Does Russian gas weaken energy security in Europe?

Lessons from the Baumgarten incident

Arndt Hassel and Christian Egenhofer

The disruption caused by the recent Baumgarten incident is a timely reminder that security of gas supply goes beyond dependence on particular suppliers and that infrastructure matters.

On December 12th, an explosion in the Baumgarten gas hub in Austria, a key distribution knot for the European gas market, led to a disruption in gas transmission that affected a large part of Europe. The incident caused Italy to declare a state of emergency and disrupted supply to the UK from Belgium and the Netherlands. Simultaneously, an outage in Norway caused flow reductions from Europe’s largest gas production site “Troll”, which compounded the supply problems. Amplified by a demand peak in the UK due to unusually cold weather, prices were directly affected, with short-term prices in the UK reaching a four-year high (up 35%). The incident has affected the gas market and may lead to further repercussions throughout the remainder of the winter, when demand stays high due to household consumption for heating.

The Baumgarten incident reminds us of the consequences of disruptions in the operation of gas infrastructure. Following the European Commission’s lead, EU member states have recently put into place a framework to minimise the impact of supply disruption, by means of an update of the so-called Security of Gas Supply Regulation. The Regulation calls for a Union-wide gas supply and infrastructure assessment to be carried out by ENTSOG (European Network of

1 “Italy declares state of emergency after deadly gas explosion in Austria”, The Guardian, 12 December 2017.
2 REGULATION (EU) 2017/1938.
Transmission System Operators for Gas). Nonetheless, in the current political debate on EU energy security, the risks associated with infrastructure have been largely eclipsed by a single theme: EU dependence on Russian gas imports. Warnings that dependence on Russia has been politically (over-)exploited have long been ignored.\(^3\) If the Baumgarten incident shows anything, it is that energy security is not only synonymous with diversification of import sources.

Resilience against disruptions like the one that occurred in Baumgarten requires a degree of redundant infrastructure, including storage, domestic transport and import systems. This was the case for most of the EU. In the UK, the relatively strong price increase was connected to an already weakened local infrastructure situation, with one import pipeline out of operation for maintenance and one storage facility in the course of retiring (both responsible for meeting the equivalent of 10% of winter demand).\(^4\) This demonstrates that infrastructure availability, even if sufficient, aggravates price increases in emergency situations. The price increase also shows that the EU’s integrated market is functioning. The price signals emerging from the infrastructure disruption mean that supply is directed where it is most needed. Electricity and coal prices increased slightly, hinting that the electricity market is able to arbitrage among different energy sources. The soaring UK gas price led to a short-term LNG (liquefied natural gas) order, ironically sourced from the Russian Yamal LNG project. The project had been opened a week earlier by Valdimir Putin and is subject to US sanctions due to the conflict in Ukraine.\(^5\)

The market is working but we are likely to see a prolonged period of high gas prices. This provides every reason for ENTSO-G’s ongoing EU-wide assessment to place due emphasis on infrastructure. While the EU gas system was able to absorb the Baumgarten disruption, we should ensure a continually appropriate level of infrastructure redundancy for the future. Any assessment of requirements should therefore take into account possible future demand trends (for example, as a result of the phasing out of coal and nuclear, energy efficiency policy and renewables investment), shifts in regional gas demand and the specific situation of landlocked countries without direct access to LNG.

The Baumgarten incident is a timely reminder that security of gas supply goes beyond dependence on particular suppliers and that infrastructure matters. One could even imagine that Nord Stream 2 may have a positive impact on security of supply, as it opens new gas routes to Europe. There may be many reasons why some governments and other stakeholders do not like Nord-Stream 2, for example the impact on Ukraine, doing business with an increasingly assertive Russia or the actual or perceived lack of solidarity in the EU. Following the Baumgarten incident, security of gas supply may well be no longer at the top of that list.

---

\(^3\) See, for example, Nikos Tsafos, “Europe’s Never-Ending Natural-Gas Obsession”, 12 June 2014.


\(^5\) “UK turns to Russian project targeted by sanctions for gas supply”, Financial Times, 13 December 2017