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ABSTRACT

Unconventional gases: a North-American energy revolution not inconsequential for Europe

Although not spoken of in France just a few months ago, unconventional gases have made a noteworthy entrance in the energy scene. In the United States, extraction techniques for these gases trapped in rocks, such as sandstone or shale, have been perfected, opening access to new and very large mineral deposits. Consequently, faced with the depletion of petroleum resources, these gases appear as a significant opportunity, since they could amount to nearly double the reserves of gases called "conventional". If energy consumption continued at its current pace, these gases would guarantee well over a hundred years of consumption to the world population. The impact of these new resources on gas prices is already perceptible. The economic crisis and the decline in imports to the United States have freed up quantities of gas which are transferred to other markets, driving down spot prices in other countries, despite the upward trend of the prices of raw materials. This decline in prices is nevertheless hardly detectable for French consumers, for whom gas prices, indexed more than 80% to oil prices by long-term contracts, continue to rise. The energy balance has changed, and many uses today are oriented toward gas at the expense of coal, nuclear power – whose recovery is delayed – and even renewable energy.

While considered by some experts as the largest energy revolution in several decades, these gases, nonetheless, raise questions about the impact of their extraction on global warming, on the environment (noise, emissions, ground coverage, risk of pollution of the water-tables, usage of large quantities of water) and on the economic activities with which it is associated. In France, the approval of research permits recently prompted a highly-charged debate. In February 2011, the ministers responsible for industry and sustainable development launched a fact-finding mission whose results will be announced in June 2011. Meanwhile, exploration work is suspended. ■

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