On November 25th, fracking experts from across the continent will convene in Warsaw for the Shale Gas World Europe conference. The gathering is a reminder of the heady days, just a few years back, when the Polish government promised to wean the country from dependence on Russian fossil fuels by imitating America's successful exploitation of shale. Poland would become "a second Norway", as Radek Sikorski, the former foreign minister, put it in 2010. All that was needed was to open the country to foreign drilling firms, set up a regulatory and profit-sharing structure, open the taps, and watch the methane (and the dollars) flow.

Four years later, those dreams are sputtering out. International companies are fleeing Poland, government efforts to create regulations for the sector are flailing, and while a few test wells have been drilled (including the one pictured above, in the eastern village of Grzebowilk), they show disappointing results.

"It's clearly developing below expectations," says Pawel Poprawa, an oil and gas expert at Poland's Energy Studies Institute, an advisory firm. Mr Poprawa puts much of the blame on a "slow and incompetent" bureaucracy, which has made life difficult for gas prospecting firms. Despite years of government promises, Poland's administration is one of the most sluggish in Europe. It takes about seven months to get the permits needed to start drilling, six months to amend the drilling concession and nine months to obtain an environmental decision, according to Kamlesh Parmar, head of the Polish Exploration and Production Industry Association.

Mr Parmar is also chief executive of 3Legs Resources, an energy exploration firm which earlier this year backed out of three shale gas concessions in Poland after production levels proved unsatisfactory. 3Legs still has three Polish concessions left, but other companies have pulled out altogether, citing a mix of bureaucratic hassles and difficult geology. Marathon Oil, Talisman Energy, Eni and ExxonMobil have all gone. Chevron and ConocoPhillips, as well as Polish companies PGNiG, PKN Orlen, and a few small independents are still in the hunt; but the atmosphere in the gas industry is a far cry from the enthusiasm of just a few years ago.

In 2011, the United States' Energy Information Administration sparked dreams of an energy bonanza when it estimated that Poland could have gas reserves of as much as 5.3 trillion cubic metres, the largest in Europe. A later and more conservative estimate by the Polish geological institute suggested shale gas reserves in the range of 346 to 768 billion cubic metres. The US agency has also since downgraded its estimate. Even using the lower estimate, shale gas could have a significant impact on Poland, which uses about 16 billion cubic metres of gas a year, almost two-thirds of it imported from Russia. Donald Tusk, the former prime minister, suggested in 2011 that Poland could be producing commercial quantities of gas by this year.

Instead, the prospects of a commercial industry are still very distant. Only 64 vertical test wells have been drilled, and just 11 of them have been horizontally hydraulically fractured—the process in which water and chemicals are forced at high pressure deep underground to fracture rocks and release trapped gas. Industry experts suggest about 200 such test wells should be drilled to see whether Poland's geology can sustain a viable industry. By contrast, Pennsylvania, at the heart of America's shale boom, sees about 1,600 new wells drilled every year. And Poland's test wells have so far produced only 10% to 30% of the gas flow needed to be commercially sustainable.

The money needed to complete the programme is enormous. It costs as much as $25m to properly test a single well—at least twice as much as in the better-developed American market. With larger companies decamping and a sour atmosphere settling around Polish shale, independent firms are having a difficult time raising the funds needed to continue prospecting. Meanwhile, back when a lucrative gas windfall seemed in the offing, Poland's government decided to set up a regulatory and tax structure similar to that of Norway. The prospect of the government setting aside much of any eventual profits for public use has only added uncertainty to the industry.

"There was a view that the role of the regulator was to manage the bounty," says Mr Poprawa. "But looking at the Norwegian experience, Poles did not understand that Poland is at a very early stage of exploration, while Norway has a mature industry." Significantly, in her maiden speech to parliament a month ago, Ewa Kopacz, the new prime minister, made no mention of shale. In an environment of rising Polish anxiety over dependence on Russian oil and gas, the omission was striking.

Perversely, Moscow may now hold the key to galvanising the Polish shale industry. While Russian gas continues to flow cheaply, exploring for Polish shale gas is risky and expensive. But with the risk of renewed military conflict in Ukraine rising, the situation could change. “There is certainly gas in Poland, but is the current system able to extract it? I don’t think so,” says Grzegorz Pytel, an energy expert with the Sobieski Institute, a think-tank. “However, if Russia cuts off gas exports that would revive shale. The hope is in Moscow.” Shale enthusiasts who once hoped to free Poland from Russian gas have been reduced to hoping that Russia will turn off the gas, or raise prices sharply, to make Polish shale viable.

Source: The Economist. Read more…