



POSTER PRESENTATION

Tectonic Development and Hydrocarbon Prospectivity of the Northern Banda Arc

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The Seram Orogen, comprising the island of Seram and an offshore fold-and-thrust belt (FTB), is located in the north-eastern part of the Banda Arc region, within a complex area in the zone of convergence between the Eurasian, Indo-Australian and Pacific plates. The Seram Orogen, is a transpressional foreland of a left-lateral transform active margin, forming part of a complex Neogene tectonic system along the continental margin around the Banda Sea.

The FTB is a wedge-shaped feature with a maximum vertical thickness in excess of ten kilometres, tapering away from Seram and developed above a decollement which dips downwards towards Seram. Beneath the decollement is a relatively-undeformed Mesozoic and Cenozoic section, largely comprising horsts and grabens. Three plays are recognized within the area: Mesozoic rocks in a structural setting, Late Cretaceous carbonates in a structural / stratigraphic setting and Neogene carbonates in a structural / stratigraphic setting.

Petroleum system and tectonic plate analyses, derived from new multi-client broadband seismic data, provide improved constraints on geological modelling and demonstrate new potential for hydrocarbon prospectivity within the area.