

## Melbourne tops list of “hot energy” cities

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Victorian Geothermal energy explorer, Greenearth Energy Ltd, has received an independent consultants' assessment that places Melbourne at the top of a ranking of 40 international cities with regards to Engineered Geothermal System (EGS) potential. EGS is also known as Hot Fractured Rock (HFR) or Hot Dry Rock (HDR)

Greenearth Energy Ltd is actively exploring for geothermal energy for electricity production in the Otway and Gippsland Basins - on the doorstep of metropolitan Melbourne city. The explorer commissioned an independent assessment of their GEP10 tenement, covering the greater Geelong area, from leading geothermal energy consultancy Hot Dry Rocks Pty Ltd. The report considers key geological risks using available data and concludes that the tenement has at least three significant regions of interest for potential geothermal development.

In addition to this, the report applies a similar assessment methodology for key geological indicators for geothermal potential within a 100km radius of 40 international cities. These cities comprise the C40 Large Cities Climate Leadership Group – an association of large cities dedicated to tackling climate change. The available data suggest that Melbourne has significant geological advantages for the development of Engineered Geothermal Systems (EGS) and ranks at the top of the list. Sydney ranks third, after Madrid, Spain. The assessment also identifies a number of cities in areas with geothermal high heat flow

The report indicates high geothermal heat flow in the GEP10 tenement. Values range from 72–107 mW/m<sup>2</sup>, the upper limit of which represents some of the highest values publicly reported in Australia, and comparable to those reported for parts of the Cooper Basin in central Australia where a number of geothermal companies are exploring, including Geodynamics. The Geelong area also presents considerable market advantages in that it is directly linked to the national electricity grid and, as an industrial hub, provides considerable scope for direct energy sales to large commercial customers as well as residential sales.

The Geelong area has the added bonus of exhibiting both “Hot Dry Rock” geothermal energy potential in the form of buried granites, and Hot Wet Rock geothermal potential through deeply buried aquifers such as the Pretty Hill Sandstone. The report estimates that based on preliminary data, as much as 1,000 megawatts of electricity could potentially be generated from geothermal energy in the tenement. This amounts to about 1/6<sup>th</sup> of Victoria’s base load energy consumption.

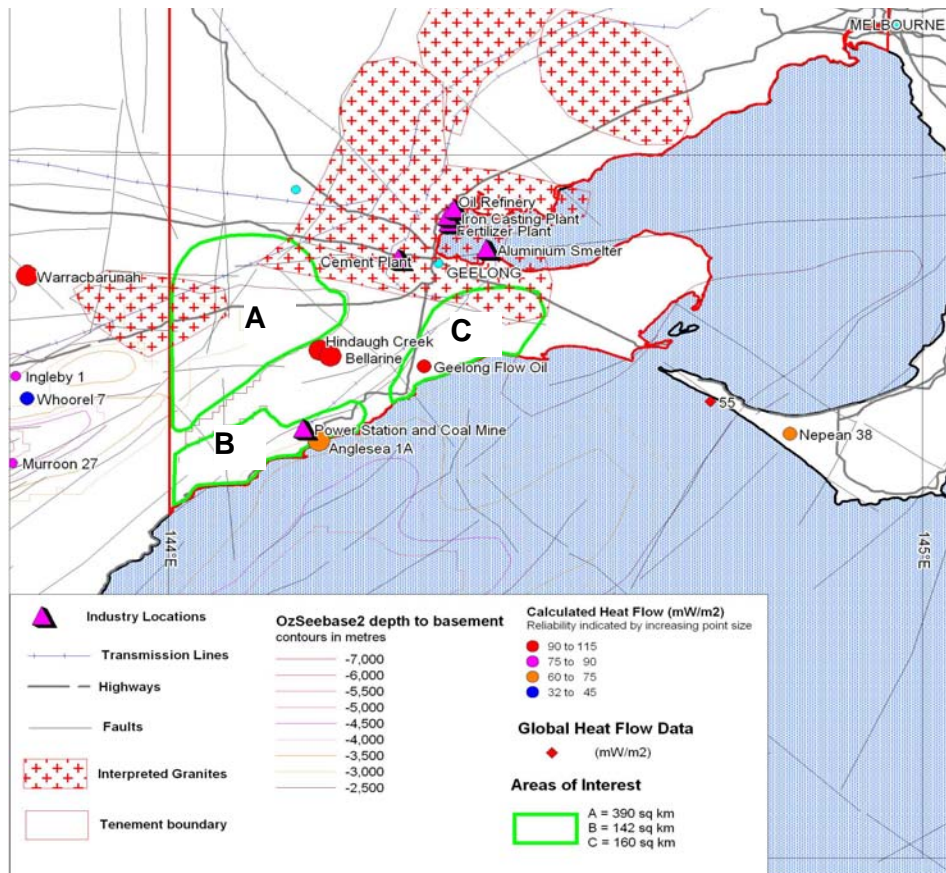
“Although there’s a long way to go yet, we are excited about the results of the study and we are looking forward to accessing drilling capital next year from the Renewable Energy Fund to further evaluate these resources” said Greenerth Executive Director Rob King. “Geothermal energy is a renewable source of base load energy with negligible emissions. It is feasible that a clean geothermal plant south of Geelong could easily replace the electricity presently produced by the coal-burning Anglesea power plant ” said Mr. King.

Greenerth Energy has an extensive exploration program underway in its Otway and Gippsland tenements and plans to undertake a state-of-the-art magnetotelluric survey in the next few months to better define geothermal potential.

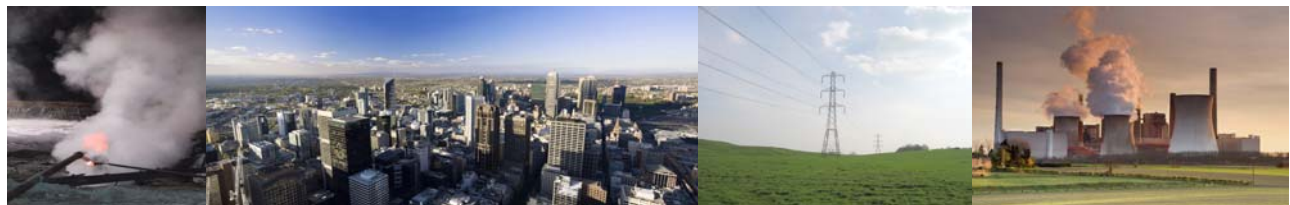
<b>Ranking for Engineered Geothermal System (EGS) potential</b>	<b>City (C40 Group)</b>
1	Melbourne (Australia)
2	Madrid (Spain)
3	Sydney (Australia)
4	Mexico City (Mexico)
5	Paris (France)
6	Berlin (Germany)
7	Beijing (China)
8	Los Angeles (USA)
9	Jakarta (Indonesia)
10	Houston (USA)

*Top 10 C40 Cities ranked for Engineered Geothermal System (EGS) potential based on a preliminary assessment of known geological indicators within a 100km radius of each city.*

**Geothermal tenement GEP10 in the Geelong area. Buried granites as defined from gravity data are shown in red, and areas of potential geothermal interest with high heat flow are shown as green outlines (A, B and C).**



[www.greeneearthenergy.com.au](http://www.greeneearthenergy.com.au)



**Greenearth Energy Ltd.**

Level 11, 500 Collins Street, Melbourne VIC 3000  
PO Box 300, Collins Street West, VIC 8007

T: +61 3 9620 7299  
F: +61 3 9629 1624

E: [greenearth@greeneearthenergy.com.au](mailto:greenearth@greeneearthenergy.com.au)