

ASX Release

1 May 2013

ASX Code: PTR

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PETRATHERM LIMITED
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MD presentation to SA Resources & Energy Investment Conference

Petratherm's Managing Director, Terry Kallis will present later today at the South Australian Resources and Energy Investment Conference.

The presentation provides an update on the Company's flagship Paralana project, its Tenerife project and the Clean Energy Precinct project.

The presentation outlines key areas of differentiation the Company believes it has in the Australian geothermal energy sector, including:

- Business model – based on JVs with right projects, partners and people – securing key skills and funding
- Project portfolio – several projects across geothermal technology spectrum to manage risks
- Track record of success – drilled, cased, fraced and flowed Paralana 2 well, confirmed economic temperature and existence of natural fracture network
- Extraction model for a pumped, deep engineered geothermal systems well that is technically valid/optimal for target temperature
- Clear commercialization path, for both the local off grid and long term on grid and growing power markets

Yours faithfully

Terry Kallis
Managing Director

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SAREIC 2013

Petratherm Limited

Company & Projects Overview

Managing Director Terry Kallis

1 May 2013

Disclaimer and competent persons statement

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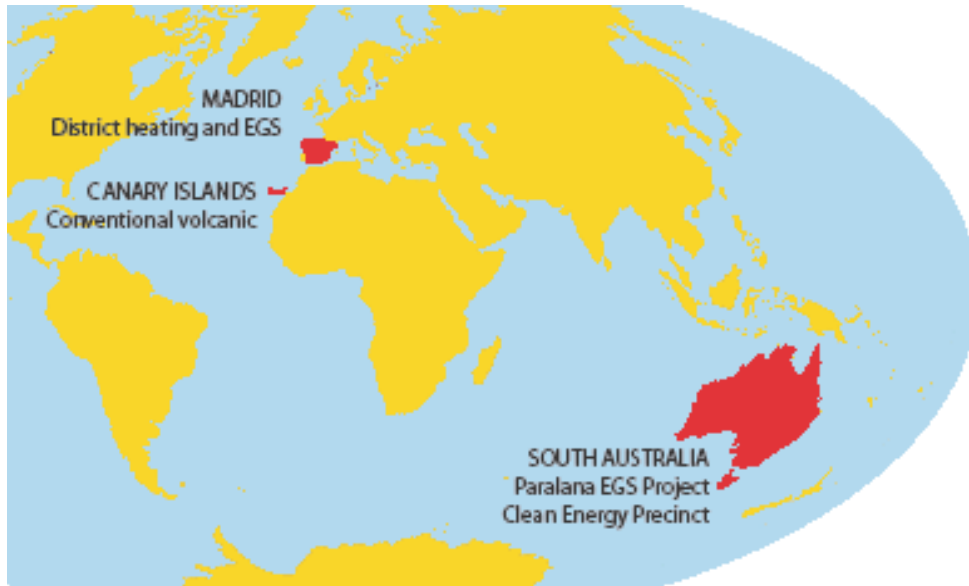
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All amounts in Australian dollars (AUD) unless stated otherwise.

The information in this presentation that relates to Exploration Results, is based on information compiled by Peter Reid, who appears on the Register of Practising Geothermal Professionals maintained by the Australian Geothermal Energy Group Incorporated at the time of the publication of this report. Peter Reid is a full time employee of the Company. Peter Reid has sufficient experience which is relevant to the style and type of geothermal play under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the Second Edition (2010) of the Australian Code for Reporting Exploration Results, Geothermal Resources and Geothermal Reserves. Peter Reid has consented in writing to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

Petratherm overview



Our company

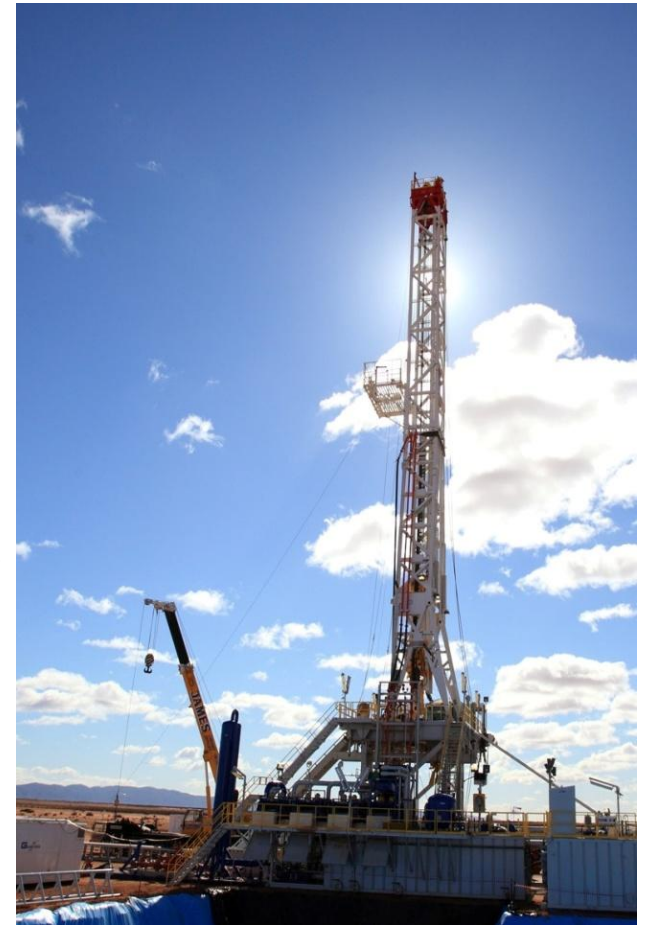
- > Projects spanning Australia, Spain and China
- > Projects across the spectrum of geothermal technology
- > Flagship project – Paralana in SA's northern Flinders Ranges

Our business model – consistent and robust

"To explore for and develop low emission energy projects that are commercially attractive"

- > Unlock Paralana's vast geothermal resources value through demonstration of viable power production.
- > Develop a portfolio of quality geothermal energy projects.
- > Identify complementary wind, solar and gas power opportunities to assist geothermal development.
- > Introduce joint venture partners with common interests, the right skills/knowledge, risk appetite & funding ability.

"Right projects, right partners, right people"



Our board – track record of success



Derek Carter
Chairman



Simon O'Loughlin
Director



Richard Hillis
Director



Richard Bonython
Director



Lewis Owens
Director



Terry Kallis
Managing Director

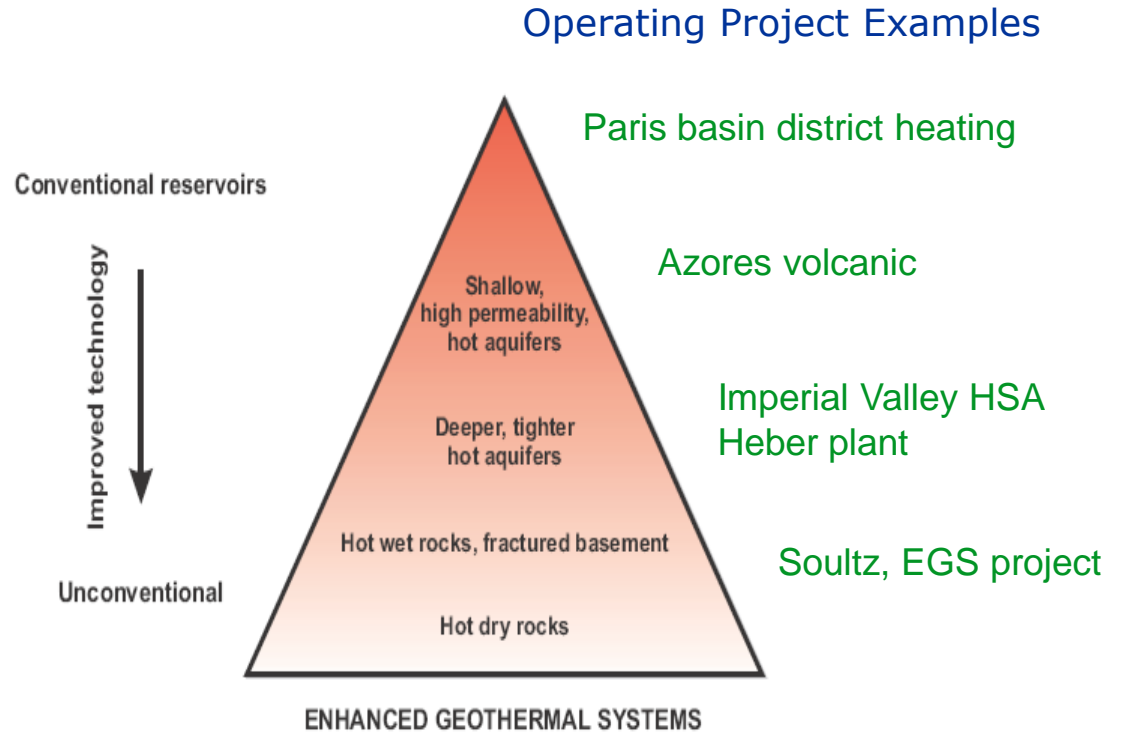
Skills and capabilities to achieve our objectives

- > Financial Management
- > Legal
- > Marketing
- > Project Management
- > Corporate Governance
- > Exploration and Development
- > Geology and Geophysics
- > Resources and Energy
- > Government and Stakeholder relations

Geothermal energy overview

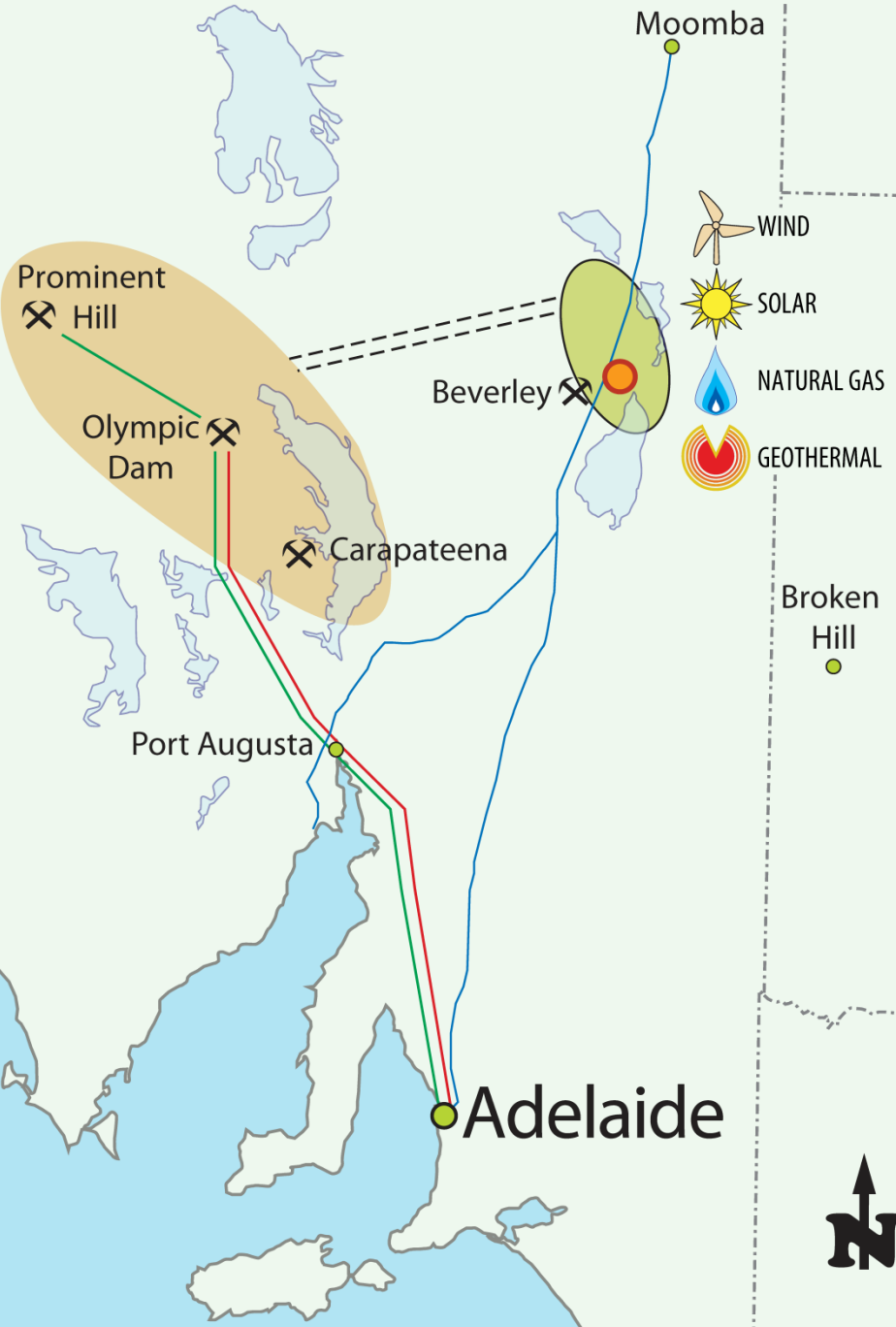
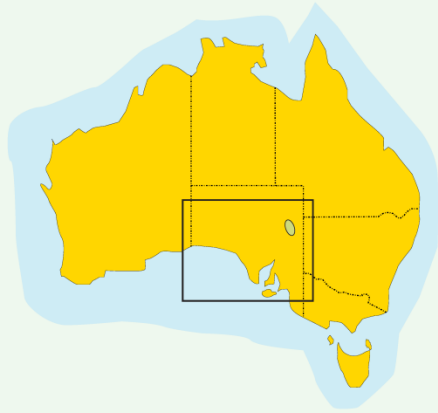
Key Project Parameters









- > Temperature
- > Drilling depth
- > Flow rate
- > Network connection
- > Generation plant type
- > Market/Customer
- > **Optimization of parameters** to achieve commercial return against competitive alternatives in target market (heat or power)



Each project has specific project parameters that when optimized enable viable operation

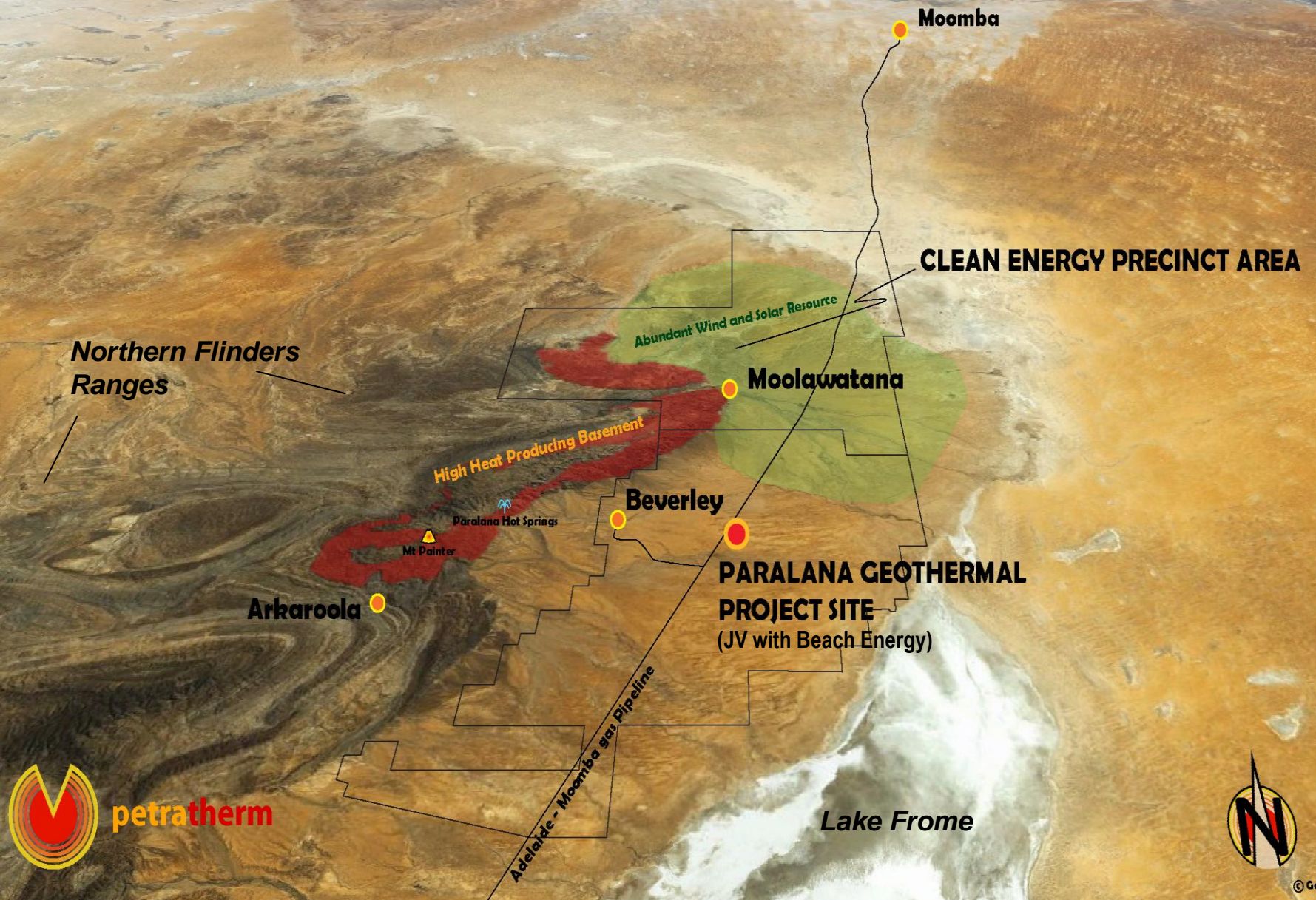
Paralana Geothermal Project and The Clean Energy Precinct



	Clean Energy Precinct		Gas Pipeline
	Mining Developments		Planned 300MW connections
	Paralana 2		275 KV
			132 KV
			100km

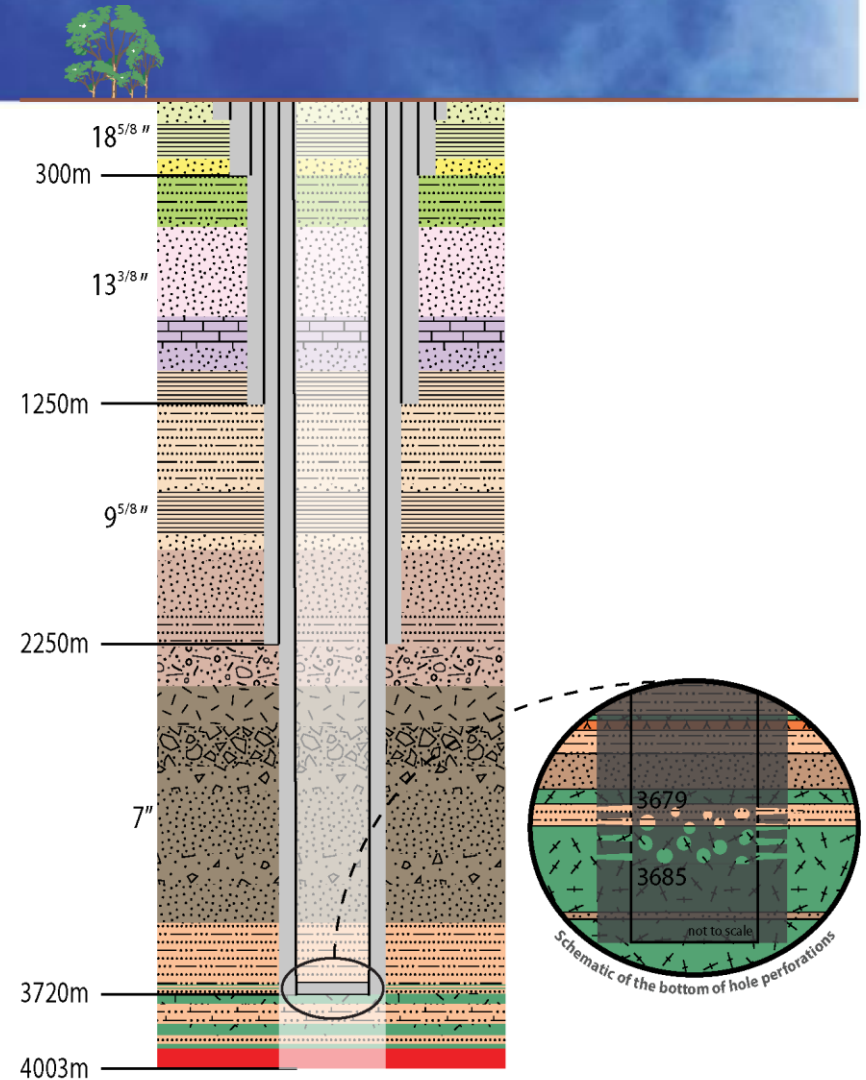


Petratherm Project Areas



Project Milestones

- > Drilled Paralana 2 to depth 4003m (G.L. A.H.D.) ✓
- > Confirmed optimum bottom hole temperatures ~ 190°C at 4000m ✓
- > High pressure geothermal brines intersected and natural fractures intersected from 3680m – may assist flows ✓
- > Fracture stimulation produced a large complex fracture cloud extending (1100m) ✓
- > Initial injection rates of 27 l/sec with scope to increase to commercial rate ✓
- > Successful flow test produced 1.3 million litres due to natural overpressure ✓



Paralana Independent Resources Statement – Nov 2011

Depth Interval (metres)	Inferred (PJ _{th})	Indicated (PJ _{th})	Measured (PJ _{th})	Total (PJ _{th})
<3,500	2,400	1,100		3,500
3,500 - 4,000	4,900	4,400	41	9,300
4,000 - 4,500	5,900	5,700		12,000
4,500 - 5,000	6,900	6,700		14,000
Total (PJ_{th})	20,000	18,000	41	38,000

Paralana Joint Venture: Petratherm 79%, Beach Energy 21%. If remaining staged equity investments are met, Beach Energy may earn up to 36% .

- Initial stimulated rock volume = **5.4 MWe power potential for 30 years**
- Paralana Resource at the 3500–4000 metre depth interval is estimated a 9,300 PJ_{th} which is sufficient to generate **1,300 MWe of electrical power for 30 years**

The information on this slide that relates to Geothermal Resources is an extract from a report compiled by Dr Graeme Beardsmore, who appears on the Register of Practicing Geothermal Professionals maintained by the Australian Geothermal Energy Group Incorporated at the time of the publication of this Slide. Dr Beardsmore is employed by Hot Dry Rocks Pty Ltd, an independent consulting group that provides professional services to Petratherm Ltd. Dr Beardsmore has sufficient experience which is relevant to the style and type of geothermal play under consideration and to the activity which he/she is undertaking to qualify as a Competent Person as defined in the Second Edition (2010) of the 'Australian Code for Reporting Exploration Results, Geothermal Resources and Geothermal Reserves'. Dr Beardsmore has consented in writing to the inclusion on the slide of the matters based on his information in the form and context in which they appear.

Extraction model for a pumped EGS well

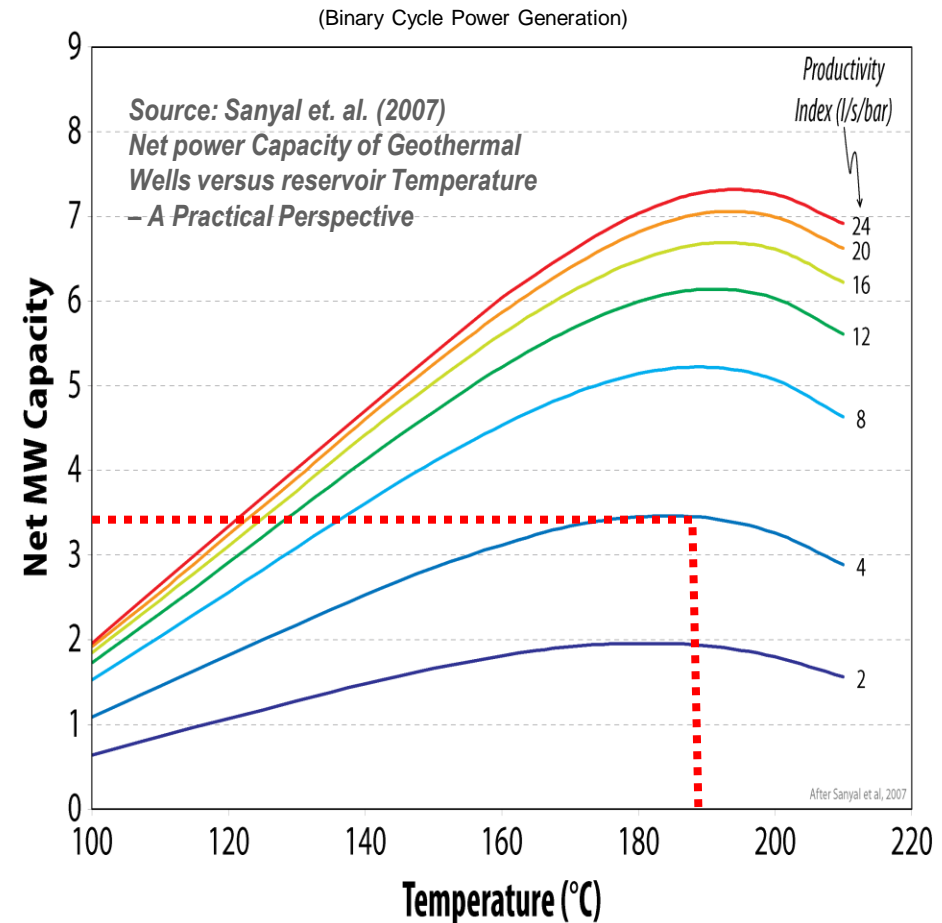
Sanyal (Geothermex) et. al. 2007*
independent expert paper reports :

- Standard industry pump operating temperature limit is ~ 190°C
- Max MW per well ~7.3MW (unless pumps improve on setting depth and pump rate)

Paralana Extraction Model :

- Targeting optimal temperature parameters to maximize output of a pumped EGS well
- Temperatures of 190°C confirmed at 4,000m
- JV decision not to drill deeper than 4km based on cost/depth trade-off – validated
- Remaining uncertainty to test is flow rate which is measured to Productivity Index (PI)
- Paralana target flow is 75 litres/sec or PI ~ 4 achieving a net capacity of 3.5 MW

Net MW Capacity of a Pumped Well vs Temperature



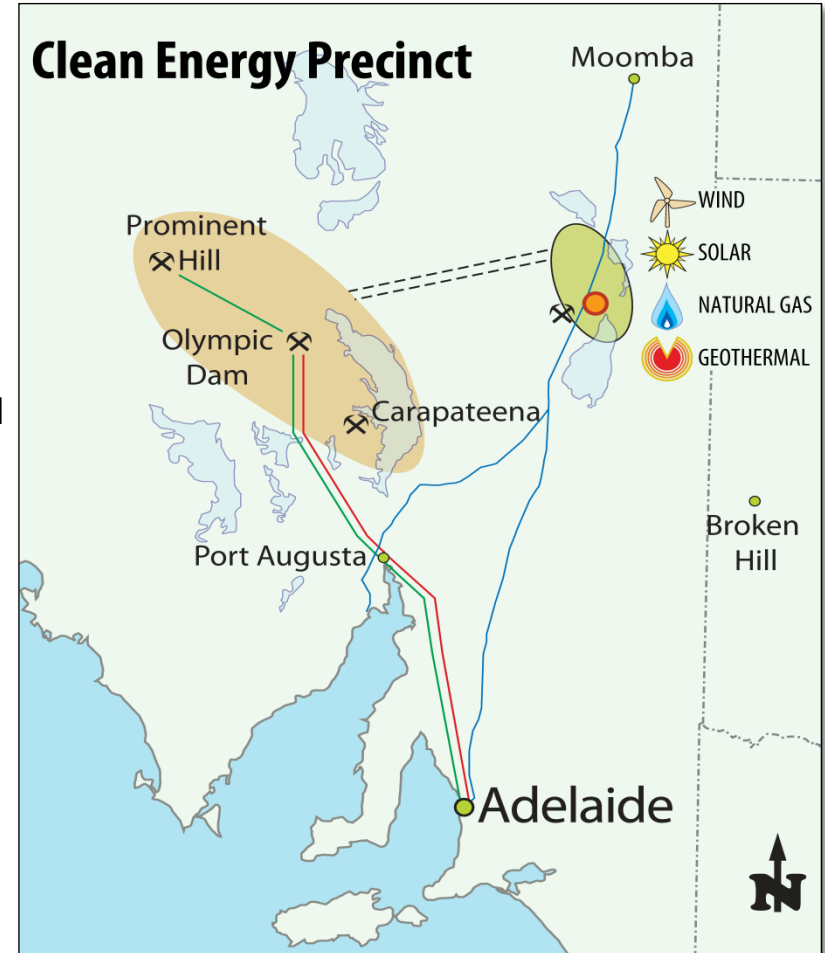
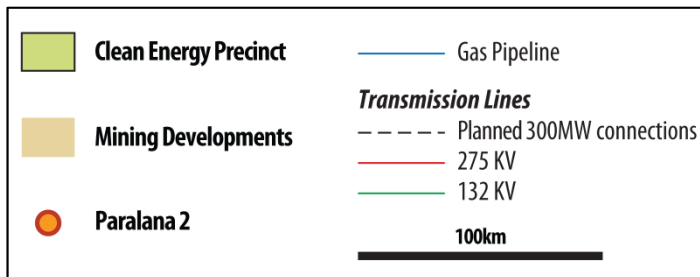
* Sanyal 2007 paper available for download at
www.geothermal-energy.org/pdf/IGAstandard/SGW/2007/sanyal3.pdf

Paralana – Next Stage Project Funding

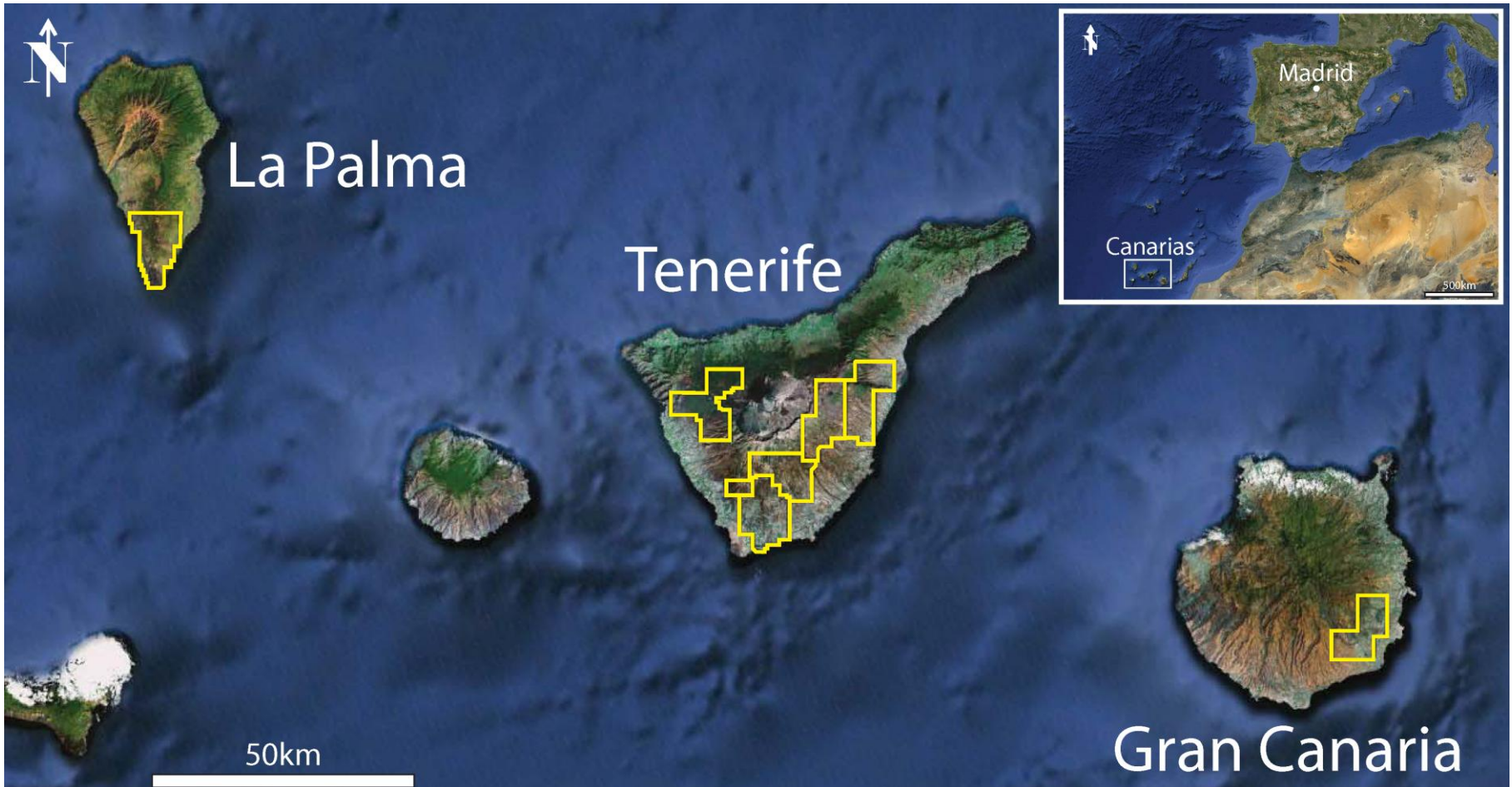
- > Next stage of works budgeted at around \$26 million
 - > Covers drilling Paralana 3, fracture stimulation and demonstration of commercial flows. This work is the immediate precursor to building/connecting a 3.5 MW pilot plant (\$15.9 million)
- > Petratherm has lodged a \$13 million grant application under the Australian Renewable Energy Agency (ARENA) \$126 million Emerging Renewable Program (ERP) to fund half of the total costs.
- > Beach Energy – Paralana JV partner- have 21% project equity share
- > Petratherm – project equity share is 79% - if ERP grant is successful, PTR funding need for next stage of works is around \$10 million.
- > Petratherm could receive up to \$7.2 million in cash rebates* for eligible expenditures under the R&D Tax Incentive scheme (* post eligible spend & assessment)
- > Net cost to Petratherm to achieve Demonstration of Commercial Flows (DCF) potentially around \$3 million. If DCF is successful, then this will unlock the Renewable Energy Demonstration Grant to fund one third of pilot plant and enable project annual revenues of around \$4.5 million.

Clean Energy Precinct

- Plan to deliver 600 MW into a large growth market driven by Mining Developments
- Gas, Wind, Solar and Geothermal converge
- Key enabler for delivery of large scale geothermal energy into the SA Power Grid
- Exclusive access to over 1,800 square kilometres of land for power generation
- Initial 300MW gas and wind development followed by solar and geothermal

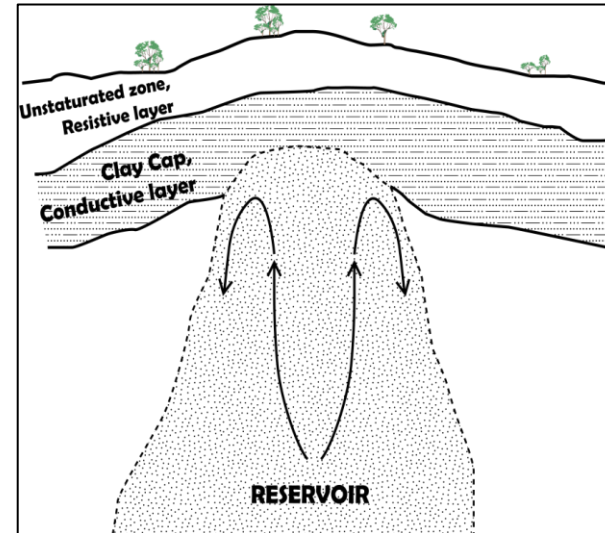
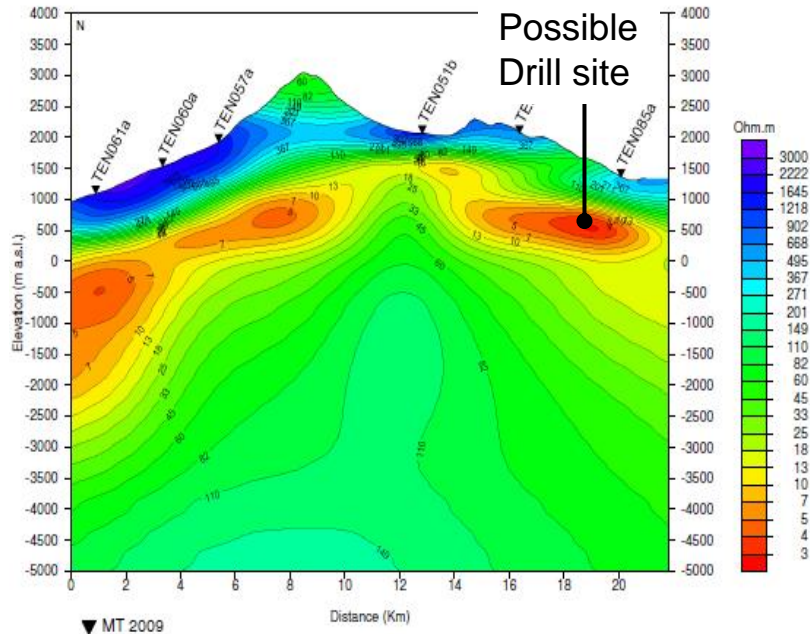


Canary Islands Projects



Tenerife and Gran Canaria – licences awarded
La Palma – licence application being assessed

Tenerife – identifying primary drill target



Schematic of the Geothermal System

- Geochemistry suggests a liquid dominated system and temperatures up to 240°C beneath the volcanic dome
- Proposed test well to the base of the conductive layer – “the clay cap” at approximately 1500 metres depth
- In fill survey underway in April /May 2013 to determine primary drill target – collaboration with Spanish govt.
- **Avoided cost of fuel oil based generation of €160/MWh (\$200/MWh), no subsidies, tax potentially only 10%**
- Commenced discussions with large Spanish energy company interested in JV for Tenerife project

Petratherm's Five Key Areas of Differentiation

1. Business model

- Project selection – clearly filtered through **resource, market and permitting**
- JV partners with **complementary skills/capabilities, funding capacity and risk appetite**
- Project viability is project specific and an optimization process of key parameters

2. Project portfolio

- Several projects to **manage risks of projects not proceeding**
- Projects across the geothermal spectrum – **volcanic, district heating, HSA and EGS**

3. Track record of success

- Successfully **drilled, cased, fracked and flowed** 4km deep Paralana 2 EGS well – confirmed **economic temperature** and **existence of natural fracture network**

Petratherm's Five Key Areas of Differentiation

4. Extraction model for EGS

- Optimization of key parameters for a pumped EGS geothermal well – drill depth/cost, temperature and target flow (HEWI) – technically valid/optimal approach*
- Focus on utilizing known and standard technologies and plant to mitigate risks – surface and subsurface (multi-zone fracking, pumping, ORC/binary plant, pipework)

5. Commercialization path – unique in Australia

- Local off grid and willing customer at just 11 kms away, distant from built up areas and enabling viability at small scale (3.5 MW net initial power production)
- Long term path for large scale geothermal via unique Clean Energy Project (gas, wind and solar) that aims to secure large and growing market from mining projects

(* refer previous slide on Extraction Model for a Pumped EGS Well)

CLEAN ENERGY FOR FUTURE GENERATIONS