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Europe Can't Ignore Shale Gas

Forgoing the energy revolution will damage prosperity and security.

By ALAN RILEY

The prospects for shale gas production in the European Union appear to be weakening. Bulgaria has become the second EU state after France to ban hydraulic fracturing to extract it from the ground. The environmental movement across Europe is building its campaign against the technology, spreading alarm wherever energy companies express interest in developing a shale play.

In Brussels, many European Parliament and Commission officials are beginning to believe that shale gas may end up like genetically modified organisms (GMOs): something that Americans do but Europeans do not. But the potential economic and geostrategic effects of shale gas are greater than for GMOs. Europe faces significant de-industrialization and loss of economic competitiveness if it does not allow shale gas development to take place. It also risks finding itself in a much weaker geostrategic position with regard to its energy security.

Shale gas is ushering in a major energy revolution on two fronts. First, shale gas is widely distributed across the planet. It undermines entirely the accepted 80:10 ratio of the last 20 years—the expectation that 80% of the world's fossil fuels are found in OPEC countries and Russia, and 10% are found in OECD countries and China. According to the U.S. Energy Information Administration's latest survey, there are enormous quantities of recoverable shale gas throughout Europe, China, India, Argentina and the United States. This scale and distribution is likely to result in a surge of gas consumption across the planet, with gas being used wherever possible to replace oil. As a result, much of the world will significantly increase its energy security.

Second, when shale gas is produced at scale, it can be delivered at very low prices. The initial flow of gas from hydraulic fracturing is much greater than from a conventional well, allowing capital costs to be paid off much more quickly. Many of the world's shale plays contain more valuable hydrocarbon fluids. Gas can become an almost free fuel source when it's found at or near shale oil reserves. Meanwhile, rapid technological development, combined with a more systematic approach to production, is driving down costs.

Bloomberg

The Chopin-1 shale gas exploration well in Pinczow, Poland.

The U.S. has already benefited enormously from the scale and low cost of shale gas. Gas futures in the U.S. are now below $3 per million British thermal units (MMBTUs), whereas in Europe they are running between $10 and $14 per MMBTU. On the back of rapid U.S. production, the Energy Information Administration predicts low gas prices into the next decade. Low-cost energy is injecting competitiveness back into manufacturing, helping the American industrial phoenix rise again.

The EU should be particularly concerned about the viability of its world-leading chemicals industry, which uses hydrocarbons as a feedstock and fuel. The U.S. now has a major competitive advantage over both China and Europe with its ever-lower gas prices. One has to question whether the European chemical industry can survive at all at current prices. Worse still, many European chemical companies currently use even more expensive oil instead of gas as a feedstock. Europe's loss of competitiveness versus the U.S., in all exporting manufacturing sectors, will be reinforced as other countries start building up their shale gas production to scale. Using newer technology some countries may well deliver gas prices even lower than America's.

Meanwhile, the U.S. is moving in the direction of at least hemispheric energy independence. Shale oil, offshore Gulf oil production, and access to Canadian oil sands and Brazilian offshore oil could soon free the U.S. from fossil fuels imported

outside the Americas. Even actual energy independence within the lower 48 cannot be discounted in the next energy technology wave, which is likely to be based on modular, cheap and quickly installed gas-to-liquid plants.

The danger for Europe is that Americans' interest in keeping Middle Eastern oil fields open will be downgraded to that of a public service. Europe should be concerned that it is now even more heavily dependent for its energy security on the U.S. than during the Cold War. If Washington were to ever withdraw the Navy's Fifth Fleet from the Persian Gulf, Red Sea, Arabian Sea and East African coast, China would be the likely replacement as the guarantor of the region. Europe's only other major oil supplier is the Russian Federation.

Shale gas is not like GMOs. It can only be ignored with hugely damaging consequences to European prosperity and energy security. The EU needs to look at redesigning its energy and climate-change policy to focus on rapid cuts in CO2 by switching to gas from coal. Its member states need to allow shale gas development at scale to obtain the low-cost energy that is benefiting the U.S. economy.

Failing that, Britain and France will almost certainly need to reconsider the scale of their military deployments in the eastern Mediterranean and the Persian Gulf. Europe cannot expect to rely permanently on the goodwill of a friendly superpower, no matter how benevolent, for a vital part of its energy security.

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