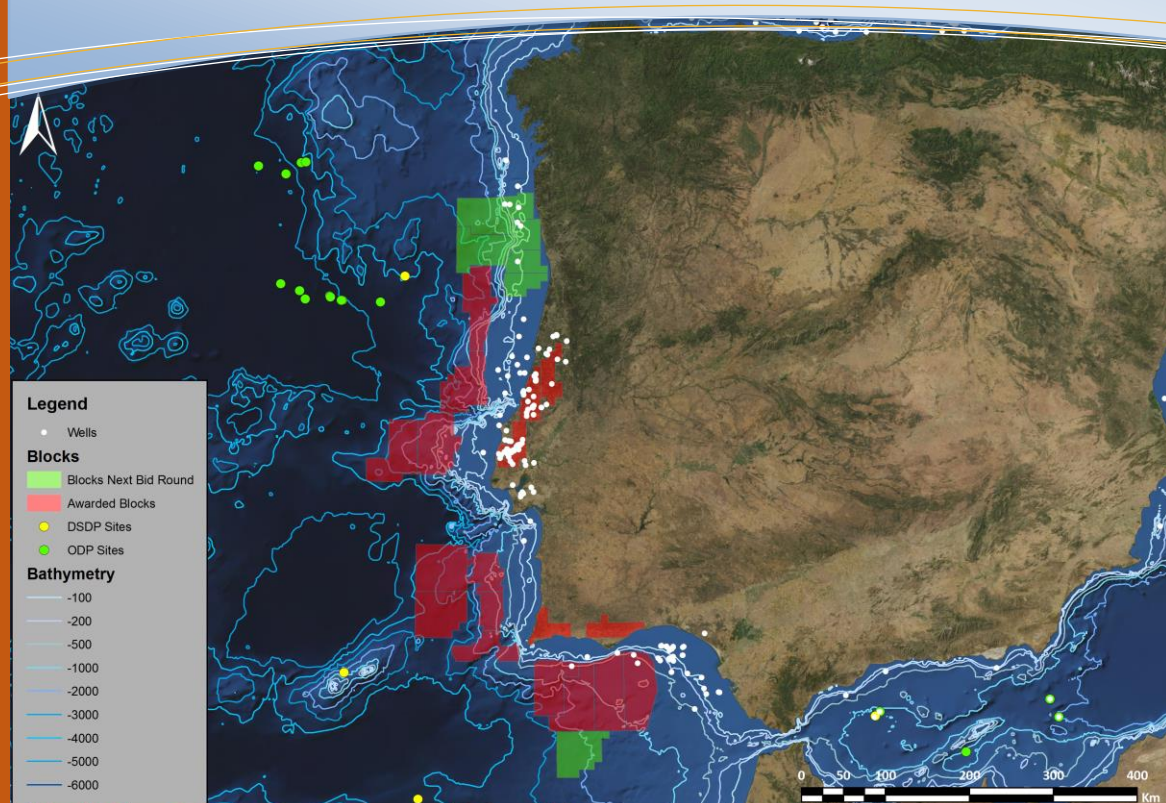


IBERIAN ATLANTIC MARGIN: GEOLOGICAL EVOLUTION AND EXPLORATION POTENTIALS



The Iberia Peninsula Atlantic Margin spans for over 900 km in length along the coasts of Spain (Galicia Region) and Portugal.

The Meso-Cenozoic basins along this margin underwent a complex geological evolution characterised by several distinct phases of extension, uplift, subsidence and inversion. The geological history of this margin is strongly related to the North Atlantic opening and the Tethys Ocean Closure.

Several offshore basins, with different sedimentary covers and structural elements have developed along the margin in different distal to proximal positions. From north to south the main sedimentary basins are: the Galicia Basin, the Porto Basin, the Peniche Basin, the Lusitan Basin (partially onshore), the Alentejo Basin and the Sagres basin.

In this vast area only 24 exploration wells have been drilled offshore (2 offshore Spain and 22 offshore Portugal). None of these wells was drilled outside the continental shelf, in deep water, to explore the thickest part of the sedimentary covers of the basins and some of the offshore basins (Galicia Basin, Peniche Basin, Alentejo Basin) do not have exploration wells drilled in.

Most of the seismic available was shot on the continental shelf and only few regional lines extend to the deep water parts of the margin.

Indications of a working petroleum systems have been collected and improve the exploration attractiveness of the area.

This study focuses on identifying the exploration potentials of the different basins that are located along the Iberia Atlantic Margin. The study is based on the integration of the all the available information in the area, on the use of analogues and on the comparisson between the geological evolution and petroleum systems present on the analogues basins on the other side of the Atlantic Ocean.

The study has also used vintage seismic lines, covering also the deeper parts of the Atlantic margin basins, and well data to define the different possible componetnts of the petroleum systems.

The available data and information confirm that in the different offshore basins there is the possibility of the presence of pre-, syn- and post-rift complete HC systems.

The report includes also a series of enclosures and a GIS project that contains maps that display the possible distribution of plays, of the paleogeography through time, main structural features and location of all the data acquired during previous exploration activities.

The study has been conducted by GEPlan Consulting s.r.l. based in Ferrara, Italy. GEPlan is an oil and gas consulting firm that can provide innovative and integrated services for exploration, appraisal and development projects. It has specialistic skills in the characterization of carbonate and fractured reservoirs and in the Italian and Circum-Mediterranean Oil and Gas Prospectivity. This study is part of larger collection of basin studies. These reports describe the geological characteristics of the basin and its evolution through time and they cover the most important aspects related to the hydrocarbon exploration and prospectivity, identifying and characterising the proved and possible plays in the area.

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