

NZ coal seam gas awaits “sweet spot” finds for major progress

26 July 2009 - Major progress in development of the coal seam gas industry in New Zealand awaited the discovery of ‘sweet spots’, petroleum exploration consultant Mac Beggs said in a survey of CSG prospects at an inaugural industry briefing in Christchurch.

Dr Beggs, a director of Lower Hutt-based Geosphere Ltd, said that overseas exploration experience showed that a number of factors had to come together for the industry to take off in any particular area.

“Once a formula has been found a CSG play tends to burgeon”, he said.

Commercial investigations into CSG in New Zealand had begun 20 years ago but success to date has been limited.

Essentially exploration was still at a concept-proving stage, he said.

“There has been a staggering level of success in Australia. About 17,000 PJ of coal seam gas has now been proven, over 50% of which was added in 2008.”

Dr Beggs said, “The goal here is to formulate one or more paradigms that are applicable to New Zealand coal resources”.

He said these coal seam gas “sweet spots” maybe a coincidence of: large continuous coal seams, high gas content, enhanced biogenesis (the process which creates methane gas in lower rank coal), and good permeability in the seams.

A positive factor for the local industry is that there are a number of well-resourced CSG companies currently exploring throughout the country. This provided multiple independent approaches, at least one of which could be expected to succeed in establishing a “sweet spot”.

Most of the prospective areas now appeared to be staked out.

However Dr Beggs said that New Zealand geology was complex compared with the “bonanza” associated with the geology in the Australian coal seam gas areas.

Access to the New Zealand energy market can be a challenge. Also development of the complex service sector to meet the needs of the CSG industry was another challenge until a critical mass is established.

Sources: Mac Beggs and Lindsay Clark