish Projects Update

### Barcelona Permits issued to Petratherm España

Petratherm is pleased to advise that the remaining Barcelona applications covering the Canoves, Montbui and Vic areas have been approved and three additional permits have been issued to Petratherm España.

Petratherm now has four geothermal investigation permits covering areas within the Valles and Ebro Basins near the city of Barcelona – refer diagram below.

The Montbui area is well known for its thermal spas with the city of Montbui having an ancient spa dating back to Roman days and surface hot springs exceeding 80°C.

**21 July 2009**

**ASX Code: PTR**

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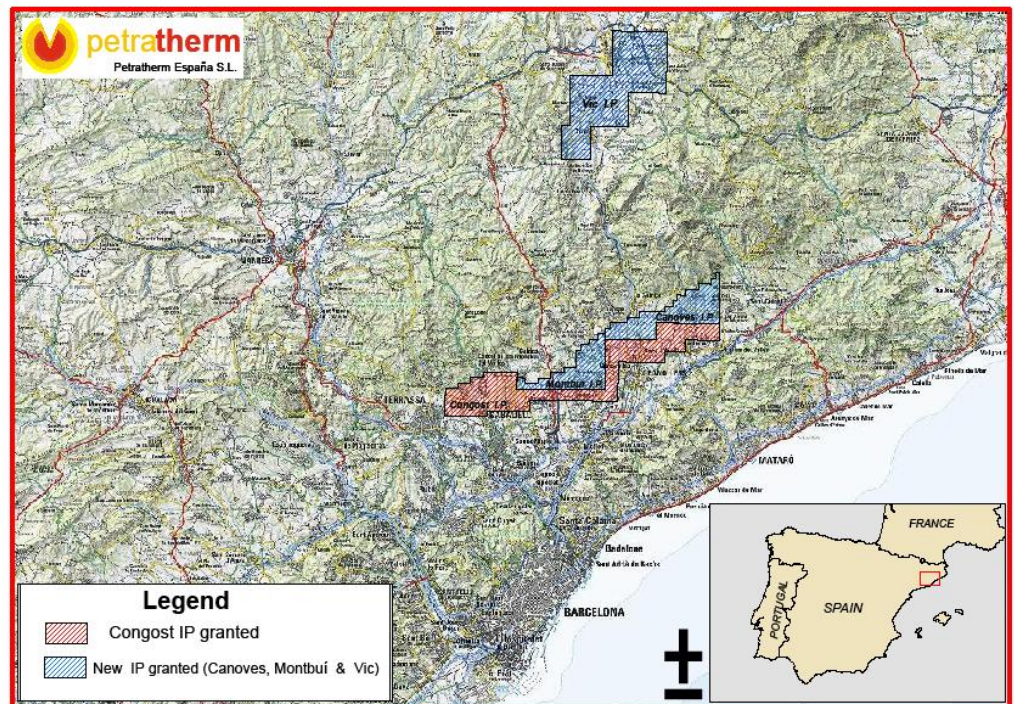
105-106 Greenhill Road  
Unley SA 5061

**T:** +61 8 8274 5000

**F:** +61 8 8272 8141

**W:** [www.petratherm.com.au/](http://www.petratherm.com.au/)

**E:** [admin@petratherm.com.au](mailto:admin@petratherm.com.au)



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 Valles Basin permit areas cover locations of known high heat flow with local hot aquifers evidencing temperatures of between 115°C to 130°C at depths of 1,500 metres to 2,000 metres. A 1,000 metre deep geothermal well (Samalus 6) on the northern edge of the Valles basin has a measured temperature of 90°C. The heat source arises from high heat production granites that underpin the Valles Basin and outcrop in the adjacent ranges. The basin thickness is estimated at approximately 3,000 metres.

The geology (including temperatures and depths of aquifers) and market characteristics make the Barcelona project area attractive for both geothermal district heating (GDH) applications and engineered geothermal systems (EGS) development for electricity production.

### **Madrid Geothermal District Heating Project**

Petratherm advises that the exclusivity agreement with Dalkia has lapsed and will not be extended. Acceptable joint venture arrangements with Dalkia were unable to be agreed. As such, the project is available to other interested joint venture parties and discussions with such parties have commenced.

The next steps in achieving financial close for the Madrid project involve:

- Agreement with customers for the supply of heat – the customers include various departments of the Madrid Regional Government.
- Obtaining environmental clearances for drilling and development.
- Securing a competitively based engineering, procurement and construction contract, and;
- Establishing a competitively based operations and maintenance contract.

Each of the above steps is underway and financial close, which is reliant primarily on the pricing arrangement for the supply of heat with the Madrid Regional Government, is expected before the end of calendar 2009.

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

### **Tenerife Volcanic Geothermal Project**

Petratherm España has sought tenders for a major magneto-telluric (MT) study to be undertaken across its three tenements on the island of Tenerife. The MT study will assist in locating a drilling target for the development of geothermal power production on the island. Concurrently, Petratherm España has commenced discussions with interested joint venture parties for the Tenerife project.

Yours faithfully



**Terry Kallis**  
Managing Director

#### **MEDIA CONTACT:**

Terry Kallis  
Kieran Hall / Tim Hughes

Petratherm Limited  
Hughes Public Relations

08 8274 5000  
08 8412 4100