

## **Hydrocarbon Exploration Opportunities in Offshore Morocco**

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During the last decade, the Atlantic Offshore of Morocco has been subject to intense geological and geophysical hydrocarbon exploration activity. Thus, almost 140 000 km and 19 000 sq km of 2D and 3D, respectively, of high quality seismic data was acquired and several hydrocarbon assessment studies carried out by international oil companies and/or ONHYM. As result of that, four play concepts provinces, three petroleum systems (related to major source rocks) and over 200 prospects and leads have been identified. However, the four wells drilled during this long period, in such large area, tested unluckily the same Upper Cretaceous play in the outboard area of the salt province. Nevertheless, the hydrocarbon shows recorded in those wells and the geological information contributed to the understanding of tectonic and sedimentary evolution of the basin as well as to the assessment of the Upper Cretaceous petroleum system parameters in that part of the basin. The viability of the other petroleum systems and the chances of success of the related plays remain integral or even reinforced thanks to the pertinence of the additional information brought by the wells.

The prospects and leads have various trapping mechanisms types and do exist at different stratigraphic levels from Paleozoic to Tertiary. They encompass salt induced structural traps, stratigraphic mini basin ponded sands, sea level change induced fan complexes and regional tectonics related structures. The prospect area closures are variable and can be up to 200 sq km and the total recoverable reserves are estimate to 13 Billion barrels.