

**ASX ANNOUNCEMENT AND MEDIA RELEASE, 21 September 2009**

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**GEELONG GEOTHERMAL POWER PROJECT  
PREDICTS SUBSTANTIAL CO<sub>2</sub> DISPLACEMENT**

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- **Substantial potential CO<sub>2</sub> displacement from base load renewable energy project**
- **Potential to significantly offset City of Greater Geelong Industrial Emissions**
- **Potential to deliver CO<sub>2</sub> displacement from Demonstration Plant Stage onwards**

Greenearth Energy Limited (Greenearth Energy) (ASX:GER) is pleased to announce the results of work completed by consultants Sinclair Knight Merz (SKM) in relation to the Company's flagship Geelong Geothermal Power Project (GGPP).

The GGPP is a staged project development that lends itself to a multiple modular installation approach, which over time will lead to geothermal power generation in the Geelong area, the delivery of renewable energy into the Victorian energy grid and substantial CO<sub>2</sub> displacement.

Greenearth Energy has previously made a release to the ASX in relation to its Hot Sedimentary Aquifer (HSA) inferred geothermal resource at its GGPP location 9 km northwest of the Anglesea brown coal fired power station (Figure 1), where an inferred resource of approximately 17,000 petajoules (PJ) has been estimated (see ASX release of 17 August 2009). Subsequent releases regarding the company's planned Proof of Concept drilling (see ASX release of 24 August 2009) and the modular installation phased development approach the company intends to employ for the GGPP (see ASX release 2 September 2009) have provided details of the company's plans to develop this unique renewable energy project opportunity.



Figure 1. Proposed first 12 MW<sub>e</sub> power plant location and optional routes for 66 kV transmission line connecting the GGPP to the Anglesea Power Station.

According to the company's technical consultants, SKM, the successful deployment of the GGPP has the potential to deliver substantial CO<sub>2</sub> displacement at both demonstration stage (12 MW<sub>e</sub>) and full commercialisation (140 MW<sub>e</sub>). Greenerth Energy understands that the weighted average CO<sub>2</sub> emissions of coal fired plant in Victoria by capacity is 1.188 tonnes of CO<sub>2</sub> per MWh of production. Assuming that the output of the GGPP will offset generation from fossil fuel plant in Victoria, each MWh produced by the GGPP will offset an equivalent MWh from an existing brown coal fired power station. The annual energy production of the 12 MW<sub>e</sub> GGPP is approximately 95,000 MWh per annum, hence the initial 12 MW<sub>e</sub> stage of the 140 MW<sub>e</sub> GGPP will displace approximately 112,000 tonnes of CO<sub>2</sub> equivalent per annum. Full commercialisation of the GGPP (140 MW<sub>e</sub>) has the potential to displace 1,316,000 tonnes of CO<sub>2</sub> equivalent per annum.

Using the City of Greater Geelong's Community Greenhouse Gas Emissions in 2006 summary report, the displacement impact full commercialisation of the GGPP could have would be 28% of total estimated emissions and 59% of total estimated industrial emissions for the Greater Geelong region.

Greenerth Energy's Managing Director, Mark Miller said: "The City of Greater Geelong and surrounding areas face a real challenge in the carbon constrained world ahead. In the Geelong Geothermal Power Project we have an opportunity to harness a significant geothermal resource and deliver to the surrounding communities and industries alike, renewable base load power, and in real terms, substantial CO<sub>2</sub> displacement for decades from the one small footprint geothermal plant".

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