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ASX Code: PTR

ABN 17 106 806 884

105 Greenhill Road  
Unley 5061  
South Australia

Tel: +61 8 8274 5000  
Fax: +61 8 8272 8141

W: [www.petratherm.com.au](http://www.petratherm.com.au)  
E: [Hadmin@petratherm.com.au](mailto:Hadmin@petratherm.com.au)



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

## **Madrid District Heating - Pre-feasibility Assessment yields positive results**

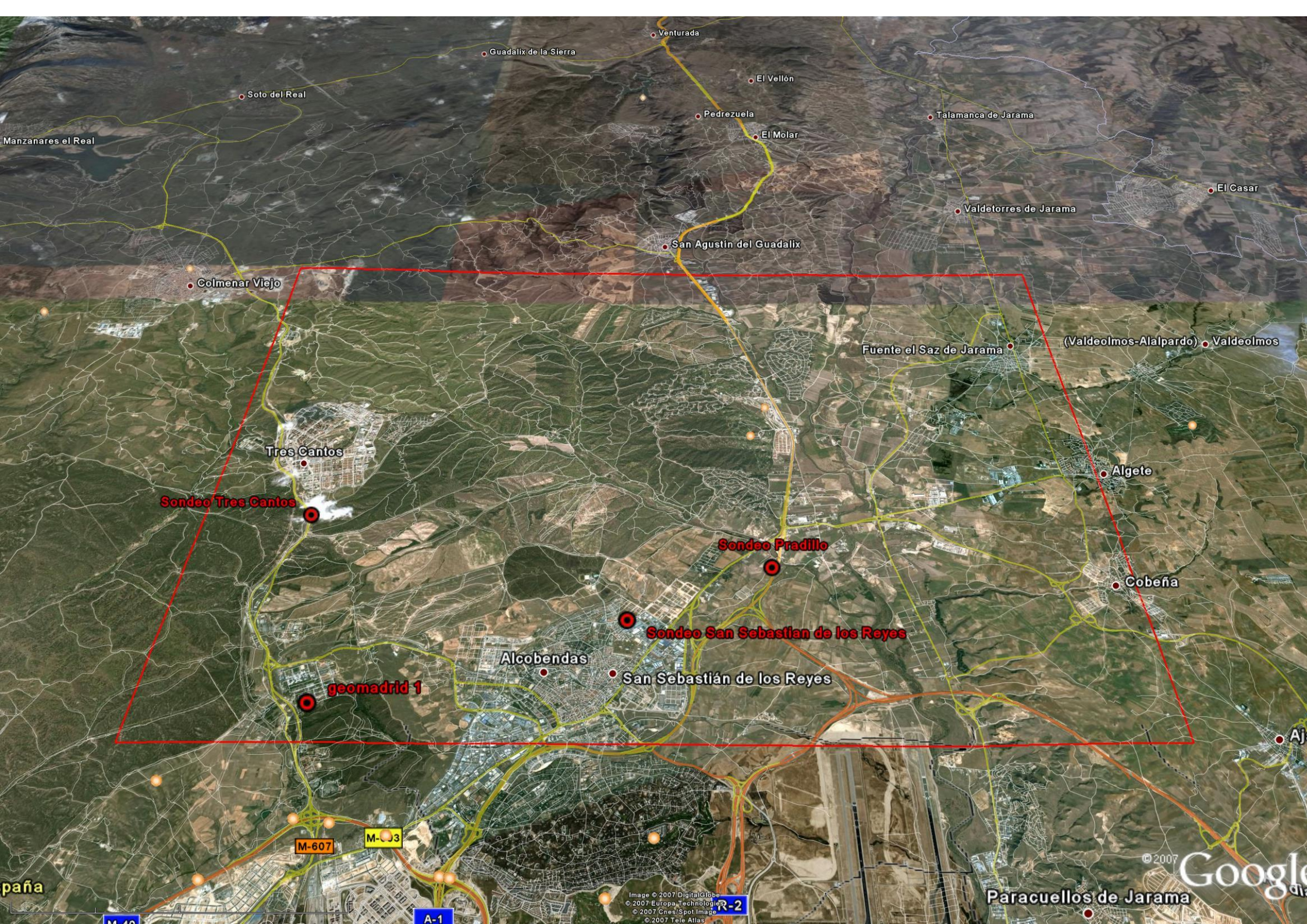
**Petratherm is pleased to announce that the pre-feasibility assessment of its Madrid Basin Geothermal District Heating (GDH) Project has determined that the potential exploitation of the known geothermal resource in the Petratherm Madrid geothermal license area is economically viable under current market conditions.**

**The findings have provided an initial level of confidence that first construction could commence by November 2009 with geothermal heat production and project revenues flowing by July 2010.**

The pre-feasibility assessment, undertaken by GPC IP, French expert consultants, utilized temperature, depth and flow information from four existing deep wells across Petratherm's large (330 square kilometre) Madrid Basin geothermal exploration license (GEL) area – refer aerial photograph overleaf showing GEL boundaries.

The scope of the pre-feasibility assessment undertaken by GPC IP - who operate a large part of the existing Paris Basin's 230 MW GDH projects - included;

- a detailed examination of a specific application of GDH at the existing Geo-Madrid doublet well site (refer left foreground of photo) – aiming to supply seven major building complexes including a University Campus, Hospital and Retirement Village, and
- an assessment of the potential thermal resource capacity of the broader Madrid Basin – assessing shallow, medium, deep and very deep geothermal resource – and estimating the recoverable heat potential.



Sondeo Tres Cantos

Sondeo Pradillo

Sondeo San Sebastian de los Reyes

geomadrid 1

Colmenar Viejo

Tres Cantos

Alcobendas

San Sebastián de los Reyes

Fuente el Saz de Jarama

(Valdeolmos-Alalpardo) Valdeolmos

Algete

Cobefia

Guadalix de la Sierra

Venturada

El Vellón

Pedrezuela

El Molar

Talamanca de Jarama

Valdetorres de Jarama

San Agustín del Guadalix

El Casar

Soto del Real

Manzanares el Real

M-607

M-303

A-1

R-2

Paracuellos de Jarama

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The examination of the Geo-Madrid GDH application concluded that 8 MW of thermal capacity could be extracted from a doublet system (assuming two newly drilled wells) and delivered to the nearby seven building complexes with attractive project returns, even under a set of conservative technical and commercial assumptions – that exclude potential available subsidies.

The assessment of the broader thermal resource capacity concluded that there was an expected massive potential thermal resource, at shallow depths of less than 2 kilometres, capable of supporting in excess of 150 MW of thermal capacity across the Company's Madrid Basin GEL area.

The key project technical parameters that underpinned the pre-feasibility assessment included;

- reservoir depths ranging between 1550 and 1600 metres;
- reservoir thicknesses of between 200 and 800 metres;
- temperatures at depth ranging between 70 and 90 °C, and
- flow rates ranging between 200 to 250 cubic metres per hour.

In the case of the Geo-Madrid GDH application, using conservative assumptions, the expectation from the well doublet was 8 MW of thermal capacity with an annual production of around 45,000 MWh (thermal) – enough energy to support the heating needs of a town with around 4,000 households. The Project is expected to save approximately 4,000 tonnes of heating oil equivalent annually and should reduce CO<sub>2</sub> emissions at a rate of 20,000 tonnes per year. With the determination of potential commercial viability under current market conditions, the Geo-Madrid GDH project can move forward to front end engineering and design (FEED), targeting a final investment decision within the next six months.

The next steps in the Geo-Madrid GDH project to be undertaken over a period of six months include;

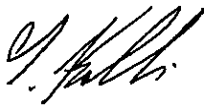
- an inspection of the two existing deep wells to confirm previous well logging information and to ascertain their suitability, or otherwise, for use in production;
- application for a change of the existing license from exploration to investigation to allow for drilling operations;
- development of an environmental impact study (EIS) to cover the expected drilling operations;
- securing a rig to drill any required deep (up to 2,000 metre) wells;
- development of an EIS to cover the above ground geothermal plant and heating distribution grid to the building complexes;
- confirmation of final demand and GDH system design (plant and distribution system);
- detailed costing and contracting for above ground equipment and heat distribution system, and
- sale of product to customers (sales agreements).

The Company currently estimates that construction of the Geo-Madrid GDH project could commence by November 2009 with geothermal heat production, and project revenues flowing by July 2010. Concurrent with the Geo-Madrid GDH project will be pre-feasibility assessments for GHD applications at the Tres Cantos (technology park precinct) and San Sebastian des los Reyes (major subdivision) areas – also highlighted in the photo.

The Company has received a very favourable initial reaction from relevant Regional and Federal Government departments and has attracted the interest of potential joint venture partners.

As a result, the Company plans to pursue suitable joint venture arrangements for its GDH projects in the coming months. Such arrangements will bring additional local expertise and capital to the projects enhancing the return for Petratherm shareholders.

Yours faithfully



**Terry Kallis**  
Managing Director

**MEDIA CONTACT:**

Terry Kallis  
Kevin Skinner

Petratherm Limited  
Field Public Relations

08 8274 5000  
08 8234 9555 / 0414 822 631