Development Trend of Unconventional Gas Resources in Pakistan

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The ever increasing energy demands and decreased number of huge oil and gas discoveries has turned the attention of geoscientists from conventional to unconventional thinking. Efforts are being made in Pakistan to un-tap unconventional gas resources. Pakistan has a diversified geology, resulting from the interactions of three tectonic plates. Apart from the conventional oil and gas resources and mineral wealth the country also has reasonable potential of unconventional gas resources such as coal bed methane, tight gas, shale gas and gas hydrates.

Pakistan has huge deposits of coal; the latest result estimates some 185 billion tons of coal. Various qualities and ranks of coal are present in different areas of the country. Efforts are being made in order to exploit the potential of the coal deposits for coal bed methane exploration and underground coal gasification.

Studies are also underway for exploring the gas hydrates resources in the offshore areas of Pakistan; initial exploration activities indicates very positive results for the presence of gas hydrates in the off shore Makran region (Western Coastal areas).

This paper gives an overview on the geological setting of Pakistan and related CBM and Gas hydrates potential of the country. It also includes a brief introduction to the work done for the exploration of these unconventional gas resources.