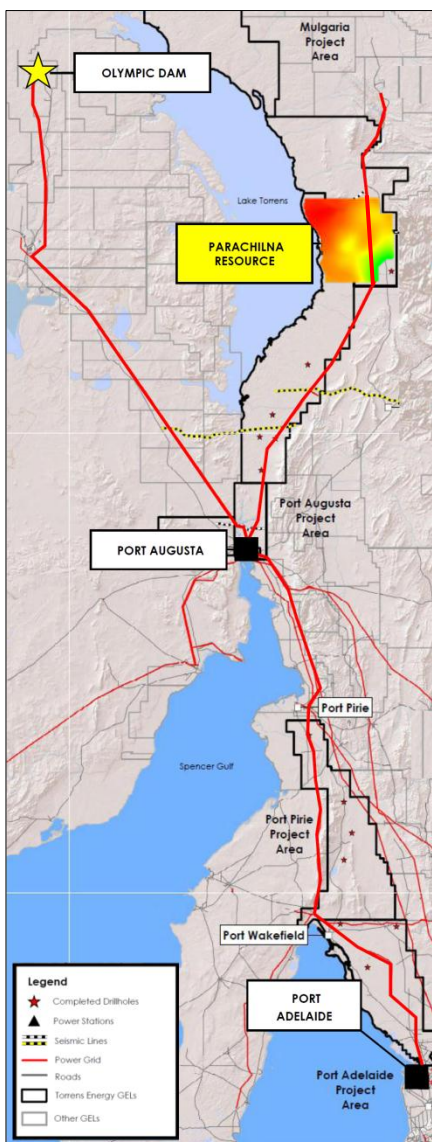


**Parachilna Geothermal Resource Update,  
 Estimate of 88,000PJ Recoverable Energy**

**HIGHLIGHTS**

- New recoverable energy estimate of 88,000PJ established at Parachilna, SA
- Inferred target resource sufficient to produce 2,900MWe for 30 years
- Ideally situated next to power infrastructure connecting to the national grid
- Substantial commercial advantage over off-grid geothermal developments



**SUMMARY**

Torrens Energy (Torrens Energy Limited, ASX: TEY) is pleased to report the results of a new independent estimate of the recoverable energy at Parachilna (GELs 230, 278 & 407), north of Port Augusta, South Australia.

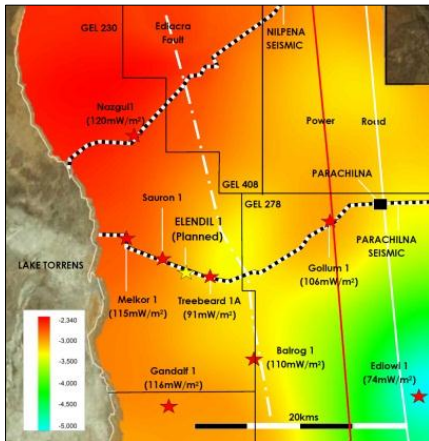
**A global estimate of 88,000PJ recoverable energy has been identified, which has been independently shown to have the potential to produce 2,900MWe for 30 years from 3,500 -4,000m:**

<b>Sedimentary Target 3,500-4,000m</b>	<b>13,000PJ</b>
<b>Estimated Reservoir Temperature 224°C</b>	<b>2,100MWe</b>
<b>Basement Target 3,500-4,000m</b>	<b>5,100PJ</b>
<b>Estimated Reservoir Temperature 224°C</b>	<b>800MWe</b>

The independent result was prepared by applying the 2010 edition of the Australian Code for the reporting of geothermal, to drilling & seismic data collected by the Company between 2007 and 2010.

**Parachilna is ideally situated adjacent to the national grid (left, red) connecting to the South Australian electricity market and mining developments including the BHP Billiton Olympic Dam Project.**

Uniquely, network access can be immediately made from pilot plant through to small-scale production for around \$12-22m connecting via the Leigh Creek 132kV transmission line, demonstrating the clear commercial advantage of the extensive Parachilna Geothermal Field.



The Parachilna target area location diagram (above) showing drill-hole and seismic line locations on gridded depth to 150°C isotherm, used in the calculation of the Resource.

#### Competent Persons Statement

The information in this report that relates to Exploration Results and Geothermal Resources is based on information compiled by Dr Graeme Beardsmore, 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.

Dr Beardsmore is employed by Hot Dry Rocks Pty Ltd (HDR), an independent company that provides consulting services to Torrens Energy Ltd.

Dr Beardsmore has sufficient experience relevant to the style and type of geothermal play under consideration and to the activity that 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'.

Dr Beardsmore was assisted by other employees within HDR but takes sole responsibility and is accountable for the report as a Competent Person.

Dr Beardsmore has no financial interest in Torrens Energy Ltd. Dr Beardsmore has consented to the public release of this report in the form and context in which it appears.

## PARACHILNA STATEMENT OF GEOTHERMAL RESOURCES

The Australian Code for Reporting of Exploration Results, Geothermal Resources and Geothermal Reserves, 2010 Edition ('The Code') defines a geothermal resource as that proportion of stored heat that can be recovered to the surface, and is therefore a more accurate estimate of potential geothermal benefit than "heat in place" reported in 2008 (780,000PJ).

Torrens Energy contracted independent geothermal consultants Hot Dry Rocks Pty Ltd (HDR) to complete an estimate of 'recoverable heat' using the information described in the next section. Results and key variables are summarised as follows:

Depth Interval	Est. Reservoir Temp. °C	Recoverable Heat PJ*	Pot. Power for 30 Years MWe**
< 2,500m	155	210	25
2,500-3,000m	178	4,000	527
3,000-3,500m	201	12,000	1,770
<b>3,500 -4,000m</b>	<b>224</b>	<b>13,000</b>	<b>2,072 (Sed.)</b>
<b>3,500 -4,000m</b>	<b>224</b>	<b>5,000</b>	<b>811 (Base.)</b>
4,000-4,500m	247	24,000	4,066
4,500-5,000m	270	29,000	5,267
<b>TOTAL</b>		<b>88,000</b>	

\*The estimate of 'recoverable heat' is the new industry standard for estimating the proportion of geothermal energy that can be recovered from a volume of rock. In this context the reservoir volume (above) is constrained by key variables (below). \*\* Estimated electrical power potential is presented for the combined sedimentary and basement reservoir targets is independently derived from a Global Protocol for Geothermal Resource estimates.

Key Variables	Value
Cut off Temperature	150°C***
Base Temperature	98°C***
Base of Reservoir	5,000m****
Average Surface Temperature	25.5± 0.5°C
Specific Heat Capacity at 25°C	750JKg <sup>-1</sup> K <sup>-1</sup>
Heat Generation - Basement	10μW/m <sup>3</sup>

\*\*\* Reference to cut-off and base temperature is made in consideration of an estimate of the current realistic lowest economically extractable geothermal temperature and so may change with technology in time.

\*\*\*\* An estimate of volume of the reservoir is required to be calculated, in this assessment requiring an upper and lower limit be set. HDRPL considers based on Australian experiences that a maximum depth of 5,000m and thickness of 500m is reasonable for the target reservoir.

ASX CODE: TEY

#### BOARD

Dr Dennis Gee: Chairman

John Canaris: Managing Director

David Eiszele: Director

Howard McLaughlin: Director

#### MANAGEMENT

Rob Hodby: Company Secretary

#### CORPORATE OFFICE

Suite 1 338 Hay Street

Subiaco WA 6008

Phone: +61 (0) 8 6380 1003

Facsimile: +61 (0) 8 6380 1026

#### SHARE REGISTRY

Computershare Investor Services

#### AUDITORS

Deloitte Touche Tohmatsu

#### SOLICITORS

Steinepreis Paganin

W: [www.torrensenergy.com](http://www.torrensenergy.com)

E: [admin@torrensenergy.com](mailto:admin@torrensenergy.com)



## KEY DATASETS

The Geothermal Resource estimate is based on three principal datasets; high-resolution temperature logs taken from shallow heat flow wells drilled in 2007 and 2008, a comprehensive set of rock thermal property measurements from the same holes, and two separate 2D reflection seismic lines collected in 2009.

This information was provided to HDR and also formed the basis for estimates of 'stored heat' for the Area as included in the Company's Annual Reports for 2008 – 10.

## TORRENS ENERGY CONNECTION COST ADVANTAGE

Uniquely, network access can be immediately established to the National Electricity Market via the Leigh Creek 132kV transmission line a few kilometres away. Connection cost estimates from pilot through to small-scale plant have been independently shown to be around \$12-22m.

The estimated connection cost for supporting larger scale geothermal power production is understandably higher, and must be made via a 275 kV or higher line. Estimates range around \$100m at Parachilna based on the need to construct a new transmission line.

By comparison an independent investigation into the early development of a transmission system, designed to connect off-grid Cooper Basin geothermal developments [further north] to Olympic Dam and the Davenport Substation, would have a total capital cost of at least \$900m (source: MMA/AGEA Connection Report 2009).

Managing Director John Canaris commented: "The \$13b Federal Clean Energy Future package released this year is slated to factor carbon into electricity pricing from July 2012. As well as stimulating investment in renewables, support is expected to come through a succession of new Government funding initiatives also commencing next year".

"With huge mining development scheduled to commence in the centre of South Australia, Torrens Energy's world-class geothermal land positions seem assured of taking their place among the low-emission alternatives to meet the future power requirements of the State".

For more information please contact:

John Canaris  
Managing Director  
Torrens Energy Limited

The information in this report relating to geothermal exploration results has been compiled by John Canaris. Mr Canaris is a full time employee of the Company, and has sufficient experience in the style of geothermal play under consideration to qualify as a Competent Person under the Australian Code for Reporting of Exploration Results, Geothermal Resources and Geothermal Reserves (2010 Edition). John Canaris has consented in writing the public release of this report in the form and context in which it appears.