

# ASX Release



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

**PETRATHERM SECURES FIFTH SPANISH PROJECT  
WITH THREE NEW EXPLORATION LICENSES IN THE  
ALMAZAN BASIN**

***New Spanish Project Expands Portfolio to Five***

Petratherm is pleased to announce that it has added a new geothermal exploration area expanding its portfolio of Spanish projects to five.

The Company has been granted three new geothermal exploration licenses (GELs) - El Vallejo, El Regacho and Monte Grande - covering about 432 square kilometres of the Almazan basin, in the Castilla y León Region of northern Spain.

***Almazan Project close to Market and Infrastructure***

The new Almazan project area is located about 250 km north-east of Madrid and is adjacent to high capacity 400 kV power transmission lines that service Spain's northern regions and the township of Almazan (see Figure 1 – project site and Spanish power network infrastructure).

**8 November 2007**

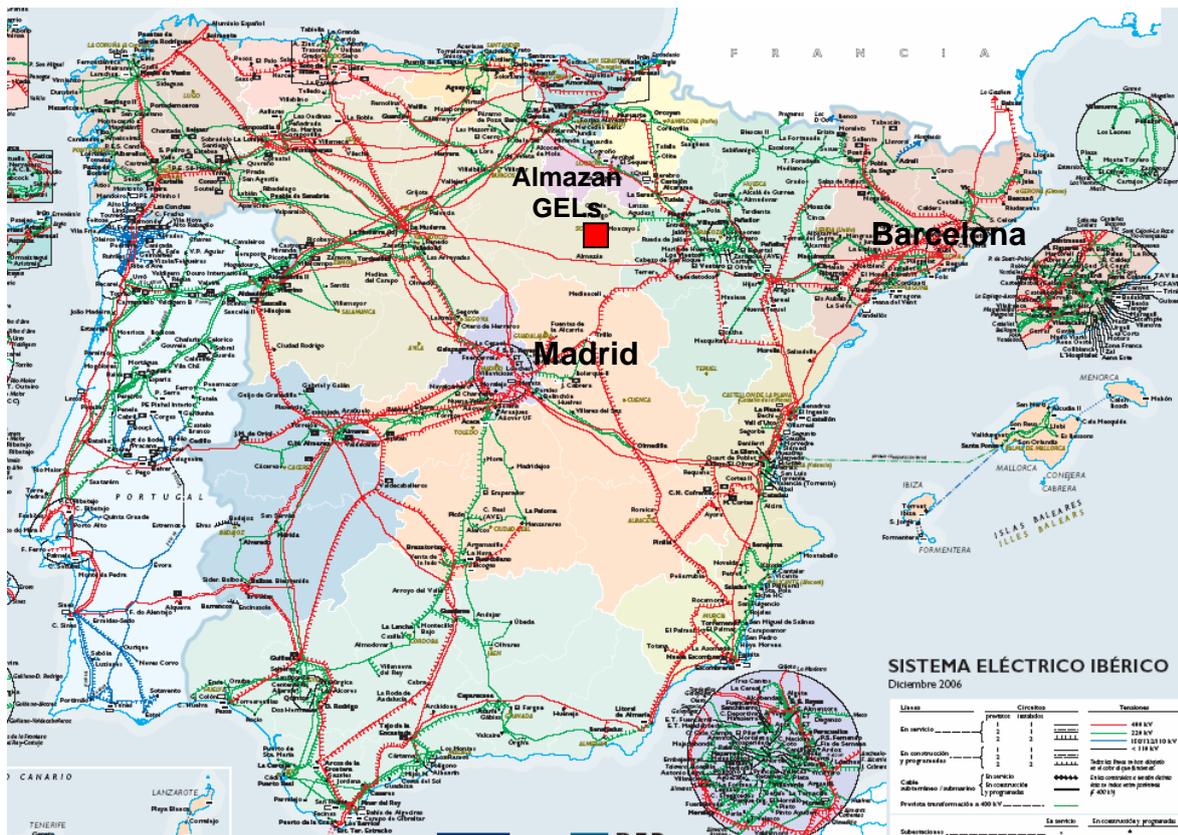
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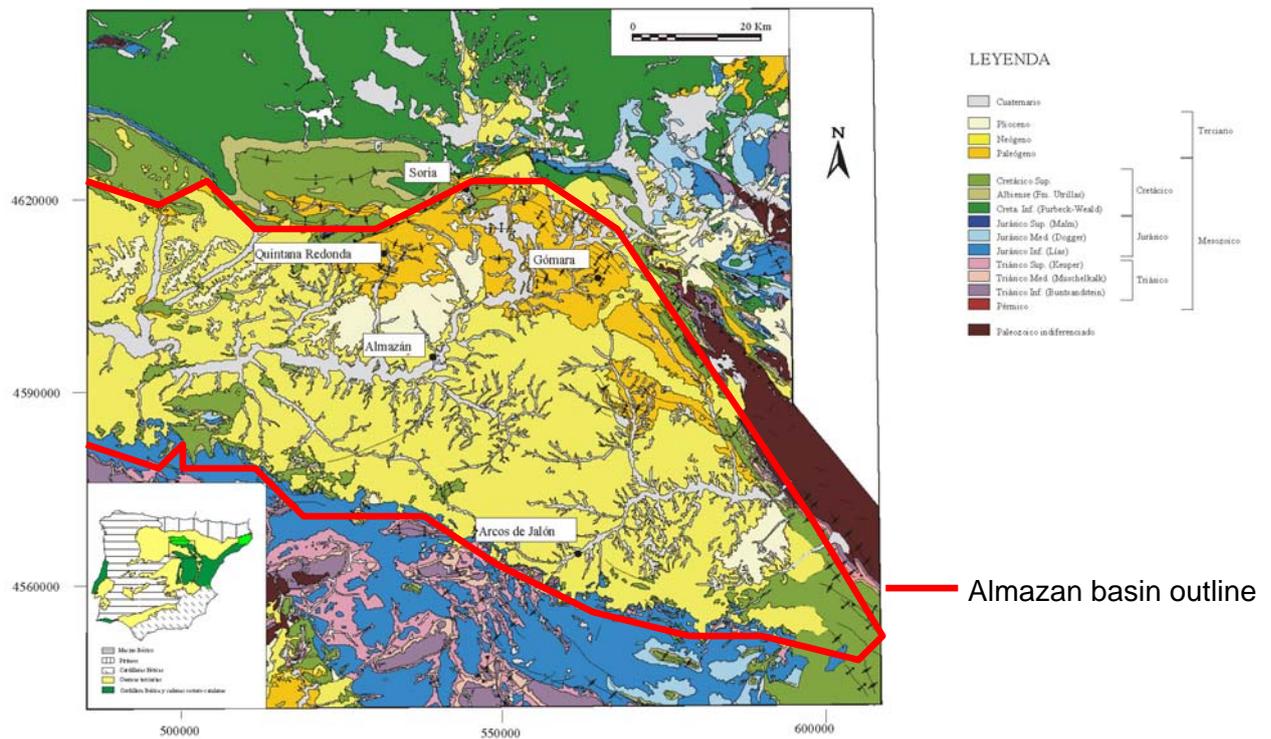
**Figure 1: Location of the Almazan Project area with respect to the Spanish transmission grid and the major cities of Madrid and Barcelona.**

**Almazan Project – Engineered Geothermal System & Direct Use Heat Opportunities**

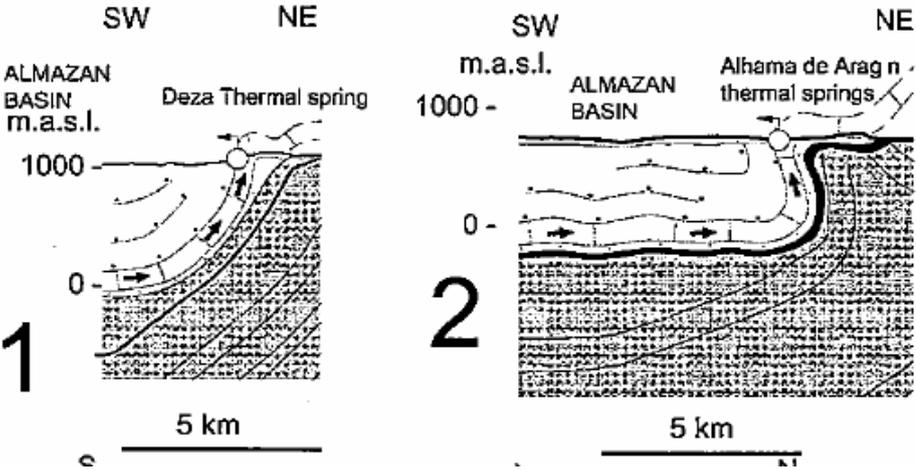
The Almazan Project is an engineered geothermal system project (EGS) with the additional potential for exploiting direct use heating from naturally occurring hot aquifers – similar to the Company’s Madrid and Barcelona Projects.

The Almazan Basin is one of the deepest Mesozoic-Tertiary Basins within the Iberian Peninsula, and the GELS have been located over the area of the Basin which combines the thickest section of sediments together with a significant gravity anomaly (see Figure 2) – in order to target the best commercial EGS prospect in the region.

The Basin is bounded on its eastern margin by large faults along the base of the Iberian Range. Thermal springs occurring at the townships of Alhama de Aragon, Deza-Embid and Jaraba are associated with the movement of hot aquifer waters from Upper Cretaceous carbonates underlying the Almazan Basin at depths of about 1000 m, up these faults to the surface (see Figure 3). The springs are significant because they have elevated temperatures at the surface (30-34°C) and high flow rates (500 – 1000 litres per second). Estimates from geo-thermometry calculations performed on these springs indicate the aquifer’s equilibrium temperature is around 110°C – suggesting that there may be a significant heat anomaly under the Basin.



**Figure 2: Geological map of the Almazan Basin and the adjacent Iberian Range to the east. The margins of the Basin are indicated in red.**



**Figure 3: Schematic diagram demonstrating the relationship between the hot springs, the aquifer at depth in the Almazan Basin and faults at the margin of the Basin.**

## Two Conventional and Three EGS Projects – with more planned in Spain

The Company has now secured two conventional geothermal projects in the Canary Islands – Tenerife and Gran Canaria - and three EGS projects areas on mainland Spain - Madrid, Barcelona and Almazan (refer Figure 4).

The Company’s entry into the Spanish energy market is a strategic move that is consistent with the Company’s stated objective of pursuing opportunities in areas where the geology, energy market and regulatory environment are conducive to commercially viable geothermal energy projects.

The Company plans to secure around seven of eight geothermal energy projects across Spain covering both EGS and conventional geothermal technologies and is targeting both direct use hot water and electricity as the two key products for sale to local markets.

This portfolio of opportunities is being built with small initial financial exposure, utilizing the company’s intellectual property (IP) developed in Australia, plus its energy industry contacts in Europe. The opportunities secured to date have attracted inquiry and interest from a number of European energy industry participants. Once the Spanish geothermal portfolio is completely established, the company will seek to further leverage its IP in Europe via a number of options to spread risk and financial exposure in the project development stage, including consideration of expanded co-operative arrangements with industry participants.

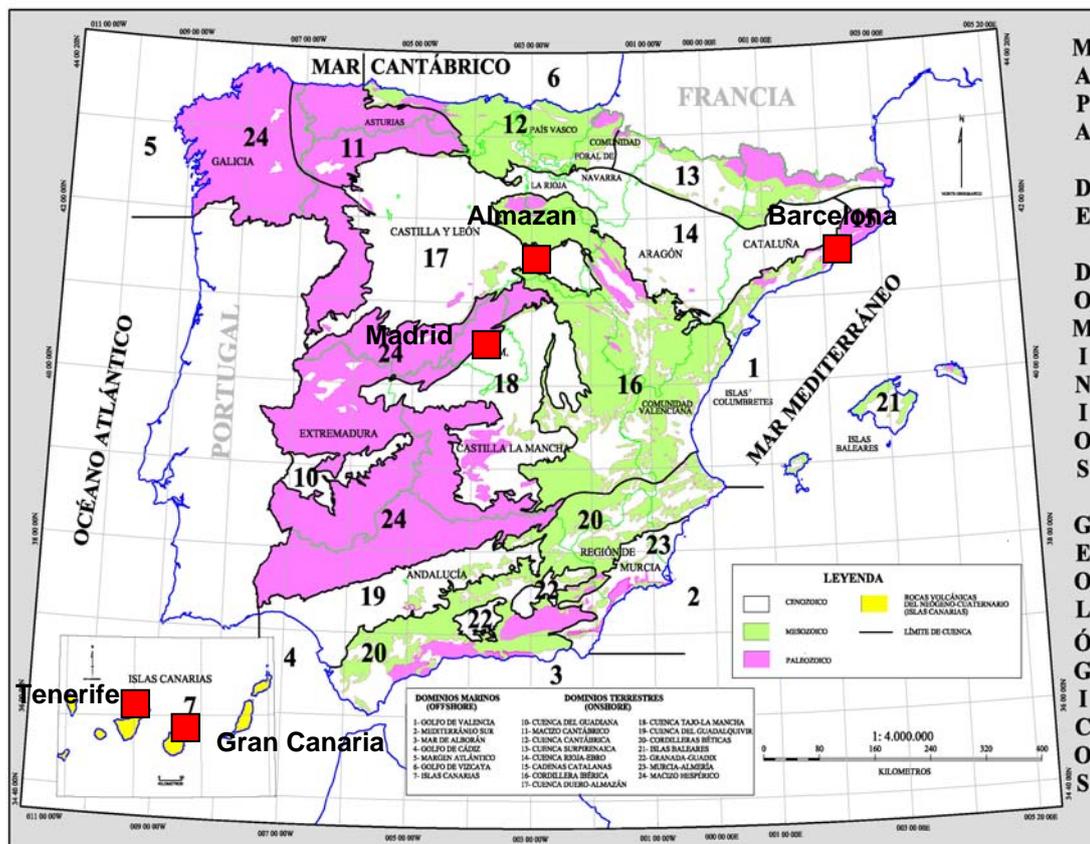


Figure 4 Petratherm’s Five Spanish Geothermal Energy Projects

## ***Petratherm España (Spain) SL***

Petratherm España, formed late last year in Spain, will hold title to all the Spanish project GELs. Petratherm España is owned 93% by Petratherm Limited and 7% by Prehenita SL – a Spanish geological consultancy that maintains an extensive database and knowledge of Spain's geology covering both the energy and minerals sectors.

Petratherm España's office will open shortly in the central location of Madrid. In addition, Petratherm España has established close working relationships with the geology department of the University of Salamanca. Raul Hildago, a geologist with 20 years' experience who has been working closely with Petratherm for the past year, was appointed as the Manager of the subsidiary Spanish company in April 2007.

## ***Spanish Regulatory Environment***

The European Union (EU) member countries have enabling legislation that underpins a very favourable commercial framework for renewable energy, including geothermal energy. Spain is a signatory to the Kyoto Protocol, a member of the European Union (EU) and has demonstrated a strong commitment to the growth of renewable energy.

Spain is second only to Germany in terms of installed wind generation capacity. The Spanish Renewable Energy regulatory arrangements provide for long term (i.e. 20 years) "in feed" electricity tariffs for renewable projects with prices typically in excess of Euro €85/MWh or AUD \$140/MWh. This compares very favourably to the market in Australia where prices for renewable energy projects are typically in the range of \$75/MWh to \$85/MWh (inclusive of renewable energy certificates).

Yours faithfully



**Terry Kallis**  
Managing Director

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