

The EU's Policy to Secure Gas Supplies

Amidst growing tensions with Russia, attention has returned to the security of Europe's gas supply. In the past, the EU has achieved successes in developing the infrastructure between member states, but not in diversifying its suppliers. An escalating crisis in Ukraine might catalyze integration. Switzerland can further improve its security of supply through close cooperation with neighboring states.

By Oliver Geden and Jonas Grätz

The Russian-Ukrainian gas dispute around the turn of the year 2005/2006, which resulted in a brief supply cutoff by Russia, made the security of gas supplies a crucial topic on the EU's political and media agenda. Security of gas supply has since been Europeanized to some extent. Generally, security of supply is strongest when gas production and supply channels are subject to one's own rules. Domestic gas extraction is therefore advantageous. Should this be unavailable or insufficient, investment in redundant structures is required to reduce exposure to political blackmail and to supply shortages because of technical vulnerabilities. Internal redundancies can be created through investment in storage capacities as well as the expansion and regulation of transportation networks. External redundancies are achieved, for instance, by building new pipelines and terminals for importing gas and liquefied natural gas (LNG), respectively.

Public attention is largely focused on the creation of external redundancies. Accordingly, the EU energy strategy first developed in 2007 prioritized the development of a common European approach in external energy policy. However, in terms of tangible measures, fostering internal redundancies has been a much more important task. For instance, while the EU and the European Free Trade Association (EFTA) states – including resource-rich Norway –



A pressure gauge is seen at an underground gas storage facility in the village of Mryn, 120 km north of Kiev. *Gleb Garanich / Reuters*

cover more than half of their consumption themselves, many of the member states in Eastern and Southeastern Europe source between 60 and 100 per cent of their supplies from Russia. When supply was disrupted, the latter had no alternative source. Improvements were achieved through measures such as the construction of new connections between member states and upgrades to existing compressor stations allowing reverse flow of gas.

Until now, the crisis in Ukraine has not brought substantial new integration steps. This is unlikely to change at the European Council in October 2014, the next opportunity for the 28 heads of state and government to decide on strategic energy and climate policy measures. Hence, the internal dimension is likely to remain a core task for EU security of supply in the coming years. However, unexpected events in the context of the Ukraine crisis might still lead to a

more coherent pattern of external energy policies. At all events, the inability to create external redundancies is increasingly making itself felt in the development of the single market, as external suppliers like Gazprom remain key players and continue to exert their influence.

External Letdown

Overall, the EU's external energy policy has been a disappointment: The Nabucco pipeline, which was promoted by the European Council in 2007 with the aim of bringing gas from the Caspian to Austria while skirting Russian territory, was not realized. Instead, the Shah Deniz II consortium, which will supply more gas from 2019 onwards, decided in favor of the Transanatolian Pipeline (Tanap), promoted by Azerbaijan and Turkey, in combination with the Transadriatic Pipeline (TAP), which is also supported by Switzerland. However, these projects offer almost no advantages in terms of diversifying gas supplies for Central Europe.

This failure illustrates that the EU lacks the means to realize an effective external energy policy: It has neither the companies nor the diplomatic expertise, but can only offer monetary and regulatory incentives for corporations and member states. At the same time, there is no European energy supplier that might advocate EU-wide interests.

The disparity between the EU's capabilities and a gas security debate centering on import pipelines plays into the hands of major suppliers such as Russia, which can offer "one-stop sourcing". Russia has gas supplies as well as major corporations and dip-

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lomatic expertise at its disposal. Thus, it has succeeded in advancing its own pipeline projects such as "South Stream" (see map). As a new supply route, the pipeline creates redundancies; however, these are not optimal for the EU, since the supplier country remains the same and existing delivery corridors and transit countries will come away empty-handed.

Internal Expertise

When it comes to the creation of internal redundancies, the EU has had considerably

Gas Pipelines in Europe 2014



more success. In the Russian-Ukrainian gas crisis of 2009, the EU had sufficient supplies of gas at its disposal. If residents of Southeastern Europe were freezing, it was due to a lack of pipeline connections within the EU, especially those running from West to East. The takeaway lesson has been that in order to deal with shorter-term supply crises, it would suffice to create better links between the fragmented markets of the EU's member states. While no pan-European concept was developed, at least a patchwork consisting of five bundles of measures emerged as a means of improving security of supply.

First of all, the EU committed the operators of long-distance gas pipelines to founding the European Network of Transmission System Operators for Gas (ENTSOG), which, inter alia, has to deliver grid development plans for the entire EU for the next ten years. These plans are to be updated biennially and provide an overview of how the existing infrastructure planning compares to prospective future gas demand and the projected availability of natural gas. The quality of these plans has improved continuously, particularly in terms of identifying regional shortfalls. However, they do not constitute a "master plan" offering an overview across the entire EU, since only the plans of individual pipeline operators are taken into account, many of which are only active in a single member state. Consequently, more efficient cross-border projects often remain outside of the scope of planning.

Secondly, therefore, the EU is offering specific incentive structures to advance cross-border projects that are politically desirable in terms of fostering security of supply. Whereas the Trans-European Energy Networks (TEN-E) program had previously only funded feasibility studies to the tune of a few million euros, after the 2009 gas crisis, the EU made available a one-time allocation of € 4 billion for expanding energy infrastructures. About one third was invested in gas infrastructures, mainly cross-border connections and reverse flow devices. For the period 2014–2020, the "Connecting Europe Facility" (CEF) will provide another € 5.85 billion for energy projects.

Thirdly, the EU issued detailed regulations that mandated member states to create additional redundancies to increase resilience in the event of supply disruptions. In 2010, it was decided that every member state had to maintain one or more alternative infrastructures as backup for its main current supply source – which in most cases is an import pipeline. But, as of 2013, only 16 of the 28 member states met that requirement. Another measure stipulates that all cross-border interconnection points within the EU have to feature devices for uninterrupted reverse flow. However, even major cross-border points at the German-Czech or Hungarian-Romanian borders do not yet allow for permanent flow reversal.

Moreover, as a fourth measure, the member states agreed upon a supply standard. Member states must outline how they intend to maintain supplies to private homes

and, depending on the country, to heating plants, schools, and hospitals for 30 days if the main source of supply should fail during ordinary winter conditions. Due to the relatively low requirements of this standard, most of the member states are already in compliance with it.

Last but not least, as soon as two or more member states are affected by a supply shortfall, the EU Commission can assume the coordination of national authorities, though the latter remain responsible for implementation and retain a certain degree of leeway.

Short- and Long-Term Perspectives

The EU operates on a short-term time-frame, which is why the focus is on measures in preparation for the winter of 2014. However, those in favor of a stronger security of supply policy are using the current crisis situation to launch new initiatives towards European integration, as exemplified by Polish Prime Minister Donald Tusk's proposal for an "Energy Union".

With respect to short-term measures, the EU Commission presented a new draft energy security strategy in May 2014. However, its suggestions do not go beyond the existing instruments of coordination and solidarity during emergencies as well as deeper collaboration in completing the common energy market. In particular, the existing emergency plans are to be adapted to the new situation. In this context, the Commission aims to adopt a more forceful coordinating role and to intensify the dialogue with new suppliers.

The European Council's decisions of 27 June 2014 also confirm the approach pursued so far: more stringent regulation and improved networks. It should be noted that the principle of solidarity, which was highly contentious at the beginning of EU energy policy integration due to concerns over "free riding", is now affirmed almost without reservations. Moreover, the 28 heads of state and government demand strict adherence to EU rules in making new investments, indicating attempts by the Russian state corporation Gazprom to water down the existing regulations. Further decisions are expected to follow at the EU summit at the end of October 2014.

The affirmation of the established policy approach by the European Council is also due to the fact that coherent implementation of EU legislation is difficult enough, since the role of Russia as a supplier has

become more prominent again in recent years. In particular, state-owned Gazprom wants different rules to apply in major new cross-border projects other than in existing transmission grids, which would cement its position. Since Gazprom also acts as a pipeline operator within the EU, it has a certain amount of influence in the process of detailed rule-setting through various European working groups. In addition, Russia has taken precautions by signing bilateral agreements with the EU member states that host the South Stream pipeline. Those agreements promise a special status to South Stream, violating EU law. Thus, the lack of success in achieving external diversification is now also impacting the ability to implement internal measures effectively.

Meanwhile, Donald Tusk's longer-term plan for enhanced integration into an "Energy Union" is referenced in the terminology of the European Council's conclusions, but rejected in substance. Like the Tusk paper, the European Council also proposes to strengthen the Energy Community Treaty, which is to integrate the Balkan states, the Republic of Moldova, and Ukraine into the EU energy market. However, on those points where the existing rules would need to be changed, Tusk's proposals have been met with little enthusiasm. The suggestions for paradigmatic changes and new competences at the EU level, such as the proposal for joint negotiation of gas supply contracts, have been rejected out of hand. The election of Tusk as president of the European Council may get some more ideas

closer to realization, especially if current energy deliveries would become subject to European sanctions due to an escalation of tensions with Russia over Ukraine.

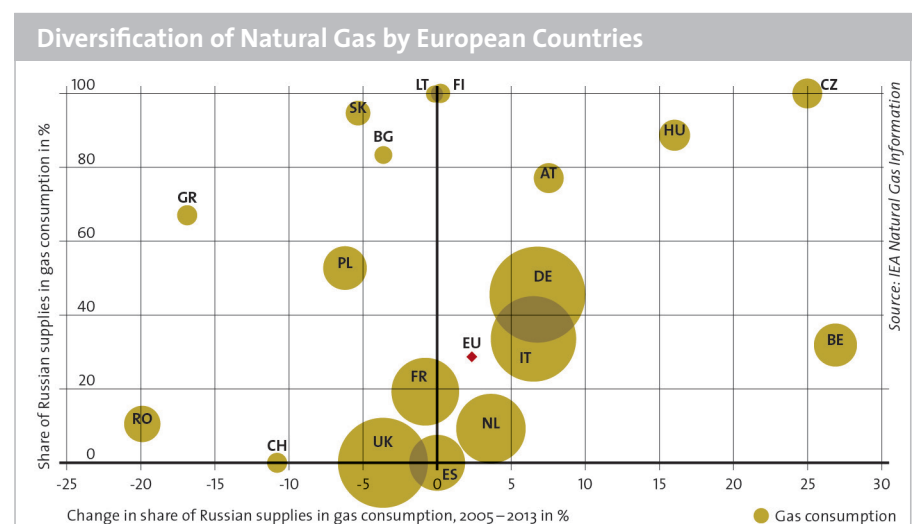
No Paradigm Shift

With the caveat of further escalation, one should not expect new integration steps worth mentioning. While there is agreement within the EU that precautions must

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be taken against potential disruptions of gas supplies from Russia, there is no consensus on a common way forward. Beyond emergency plans resting upon short-term measures and a certain degree of pragmatism, all 28 governments tend to regard the crisis primarily as confirmation of their fundamental priorities in energy policy. Many North and Western European countries advocate additional measures to combat climate change and an expansion of renewable energies; Eastern European countries, on the other hand, rely on domestic coal and wish to begin extracting shale gas. The only measure that all can agree on is strengthening energy efficiency. Nevertheless, a majority of member states is intent on avoiding any stringent EU regulation.

For most EU member states, an expansion of the role of European institutions is only



Security of Gas Supply in Switzerland

Natural gas accounts for only a small, but growing share of Switzerland's energy supply. In 2013, due to the cold winter, 3.34 billion cubic meters were consumed. This is equal to **13.5 per cent of total energy consumption**. Three quarters are imported from Germany and France through the Transitgas pipeline. If Switzerland should carry through its nuclear phase-out, as envisaged under the "**Energy Strategy 2050**", it is likely that gas consumption will rise after 2020. Security of electricity supply will then increasingly depend on secure gas supplies.

Switzerland has no gas reserves of its own, nor does it feature seasonal gas storage capacities. A certain degree of security is provided by the Transitgas pipeline that delivers gas to Italy. However, in case of a gas shortage in southern Germany – for instance, if Russia should cut back deliveries in a harsh winter, as was the case in 2012 – deliveries through Transitgas could come to a halt as well. The situation might be redressed by facilitating **reverse flow on the pipeline from Italy**, especially as Italy's supply situation is likely to improve further from about 2020 onwards, when the Transadriatic Pipeline is expected to come on stream. Preparations for reverse flow are far advanced, and it is probable that the investment will be approved as planned.

Switzerland compensates for the lack of formal involvement in the EU's decision-making structures through bilateral cooperation with the authorities and corporations in the respective neighboring states. A formal agreement between Switzerland and France ensures that until 30 September 2030, Swiss and French consumers will be treated equally in the case of a supply crisis. Moreover, at least until 2016 or, absent any objections on the part of the French side, until 2023, Switzerland has secured **access to the "Etrez" gas storage**. Swiss companies may use it to store up to eight per cent of annual consumption, which is especially beneficial for security of supply in the western part of Switzerland. The Swiss side will also be involved in network planning. Berne has no legally binding cooperation agreement with the other neighboring countries.

Despite continuing Europeanization, the EU member states retain considerable leeway. Accordingly, there is room for improvement in bilateral cooperation with EU member states and at the corporate level. Supply problems for Switzerland might only be expected in the case of **a regional or even a Europe-wide gas emergency**; however, even then, the EU Commission would only have a coordinating role.

glected at the regulatory level, is becoming more and more important in the context of liberalized markets, as only storage can ensure the necessary degree of flexibility. Furthermore, a lack of regulation may encourage incumbents to book capacities while not actually using them to store enough gas, consequently reducing the buffer in a crisis. Although this is currently not a problem, storage might be prioritized in the current crisis. Symbolically, the EU Commission might again be tasked with diversifying supplies, but this is unlikely to yield tangible results.

A coherent European energy policy geared towards diversification of supplier countries remains a vague hope for the time being. For Switzerland, this means that improvements will have to be achieved through pragmatic bilateral cooperation with neighboring countries, energy suppliers, and also the EU. In the case of natural gas, only a regional supply shortage would create the type of situation where an energy treaty with the EU would bring added value in terms of security of supply, as Switzerland would then enjoy the same priority as any EU member state.

desired if their respective preferences can be enforced across the EU. If not, governments emphasize the principle of sovereignty in determining the national energy mix and in ensuring national security of energy supply, as affirmed by EU primary law. This political status quo is not likely to be overcome anytime soon.

Looking forward to October 2014, when the next strategic decisions concerning the EU's energy policy are due, one can expect

a pragmatic continuation of the path embarked upon in 2009, plus some symbolic steps: Pragmatically, the expansion of infrastructure and enforcing fair and transparent market rules, as well as stricter standards for security of supply at the national and regional levels will be in focus. In this regard, a new field of activity might be the introduction of stronger regulation for gas storage, which could enhance the ability to face a supply disruption. Access to gas storage, which has so far been ne-

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