

## **Surface to Subsurface: Myanmar Geology Consolidated**

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### **Abstract**

Myanmar is one of the World's current hotspots for oil and gas exploration, with enormous economic potential thanks to an estimated 50 million barrels of oil and around 10 Tcf of natural gas reserves, in addition to a wealth of industrial minerals and gemstones. Yet in spite of this mineral richness, and being one of the World's first oil producing countries, both on- and offshore exploration has been limited. We see this as being due to a number of interlinked reasons. Firstly, the geology of Myanmar is diverse and complicated. Structurally and stratigraphically, the region is extremely complex, and the diachroneity of stratigraphic units and unconformities makes understanding the lithostratigraphy far from trivial. Secondly, the quality, availability and accessibility of geological data are extremely variable. Indeed, the current, publicly available geological map coverage is piecemeal, and scales and stratigraphic nomenclature are inconsistent, and have been reported to us as being "simply incorrect and confusing" in certain areas.

The majority of Myanmar was mapped in considerable detail by field teams of the Myanmar Oil and Gas Enterprise (MOGE) during the 1970's and subsequent decades. However, the accessibility of this valuable resource of geological data is extremely limited, and the continuity of the mapping between different areas is uncertain. Publications arising from academic research have aided in revealing some of the geological detail, but again, provide only piecemeal coverage. Other data, specifically subsurface data, remains locked up in industry reports, and thus essentially inaccessible to regional newcomers. Thus the need for a regionally consistent, detailed and accessible geological dataset is very real, and necessary to unravel the region's geological and tectonic heritage, and help realise the full potential of Myanmar's natural resources.