

FRACKING IN THE BALKANS – POSSIBILITY OR WISHFUL THINKING?

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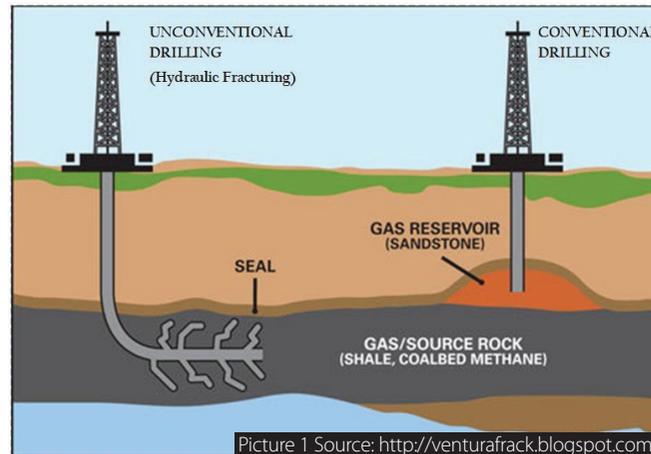
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Fracking is a rather new technique of getting oil and gas from shale rocks. The whole name of the procedure is actually **hydraulic fracturing** and the definition for it is: fracturing of rock by a pressurized liquid; technique in which typically water is mixed with sand and chemicals, and the mixture is injected at high pressure into a wellbore to create small fractures (typically less than 1mm), along which fluids such as gas, petroleum, uranium-bearing solution, and brine water may migrate to the well (see Wikipedia for more information and additional sources). As conventional ways of getting oil and gas are getting exhausted but the need for fossil fuels is not waning away, people have searched for new ways to get what there is in the Earth and utilize it. Even though the first recorded fracking happened in the US in 1947, the modern fracking

did not come to stage until the 1990's again in the United States. Below on picture 1 is the difference between conventional and unconventional drilling. Fracking has become so popular in the US due to the economic benefits from the vast amounts of formerly inaccessible hydrocarbons this process can extract. Almost all natural gas extraction nowadays in the United States involves hydraulic fracturing. Furthermore, according to one study (HS Global Insight, Measuring the

Economic and Energy Impacts of Proposals to Regulate Hydraulic Fracturing, 2009) 17% of the oil production and 45% of natural gas production in the US would be lost within 5 years without usage of hydraulic fracturing.

As mentioned this technique is booming in the United States where it revolutionized its energy industry with boosted oil production and fall of gas prices. In 2012 out of 5 million fracking jobs more than 1 million of them where



Picture 1 Source: <http://venturafrack.blogspot.com/>

Unconventional/Conventional Natural Gas Extraction

performed in the United States.

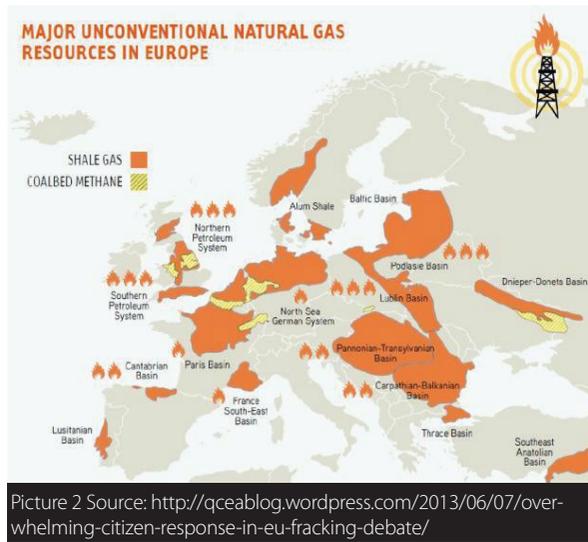
Lately there has been lot of talk about expanding the business of fracking in Europe in general. The potentials for it are presented on Picture no. 2.

However the reception of such possibilities has been rather hostile and not so welcoming as one might have wished. Environmentalists have many concerns and are against any fracking on the territory of Europe. The main issues with fracking that are mentioned are:

- 1 - It requires vast amounts of water for the pumps to work;
- 2 - It can pollute with potentially carcinogenic chemicals the underground waters and soil where the fracking is taking place (these chemicals are used in the process of drilling);
- 3 - There are worries it can cause earthquakes due to the invasive nature of the drilling;
- 4 - It takes away the attention from investing in clean renewable energy sources like solar power.

Another issue with Europe is the high density of population in small areas. Unlike the US where you can have wells which are on safe distance from any living areas in Europe as a much smaller place this is usually not the case. Hence the fear from fracking environmentalists and the local population have. On that note fracking is already forbidden in countries like Germany and France.

Where does this leave the countries from the Balkan Peninsula? As it can be seen in picture 2, countries like Bulgaria, Serbia, Bosnia, have unconventional resources of natural shale gas that could be utilized in the future. There is a double problem here however: on one hand



the EU insists all member states and potential candidate member states to reduce the CO2 emissions up to 20% by 2020. The more ambitious goals that are being discussed will lead to an overall target of reducing carbon emissions up to 80% by 2050. This means the countries need to find replacements for dirty energy sources such as coal and conventional oil. Furthermore, as renewable energy sources are not yet utilized enough to replace the dirty energy sources fast enough fracking might come as suitable replacement. The other problem is that the tide for now is against any sort of fracking where some companies

are planning to dig. As the NY Times reports: “In Eastern Europe, national governments like those in Romania, Poland and Ukraine have given their assent, but some people in local communities have yet to be won over. There has even been resistance in Poland, although a poll last summer showed strong overall support for shale gas production. In the village of Zurawlow in southeast Poland, near the Ukrainian border, farmers have blocked access to a Chevron test site with farm equipment for several months...”

This means that for now environmental groups and local communities are not favorable of fracking as an alternative to conventional drilling for oil and gas or as an alternative to the Russian gas or domestic coal utilization. The conclusion would be that the many reasons mentioned which go against fracking need to be carefully examined in each country before adopting any decision which goes in favor of letting fracking companies dig wells. The potential benefits might be high, but the consequences might be even higher if not played right.