Frank van Bergen – TNO

Abstract

Since the discovery of the Groningen Gas field the Netherlands have been a large producer and consumer of natural gas. Current forecasts show that production from conventional on- and offshore fields will decline noticeably in the next decades, while the Netherlands have the ambition to sustain its prominent role in the northwestern European gas market and have to be able to meet the future domestic demand. Import of natural gas, either through LNG import (North Africa, Middle-East) or from the East (Nordstream) are therefore evaluated and planned. Following the developments in the U.S.A. , where about 50% of the internal gas production is now from shales, the question has arisen if there is also gas shale potential in the Netherlands that could add to the internal gas production. A first evaluation by TNO and EBN in 2009 confirmed this potential, although the uncertainties are huge. The follow-up work that is presented provides more detailed information based on extensive data evaluations and interpretations of potential shale gas targets in the Netherlands. The Netherlands have a long and intense exploration history which led to a very high data coverage which are largely in the public domain. A first assessment of possible shale gas reservoirs in the Netherlands was made using this unique dataset. The main target formations for shale gas are the Lower Jurassic Posidonia Shale Formation (PSF) and the Carboniferous (Namurian) Epen Formation (CEF), especially its basal part with high organic content. In conclusion, the presentation will provide background information on the geological setting for potential shale gas developments in the Netherlands. Further, the situation of the Netherlands will be commented on in terms of barriers to overcome from a legal, economical, environmental and societal point of view. The need for such information has become very relevant over the past two years, since as of 2010 a total of four exploration licenses have been granted to different companies, with the first exploration well to be drilled this year.

Biography

Since Frank van Bergen joined TNO in 1998 he has focused on projects related to coalbed methane, CO2 storage and petroleum systems. He was one of the main drivers behind a field demonstration project of CO2 storage in coal in Poland. Currently, he is leading an evaluation project on ECBM in China. Parallel to this, he has been working on conventional and unconventional petroleum systems, including shale gas evaluations in the Netherlands.