



## Europe's energy security strategy must be to beef up our gas infrastructure

**Claudia Kemfert**

The political crisis over Russia's cooling towards the Ukraine has revised fears that Russia may suspend natural gas supplies to Ukraine and to the European Union. There are legitimate reasons for these concerns, as five years ago, Russia temporarily cut off its supply following a dispute with Ukraine over the price of natural gas and transit costs. Since then, the EU has strengthened its security of gas supplies and the rising profile of shale gas has given people great confidence regarding Europe's overall energy security.

A number of measures proposed by the European Commission have done much to create this sense of security – particularly the diversification of supplies and the accompanying expansion of natural gas infrastructure to secure supply links with third-party countries. Means to ease temporary bottlenecks have also improved significantly, with Liquefied Natural Gas (LNG) playing an important role because Europe has successfully increased its LNG market options by

constructing new LNG terminals. Potentially lower gas imports from Russia could be compensated for by increased LNG imports.

But regardless of expectations, shale gas will not be the game changer for Europe that it is in the U.S. Extraction is much more difficult in Europe because of higher environmental standards and population density, while property rights also differ substantially to those in the U.S. Even if Europe were to explore its potential shale gas reserves, the share of total gas production would still be low, leaving Europe still largely dependent on imported gas.

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This is in contrast to the U.S., where shale gas now plays a huge role; so much so that the U.S. may become a major exporter to Europe. Labelled by some

as a "new Arabia", the U.S. could potentially deliver huge amounts of oil and gas to the rest of the world, with recent developments in "fracking" increasing the possibility of it being a mass energy exporter. But within the U.S. there are concerns that increasing demand along with the rising cost of gas extraction is already beginning to cause gas prices to rise. This price increase, combined with uncertainties about how much extraction will actually take place, is also complicating the shale gas potential in Europe.

Existing gas fields in the U.S. are being extracted much faster than was anticipated, while extraction on a larger scale is being challenged as undesirable because the drilling options aren't always economically efficient. When gas prices are high, fracking is economically attractive, but when gas prices drop fracking risks being no longer viable. Considering the growing environmental concerns in the U.S., it's beginning to seem unlikely that all these new fields

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will be developed. And if the U.S. doesn't reduce its very high domestic energy consumption, it won't have the resources to be a major energy exporter, to Europe or elsewhere.

Europe must therefore concentrate on its own energy security by intensifying LNG imports and by improving energy infrastructure and efficiency rather than relying on the U.S. One way the European

gas infrastructure can be improved is by expanding it, notably between Spain with its important LNG terminals for improving gas, and the rest of Europe.

Existing infrastructure also needs to be used more efficiently. More LNG trade options are needed to connect eastern European nations to the existing infrastructure system. This would increase the "reverse flow" options from western

to eastern European countries – and so help increase overall energy security in Europe. In the medium term, Europe also needs continue diversifying gas supplies in case Russia turns off the tap. ■

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