



Research seminar of the Chair The Economics of Natural Gas

Wednesday 3rd of October 2018

Moscow State University,
GSP-1, Leninskie Gory, 119991, Moscow

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Phasing out the U.S. Federal Helium Reserve: Policy insights from a world helium model

This paper develops a partial equilibrium model of the global helium market to study the effects of the recently decided rapid phase out of the U.S. Federal Helium Reserve (FHR). The model incorporates a detailed representation of that industry and treats both helium producers and the FHR as players in a dynamic non-cooperative game. Considering two alternative policies aimed at organizing the phase out of the FHR: the currently implemented one and a less stringent one whereby the FHR would be allowed to operate as a profit-maximizing agent during a 20-year extended period, we show that the less stringent policy increases the financial return to the U.S. federal budget, lowers helium venting into the atmosphere and augments global welfare.

Co-authored with Omer Rifaat

Ekaterina DUKHANINA

PhD candidate, MINES ParisTech,
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Integration of natural gas markets: focus on arbitrage opportunities

The liberalization reforms conducted in different regions have stimulated the emergence of spatially localized spot natural gas markets worldwide interconnected through the pipeline network or via LNG. According to the spatial equilibrium theory, the spatial arbitrage is playing a crucial role in the determination of local prices. The paper applies a new methodology to estimate the degree of spatial integration between natural gas markets. This model provides insights into profitability of arbitrage, detects periods of integrated equilibrium and points out barriers to trade and market inefficiencies. The model is applied to the global gas market to estimate its degree of integration. Another application assesses the efficiency of a policy targeting a more integrated gas market.

Co-authored with Olivier Massol and François Lévêque

**The presentations will be followed by a set of discussions on related topics.
The seminar will be held in English.**