

A freer energy market can power Europe's security

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Recent EC proposals fail to explain how alternative energy technologies such as fracking, a deeper energy trade relationship with Europe's biggest trading partner – the United States - and a freer internal energy market can boost the Union's energy security strategy.

Fracking would bring lower energy prices; it can boost the European economy by creating new investment opportunities, economic growth and jobs; and it would help to diversify Europe's energy sources.

Recent economic and geo-political trends suggest Europe should increase its energy trading ties with the United States, who, in 2015, lifted their oil export ban.

Furthermore, if the Energy Union strategy launched in 2015 is aimed at energy security, it should encourage efforts to remove any distortion—both physical and regulatory—that prevent the internal energy market from properly working.

Introduction

Following the 2006 and 2009 energy supply shortages, the EU launched its new energy security strategy in 2014. This laid out measures such as increasing energy efficiency, increasing EU-made energy production and completing missing infrastructure links to redirect energy to where it is needed during a crisis.

However, whilst the Commission's latest proposals (EC 2016a; EC 2016b) go in the right direction, especially in increasing the prospects for energy trade across Member States, the package fails to explain that alternative energy technologies such as fracking, stronger energy trade relationships with the U.S, and a freer EU internal market are likely to reduce the potential for future shortages.

Why is energy security a problem for EU countries?

The dependency of the EU on energy imports forms the backdrop for policy concerns relating to the security of energy supplies. As Eurostat data (2017) reveal, more than half (53.5%) of the EU28's gross inland energy consumption comes from imported sources. At the same time, the internal production of primary energy in the EU28 was 17.3% lower in 2014 than it had been a decade earlier.

The downturn in the primary production of hard coal, lignite, crude oil, natural gas and nuclear energy — much of it caused by environmental regulation at the EU and national levels — has led to a situation where the EU is increasingly reliant on energy imports. Russia has maintained its position as the main supplier of crude oil and natural gas and has also emerged as the leading supplier of solid fuels: in 2014, 70.7% of EU28 solid fuels imports originated in Russia (Eurostat, 2017). Moreover, although in recent years there has been evidence of the emergence of new energy partners such as Nigeria, Kazakhstan, Azerbaijan, Iraq, Qatar and Libya, the vast majority of these countries still remain politically unstable, which makes supply more volatile.

Fracking can power Europe's energy security

Natural gas has the potential to become a key driver for the future EU energy transition. However, the extraction of oil and gas from shale rocks has never been properly exploited. According to recent data (EIA, 2015), European countries such as France and Poland have large basins of wet shale gas, with around 137 and 146 trillion cubic feet of technically recoverable resources, respectively. Despite this advantage, several Member States, such as

The U.S. fracking revolution is benefitting households; it led to a 47% drop in gas bills between 2007 and 2013 and is helping America achieve greater energy independence.

France and Germany, have effectively banned fracking whilst importing millions of barrels of U.S. shale gas and oil (Grealy, 2016).

There are compelling reasons why Europe should replicate the U.S. shale boom. First of all, fracking would bring lower energy prices. Secondly, it can boost the economy by creating new investment opportunities, economic growth and jobs. According to 2014 data from the UK, harnessing the potential of onshore shale reserves could create over 74,000 new jobs in Great Britain alone (UKOOG, 2014). Thirdly, it would depoliticise the energy sector of several Eastern European countries, such as Estonia, Lithuania and Poland, helping those countries to move away from a situation of reliance on a single supplier.

A sound EU-wide fracking strategy could benefit the European economy, as it is happening on the other side of the pond. A recent study by Bartik et al. (2016) finds that the increased oil and gas production in the U.S. caused by advances in the techniques of

fracking is on average worth between \$1,300 to \$1,900 per household, annually. According to the Brookings Institutions (2015), as a result of fracking, US consumer gas bills dropped by around \$13 billion per year between 2007 and 2013. This equates to a 47 percent drop compared to what the price would have been prior to this increase in domestic supply. Moreover, fracking is not only helping America achieve greater energy independence (Politico, 2013; CNN 2015), but also, as Kondash et al. (2016) stress, its environmental impact is low and more than 90% wastewater from hydraulic fracturing sites is safe.

Whilst replicating the U.S.'s success is far from an easy task for European countries, EU institutions still remain too slow to act and European policymakers should start a serious debate about the real benefits of fracking when discussing EU energy security and independence. Without more research into discovering the potential quantities of recoverable shale gas and their impact on local communities, economic analyses of fracking will remain extremely limited and the achievement of greater energy security utopian.

Energy Trade with the US is a straightforward path to greater diversity of supply

Given the recent declining demand for American Liquefied Natural Gas in Asia (IGU, 2016), the European Union has a real opportunity to position itself as the best target market for the freed-up American LNG output. A move in this direction might also lead the U.S. to renew its commitment to a transatlantic trade deal with Europe (Benjamin Wilson, 2016; Woertz, E. et al., 2016).

The latest EC energy security package largely argues that the Union does not need an increase in import capacity, as opposed to better interconnections between member countries (FreishmanHillard; 2016). This view misses out the opportunity to increase LNG trade and correct the discrepancy in the price of gas between the EU and the U.S. Clearly, then, European policymakers should focus more on promoting investment in new import terminals in the long term and FSRUs in the short term – issues that are barely discussed in the EC proposals – to reduce the dependence of Eastern Europe on Russian supply.

Moreover, after the historic 2015 repeal of American oil export restrictions and the historical OPEC and non-OPEC oil production deal that has stabilized prices at around \$50 a barrel (De Mico, 2016), there is also opportunity to increase oil trade. Keeping in mind that around 75% of Europe's oil imports come from countries that participated in the recent production deal, the Union should work to eliminate lingering restrictions to crude oil trade with the U.S.

Energy liberalisation equals energy security

As previous EPICENTER (2017) research has shown, despite successive attempts at liberalisation, national electricity markets remain highly concentrated. According to Eurostat (2016) sixteen Member States still have a state incumbent that retains more than a 50% market share. On top of this, different national regulatory frameworks are delaying and discouraging a higher level of competition, of energy efficiency and of longer-term investments.

In some countries, such as France, Estonia and Greece, state incumbents retain market shares of 86.8%, 84.8% and 71.5% respectively.

Due to a strong resistance to reforms, the EU liberalisation process has stalled in recent years, and despite the 2009 reforms, the current political pendulum is swinging back to state intervention. Even if the security of supply has always been used by policymakers as an argument for why national authorities should supervise energy markets, state intervention is generally an inefficient solution to energy security problems. In fact, as Stagnaro explains (2015), energy security is not necessarily a public good that requires public intervention, as the risk of supply interruptions is normally dealt within the energy market itself.

For this reason, what can really improve EU energy security is the achievement of a greater degree of market integration. In other words, if the Energy Union strategy launched in 2015 is aimed at energy security, it should encourage efforts to remove the remaining distortions — both physical and regulatory—on energy trade within the internal market.

Conclusion

After the 2014 stress tests carried out by 38 European countries (EC, 2014), the European Commission has argued that a market-based approach should be the guiding principle for combating supply disruptions within the EU.

Given both the 2015 Energy Union Strategy and the most recent energy union packages, it is key for European policymakers to understand that the most efficient policy to increase energy security is to broaden the scope of competition by removing existing national barriers that tend to lead to unfair internal competition and by fully comply with the 2009 liberalisation package. Furthermore, the development of alternative technologies, such as fracking, and the strengthening of energy trade-relationships with the U.S. can indeed help Europe to boost investment, economic growth and jobs as well as diversifying its volatile energy relationship with Russia.

References

Bartik et al. (2016). The Local Economic and Welfare Consequences of Hydraulic Fracturing. SSRN.

Benjamin Wilson, A. (2016). Energy and EU-US relations. European Parliament.

Brookings Institutions (2015). The Economic Benefits of Fracking.

CNN (2015). U.S could be energy independent within four years.

De Mico, P. (2016). Could US oil and gas exports be a game changer for EU energy security? European Parliament. pp. 8

EIA (2015). World Shale Resource Assessment. Analysis & Projections.

EPICENTER (2017). High-powered reforms to EU energy policy.

Eurostat (2016). Market share of the largest generator in the electricity market

Eurostat (2017). Energy production and imports.

European Commission (2016a). Towards Energy Union: The Commission presents sustainable energy security package.

European Commission (2016b). Commission proposes new rules for consumer centred clean energy transition.

FleishmanHillard (2016). The European Commission's 'Energy Security Package'. p. 6

Grealy, N. (2016). France, how can you square your ban on fracking with the import of shale oil? EnergyPost.

IGU (2016). 2016 World LNG Report; LNG 18 Conference & Exhibition Edition. pp. 18

Kondash, A.J. et al. (2016). *Quantity of Flowback and Produced Waters from Unconventional Oil and Gas Exploration*. Science of the Total Environment

Politico (2013). Congratulation, America. You're (Almost) energy independent.

Stagnaro (2015). Power cut? How the EU is pulling the plug on electricity markets. Institute of Economic Affairs

UKOOG (2014). Potential for £33bn investment and over 64,000 new jobs in the UK from shale gas development. UKOOG and EY Report.

Woertz, E. et al. (2016). The EU's energy diplomacy: Transatlantic and foreign policy implications. European Parliament, pp. 66