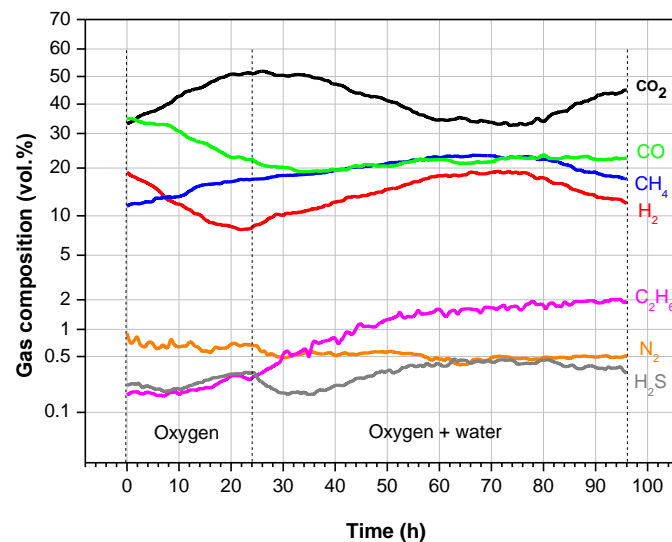


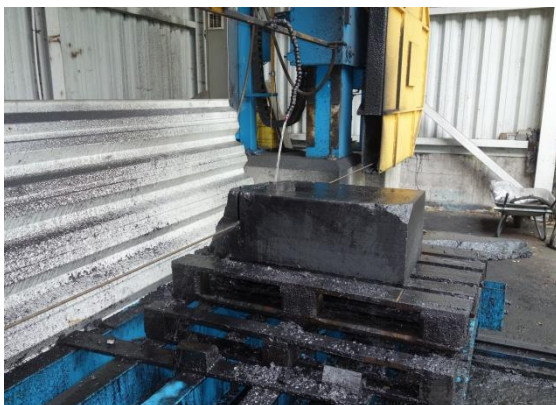
PROJECT FINDINGS

Methane-rich gas production through UCG experimentally proven

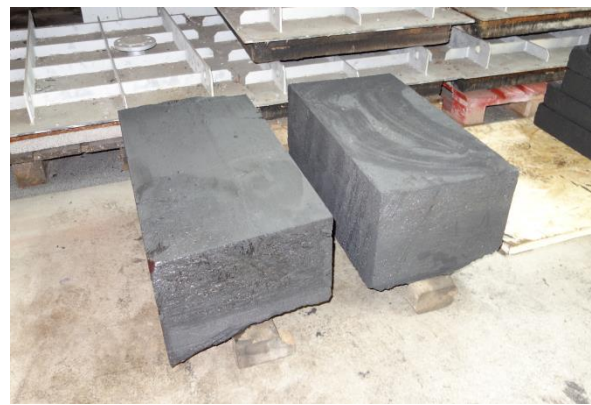
Methane, the main component of natural gas (NG), is one of the most desirable products of the underground coal gasification (UCG) that significantly contributes to the calorific value of the gas produced. Gasification test conducted in MEGAPlus resulted in high methane yields and the maximum CH₄ concentration (average) obtained during the experimental campaign was: 20.6%vol. Two different European coals were used for the tests - hard coal "Wesoła" (Poland) and semi-anthracite "Six Feet" (Wales). Large-scale UCG tests conducted in ex-situ reactor revealed that not only gasification pressure, but also the coal rank had a significant impact on methane formation. Therefore, the feasibility of methane-rich gas production through UCG was demonstrated in the MEGAPlus project.



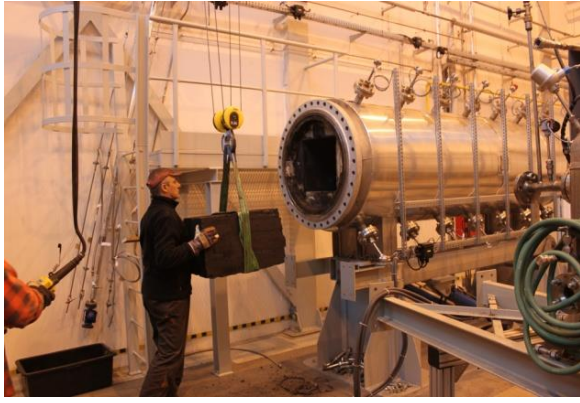
Changes in gas composition over the course of gasification experiments at 40 bar for "Six Feet" semi-anthracite



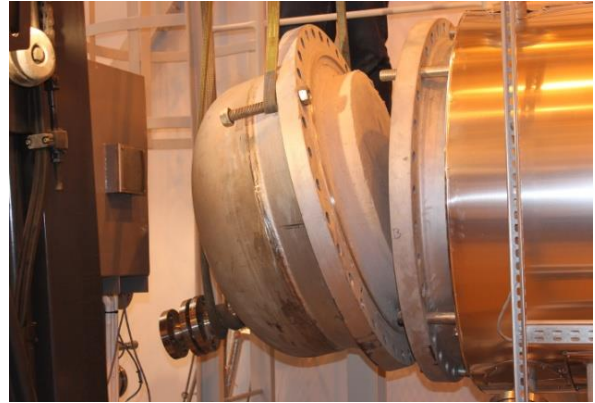
a)



b)



c)



d)

Preparation of artificial coal seam for the UCG tests:

a) sample cutting, b) samples prepared, c) reactor loading, d) reactor closing

Read more at projectmega.eu