EUROPE’S NATURAL GAS DILEMMA

EUROPE REMAINS HEAVILY DEPENDENT ON RUSSIAN PIPELINE GAS SUPPLIES

Europe’s natural gas position stands in stark contrast to that of the US. The 28 member states of the European Union (EU) are slightly less natural gas dependent on average than the United States, with 24% of total energy consumption supplied through natural gas, compared to 30% in the US (Figure 4). The share of total EU energy demand met through imported gas is considerably higher, however, 15% for the EU compared to 2% for the United States in 2013. And while US dependence on imported gas has fallen from a high of 5% of total energy consumption in 2002, European dependence on gas imports has grown over the past decade, up from 12% in 2002 (Figure 5).

Within the EU dependence on imported natural gas varies widely by country (Figure 6). Italy meets a third of its energy needs with imported natural gas, while Lithuania is closer to 38%, according to Eurostat data. Germany is slightly above the EU average at 19%, while France is slightly below at just under 15%. Denmark and the Netherlands, on the other hand, are natural gas exporters.

Of the two-thirds of total EU natural gas demand met through net imports in 2013, nearly 90% came by pipeline (Figure 7). Russia is the largest single source of Eu-

Figure 4: The relative role of natural gas
Total gas and imported gas as a share of total energy consumption, 2013

Figure 5: Share of total US and EU energy consumption met through imported gas


Figure 6: Share of 2012 EU energy demand met through imported gas, by country

Source: Eurostat.
European pipeline gas imports and accounted for more than one-third of total EU gas supply in 2013. In addition, Russia is a critical swing supplier for the region, meeting demand during periods of higher consumption. Most Russian gas reaches Europe through Belarus and Ukraine, which rely on Russia far more than most EU members for energy. In Ukraine, 34% of total primary energy demand is met with gas, about 56% of which came from Russian imports in 2013. Belarus is even more reliant on gas, which accounts for 65% of total energy consumption, all of which is purchased from Russia. Russia traditionally sold gas to these transit countries at far lower prices than to consumers within the EU. Moscow still rewards Belarus with discounted gas prices for the country’s participation in Russia’s Eurasian customs union. The discounted gas price offered to Ukraine in December 2013 was also intended as an incentive to convince Kiev to join the Russia-led trade bloc.

**Figure 7: EU natural gas imports by supplier**
Billion cubic meters, 2013

![Graph showing EU natural gas imports by supplier](image)

- **Source:** BP Statistical Review of World Energy 2014.

**RUSSIA-UKRAINE DISPUTES OVER GAS PRICES THREATEN SUPPLY STABILITY**

Price disputes between Russia and Ukraine resulted in the disruption of Russian supplies to the EU in 2006 and 2009. Russia cut off gas supply to Ukraine again in June 2014 in an escalation of the most recent pricing dispute. Gazprom insists gas shipments will not resume until Ukraine pays off a debt of $4.5 billion, but Kiev is demanding lower gas prices first. Gazprom has continued to deliver supplies to Europe via Ukraine, but supply risks remain and it is unclear how the standoff will be resolved.

Ukraine has filled roughly half its existing storage and three-quarters of its targeted volume to protect against winter disruptions. Presently, it has adequate storage to meet domestic consumption some way into the winter.
Presently, Ukraine has adequate storage to meet domestic consumption some way into the winter (perhaps January or February), but increased storage supplies are still needed to both satisfy domestic demand and ensure stable seasonal supplies into Europe. Ukraine may face potentially life-threatening gas shortages, particularly if this winter is unusually cold.

Gazprom has threatened to reroute the gas around Ukraine if it suspects Ukraine of stealing any of the transit supplies of gas for its own use, and plans to increase injections into underground storage in the EU to ensure customers there continue to receive adequate supplies. But such measures cannot fully compensate for the Ukrainian loss, as about a third of Russian gas shipments to Europe will have to be transported via Ukraine, even if Gazprom ramps up transport volumes through its Nord Stream pipeline to full capacity.

Given both Ukraine’s and the EU’s dependence on Russian gas, and the importance of energy exports to the Russian economy, it is logical that policymakers, both in Europe and the US, are exploring the extent to which US LNG exports can help resolve the current crisis by providing Europe with an alternative source of natural gas supply and thus reducing Moscow’s leverage over both Ukraine and EU member states, and prompting a change in its attitude by adversely impacting the Russian economy.

Next we will assess the potential benefits of US LNG exports in achieving these objectives and the role that energy can play in the broader US response to the crisis.