

Update on Geothermal Activities in Australia

Adrian LARKING and Betina BENDALL

¹ Green Rock Energy Limited, Australia

² Department for Manufacturing, Innovation, Trade, Resources & Energy-South Australia (DMITRE)

alarking@greenrock.com.au

ABSTRACT

This presentation outlines the current state of the Australian geothermal industry together with changes in federal government policies and agencies to support the development of geothermal energy in Australia.

Despite Australia having one of the world's strongest economies in recent years, a strong currency and rising retail energy and power prices, the geothermal sector in Australia has struggled to attract sufficient investment funds from public or government sources to progress commercial scale geothermal activities in Australia and abroad. Together with a lack of any demonstration of large scale commercial geothermal success this has resulted in a substantial slow down of geothermal industry activity in Australia. The only significant sub-surface geothermal project activity has centred on EGS projects in South Australia while planning for other power projects within sediments in the Perth Basin continued. This decline has been accompanied by a trend of Australian geothermal companies heading outside Australia to pursue geothermal activities in more conventional volcanic settings such as Chile, Indonesia, Peru, Philippines, Solomon Islands and Tenerife or diversifying their investments into other renewable and non-renewable energy sources. The most active projects which continue to be pursued in Australia involve Geodynamics and Petratherm.

Against this difficult financial background for the geothermal sector, in 2012 the Australian Government implemented substantial changes to federal policy on climate change and renewable energy. Two of the key objectives of this policy shift were intended to reduce carbon emissions in Australia and increase the use of renewable energy technologies. The Australian Government addressed the first objective of reducing carbon emissions by legislating to increase energy efficiency and imposing a carbon tax on emissions starting at A\$23/tonne in 2012/13 and rising with inflation until it is replaced from July 2015 with a market determined price. In response to a substantial collapse this year in the carbon pricing in Europe the Australian Government elected to match this decline by halving the Australian carbon price to A\$12/tonne from May 2013. The Government's second objective of encouraging the uptake of renewable energy was to be met by expansion of the national Renewable Energy Target (RET) with the addition of an additional target of 41,000GWh of renewable energy generation by the year 2020. Legislation was enacted with the support of all the major political parties in Australia which should enable geothermal energy to contribute to achieving this objective. To assist with this objective, in 2012 the Australian Government installed two new federal government funding bodies for renewable energy; the Clean Energy Finance Corporation and Australian Renewable Energy Agency (ARENA). The Clean Energy Finance Corporation was set up to promote investment in clean technologies by providing supplementary funds to overcome funding hurdles. ARENA was established to manage new and existing grant funds totaling A\$3.2 billion for renewable energy programs. To date A\$1.7 billion of this sum remains uncommitted and only A\$26.6 million had been set aside to be made available specifically for commercial scale geothermal energy projects. Previously Federal Government grants totaling A\$167 million had been allocated to the Australian companies Geodynamics and Petratherm but in June this year Petratherm had its allocation reduced by the Government from over A\$60m to A\$13 million.

On 7 September 2013 Australia faces a Federal election. If the Government changes as a result of the election it is expected that the Clean Energy Finance Corporation may be wound up and ARENA may lose its independent status but the national renewable energy target will be retained.