



## Harvard Kennedy School Energy Policy Seminar Series, Fall 2014

### Prospects for shale gas development in Eastern Europe

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“What makes energy technology travel?” asked Dr. Andreas Goldthau, explaining the question behind his research into shale gas technology adoption in Eastern Europe. Speaking in the Harvard Kennedy School’s energy policy seminar, Goldthau presented his work in progress, a comparative study of recent policies related to shale gas development in selected Eastern European countries, and of what kinds of factors either lead to or detract from the development of a “social license to extract,” one factor that seems to be necessary to the adoption of shale gas technology in Europe.

Eastern Europe, Goldthau explained, is one of the areas in the world where shale gas development could potentially take off—there are shale gas reserves throughout much of the region, high natural gas prices, a potential for increasing demand as Europe looks for lower-carbon alternatives to coal, and a recent history of supply interruptions that might sharpen interest in alternative sources of gas.

But the development of shale gas in Europe is not a question of simply replicating what happened in the United States, Goldthau explained. “To understand what’s happening in Europe,” he noted, “take the United States and turn it on its head. Everything you have in the United States, you don’t have in Europe.” For example, essential equipment like oil rigs are relatively scarce (only 144 rigs in all of Europe, compared with over 2,000 in North America), a deep service sector is lacking, and regulation does not fit the industry.

Within this context, Goldthau reported on the findings of a series of interviews in Bulgaria and Poland that he recently conducted along with a team of other researchers, finding significant contrasts in the process of introducing shale gas fracturing technologies and the likely outcome for the development of shale gas in each country.

In Bulgaria, Goldthau reported, interviews seem to point to a “top-down process that ignores incumbents and stakeholders.”

A deal for shale gas development negotiated by the central government with Chevron seems to have excluded most other stakeholders, resulting in an overall sense of distrust and doubts about whether environmental and economic impacts were sufficiently considered. The Bulgarian government awarded an exploration permit to Chevron in May 2011, but then protests erupted across the country, and the permit was withdrawn in January 2012.

Goldthau found a contrasting picture in Poland, where a “comprehensive institutional framework facilitates buy-in of stakeholders.” Interviewees described a complex and inclusive process of decision-making related to shale gas development and a common perception that shale gas development “is about security and jobs.” However, Goldthau noted that Poland is very early still in the process of shale gas development. The Polish Parliament passed a law authorizing development in June of 2014, but there has been no significant production yet.



Overall, Goldthau noted, “Getting the process right for creating the social license to extract matters as much as technology transfer itself.” A key lesson is that it may be necessary to accept a slow process and slower growth if the shale gas industry is to have a future at all in Europe.

The panel was part of the Kennedy School’s Energy Policy Seminar Series, which is jointly sponsored by the Energy Technology Innovation Policy research group of the Belfer Center for Science and International Affairs and by the Consortium for Energy Policy Research of the Mossavar-Rahmani Center on Business and Government.