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## **SPOTLIGHT**

## The Impact of the Russian Invasion of Ukraine on the European Energy Sector

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The Russian invasion of Ukraine has led to a rapid reorientation of energy policy in Western countries. Energy cooperation with Russia is now undesirable. A broad consensus has emerged on the need to reduce dependence on imports of Russian raw materials, including countries that previously regarded Russia as a reliable trading partner, such as Germany. The EU supports Ukraine, whose energy security has deteriorated significantly.

## What consequences does the war have for the Ukrainian energy sector?

In the war, Russia seeks to deprive Ukraine's armed forces of fuel. Among the targets of Russian attacks have been fuel depots in Vasylkiv and Chernihiv. Due to the threat of shelling, Ukraine has shut down the Shebelinskaya refinery and now only the Kremenchuk refinery is operating. This has severely worsened Ukraine's fuel supply, which during peacetime was still dependent on imports from Belarus (now suspended). Belgium, France, Poland, and Romania have pledged deliveries to support Ukraine.

Local thermal power stations and transmission lines have also been targeted by Russian shelling, which has deprived residents of Mariupol and other towns of electricity. In the area controlled by Ukraine, however, the power supply system is working and relatively stable despite being disconnected from Belarusian and Russian systems with which it was synchronised. Stability may be threatened by Russian takeover of the Zaporizhzhia nuclear power plant on the night of 3–4 March. This resulted in two of its power units, with a total capacity of 2 GW, being disconnected from the grid (currently, 7 out of 15 nuclear units are in operation in Ukraine, including one at the plant occupied by Russia). However, the loss of control over the plant has not led to a radiological hazard. To strengthen the stability of the Ukrainian system, Ukraine and the European Network of

Transmission System Operators (ENTSO-E) have begun work on accelerated synchronisation with the European system.

Despite the military action, gas transit to the EU through Ukraine is proceeding without disruption. The increasingly intense shelling of civilian and critical infrastructure by Russia makes the likelihood of impediments or interruptions to gas transmission high. Many Ukrainian towns have already been cut off from the supply of gas.

## How have foreign companies reacted to the Russian aggression?

The invasion on Ukraine has changed the approach of foreign energy companies to investments in Russia. Among the companies deciding to withdraw from the country include BP, whose assets in Russia are worth \$14 billion, ExxonMobil (\$4 billion), Shell (\$3 billion), Equinor (\$1.2 billion), and the Norwegian Oil Fund (\$2.8 billion). They did so within just a few days after the invasion of Ukraine began, ending cooperation that had lasted more than 30 years for some of the entities. Interest in spot oil from Russia (apart from ongoing long-term contracts) has also declined. For example, the Surgutneftegaz company has not found a buyer for 880,000 tonnes of oil (less than two weeks' demand in Poland) since the beginning of the invasion. This demonstrates a radical change in the perception of investments in and trade with Russia. The potential loss of reputation in connection with financial support of the

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aggressor state has become higher in companies' opinion than the potential profits from cooperation.

## How has the Russian invasion affected European energy policy?

Russia's aggression has led to a change in the content of the debate on EU energy policy. Kadri Simson, European commissioner for energy, on 3 March defined the EU's priority as becoming independent from Russian supplies, so far with respect to the reduction of emissions. The response to this challenge is to be, first of all, acceleration of investments in renewable energy and energy efficiency according to the assumptions of the EU's Green Deal. However, Commissioner Simson pointed to the need to fill gas storage facilities with LNG in the short term.

The biggest change came in the approach of Germany, which until now considered Russia a reliable trading partner. The German Chancellor announced on 22 February the suspension of certification of the Nord Stream 2 gas pipeline, and on 27 February the accelerated construction of two LNG terminals to reduce dependence on "individual suppliers". Germany is also considering extending the operation of its last three operating nuclear power plants and coal-fired power plants to ensure the country's energy security.

### Is it possible for Russia to stop supplying gas and oil to the EU?

It is unlikely that Russia will stop supplying gas and oil to the EU. About 60% of Russian oil and gas goes to the EU market and the profits from these sales account for about 40% of Russian budget revenues. Following the introduction of

sanctions cutting Russia off from nearly half of its currency reserves, oil and gas revenues are now more vital than ever. The sale of currencies obtained from raw material exports will aim to strengthen the Russian rouble, which has depreciated by around 30% against the U.S. dollar since the introduction of sanctions. Exports to Europe are therefore very important and cannot be quickly replaced by sales to other countries due to the lack of necessary infrastructure. However, it is possible, for example, to limit supplies in response to the Western sanctions.

## What steps can the EU take to increase its energy resilience?

Member States should take steps to reduce the potential costs of a sudden interruption in the supply of energy resources from Russia. To this end, they should start filling coal stockpiles with non-Russian material under spot contracts, for example, from Colombia, and increase imports of LNG and natural gas from Norway. In the short term, wheeled transport can be used to deliver LNG from Western Europe (where more terminals are operating but there is insufficient pipeline capacity) to the east. EU countries must act in solidarity in this regard, selling each other their gas without margin. It is essential to ensure a continuous supply of crude oil of a type compatible with the technical capacity of refineries, which should be the result of consultations involving European and U.S. energy companies and governments. In the long term, it is necessary to develop renewables and nuclear energy simultaneously, which will gradually reduce the EU's dependence on imported energy sources and ensure diversity of energy mixes.

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