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Romanian Oil fields, Possible Natural Reservoirs for CO₂ Storage

O. Coltoi* (Geological Institute of Romania)

SUMMARY

In 2002 total net GHG emissions for Romania have decrease about 50 % compared with 1989, reference years. This decrease was due Romania s economic restructuring, primarily, due to reduction industrial production and comes into operation the first nuclear reactor at Cernavoda (1996). CO₂ emission into the atmosphere as a result to the burning process of fossil coal into power plant is one of the major negative aspects with serious implications in climate change recorded on the our world.

ROMANIAN OIL FIELDS - A SHORT OVERVIEW

Petroleum systems are found into 9 petroliferous basins: Moesian Platform (Romanian sector), Moldavian Platform, Transylvanian Basin, Paleogene Flysch, Carpathian Foredeep (Neogene Molasse, Diapir Fold Zone, Getic Depression), Scythian Platform, Pannonian Basin (Romanian sector), Dobrogea North Promontory and Romanian Black Sea Continental Platform

The area of Moesian Platform is more than 43,000 km². In the reservoir rocks of the Moesian Platform have been discovered more than 160 oil and gas fields.

The Transylvanian Basin is a basin of elliptical form elongated on N-S direction (the length is of ca. 300 km and its width is of ca. 200 km). In the reservoir rocks of the Transylvanian Basin have been discovered more than 110 gas fields.

The Moldavian Platform represents the western part of the East European Platform with a monoclinial character of the deposits and they dip westward beneath the Carpathian Foredeep (Molasse) and Eastern Carpathian Flysch.

In the reservoir rocks of the Scythian Platform have been discovered about 10 oil and gas fields.

Pannonian Basin is presents in Romania by the his easternmost part. Neogene formations are represented by Miocene and Pliocene deposits (marls, shales, sand and sandstone are predominant lithologies). In the reservoir rocks of the Pannonian Basin have been discovered more than 80 oil and gas fields.

Romanian Black Sea Continental Platform is located on the extension of two main onshore structural units separated by the important fault (Peceneaga-Camena). In this area have been discovered about 7 oil and gas fields.

Paleogene Flysch is represented by the Tarcau Nappe, Marginal Folds Nappe and Subcarpathian Nappe. In the reservoir rocks of the Paleogene Flysch have been discovered more than 35 oil and gas fields

In the reservoir rocks of the Carpathian Foredeep have been discovered more than 70 oil and gas fields.

Oil and gas fields must be recounted, reevaluation to be used for CO₂ storage.