

Engaging Stakeholders in the Formation of Policy for Geothermal Developments

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ABSTRACT

The confluence of legislative tenure, renewable energy policy drivers, supportive equity markets and recognition of Engineered Hot Rock and Hot Subterranean Aquifer geothermal energy potential for Australia has seen the development of a nascent Australian geothermal industry with some 33 companies holding licences for exploration and or heat extraction from these reserves. It is estimated that there are sufficient energy in the Australian crust to provide renewable, clean, base load power to meet Australia's energy demand several times over.

While some forms of geothermal energy are mature and commercial, Australian reserves, geology and characteristics are different to existing developments and therefore unproven. Hence, significant development in drilling and stimulation technologies, resource assessment and transmission interconnection are required to prove these resources to be viable and practicable. Thus industry faces a number of challenges: technical, environmental, regulatory, financial (institutional capability approvals) and legislative. These include different treatment of permitting across the different states, different treatment of indigenous community rights, high cost of project finance capital (due to the 'unproven' nature of the technology as a whole), tightening labour markets and equipment shortages and remoteness.

This paper explores the processes developed and undertaken to engage all potential stakeholders in this new industry: industry players; related industries (such as oil and gas explorers); financial institutions; law firms; community groups; government and government officials, to identify raise and discuss issues that might impede the rapid development of the industry. As well as to identify and adopt/adapt solutions and expertise that already exists in other industries to avoid the industry "re-inventing the wheel". The result being a series of key and fully auditable recommendations that will aid informed, co-ordinated policy making within government across the areas of:

- Technology;
- Research, training and skills development;
- Legislative and regulatory framework;
- Private and public financing structures; and
- Community concerns.

As well as outlining the processes developed, we report on the success of the methodology in gaining input from all relevant sources, in increasing the 'knowledge base' amongst stakeholders and in identifying key recommendations to support the development of a sustainable and sizeable geothermal industry in Australia. Finally, we outline possible improvements to the methodology and discuss other potential areas for its application in overcoming barriers to implementation of sustainable energy technologies.