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**The Molasse Imbricates Belt - the Last Gas Exploration Frontiere in a Mature Basin?**

In 1958, the Perwang 1 well, some 6 km north of the Alpine Flysch front, encountered a six fold repetition of Eocene and/or Cretaceous rocks belonging to the base of the Molasse fill. This was the first indication of the existence of imbricates reaching "far into" the Molasse basin. The imbricates have only limited lateral extension and are not mappable with 2D-seismic. Well cuttings, micropaleontology and well log characteristics remained the key tools for identification of imbricates in the subcrop before 3D-seismic was used. Only modern seismic interpretation and visualisation techniques combined with newly adopted geological and sedimentological concepts, led to the identification of projects within the Imbricates Belt.

The Imbricates Belt comprises projects in the triangle zone, in imbricates sensu strictu, in piggy back basins between packages of imbricates, and in the so called south slope facies - potentially thick sandstone units derived from olistostroms as well as from turbidites on the flank of and above imbricates.

As the drilling results in the traditionally explored and exploited foreland had been below target, the overall interest turned toward the imbricates belt with its tectonic and sedimentologic "infrastructure" as a challenging frontier for doing exploration for hydrocarbons. Encouraging results alternated with heavy disappointments. Ongoing 3D-seismic acquisition and (re)processing are for improving and optimizing the data quality. The expected economic result of all these activities is a portfolio of sound, drillable prospects to further explore the still undiscovered hydrocarbon potential in the imbricates belt.