

The Influence and Significance of Russia, a Giant of Fossil Fuel Export

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The Ukraine crisis turned around on Russia's military invasion on February 24 and has continued to rattle international politics, security, geopolitics and the global economy over the past three months. It has also continued to shake international energy markets. International energy prices shot up from levels before the crisis and have remained high. Given that future Ukraine crisis developments are uncertain, energy market players are concerned that international energy markets could be destabilized further.

Among various factors behind the potential further destabilization of international energy markets, the most essential factor is that Russia has a great presence in international energy markets, leading the important Russian energy supply itself to become a risk. In the following, I would like to summarize and reaffirm Russia's significance for international energy markets to provide references for considering the future international energy situation regarding Russia.

Russia is significant for international energy markets because it is a significant energy supplier for the world. According to BP statistics, proven oil reserves in Russia stood at 107.8 billion barrels at the end of 2020, accounting for 6% of the global total. Russia ranks sixth in oil reserves in the world, following Venezuela, Saudi Arabia and three others. Natural gas reserves in Russia then totaled 37.4 trillion cubic meters, the largest in the world, commanding 20% of the global total. Backed by the rich reserves, Russia produced 10.67 million barrels per day or 12% of the global total oil output in 2020, ranking third after the United States and Saudi Arabia. It also produced 638.5 billion m³ in natural gas, accounting for 17% of the global total. Russia ranked as the second largest gas producer in the world, following the United States.

The significance of Russia as an energy exporter is more remarkable. In 2020, Russia exported 7.43 million bpd in oil, or 11% of the global total, ranking as the third largest oil exporter after Saudi Arabia and the United States. On a net export basis, Russia was the second largest exporter after Saudi Arabia. The United States not only exports large volume of oil but also imports similarly large volume of oil. In the year, Russia was the largest natural gas exporter, accounting for 238.1 billion m³ or 25% of the global total, leaving Qatar as the second largest exporter far behind. It also accounted for 18% of global coal exports on a calorie basis, ranking as the third largest coal exporter in the world following Australia and Indonesia. Russia is thus a giant fossil fuel exporter. On a calorie basis, it is the world's largest fossil fuel exporter.

In the nuclear energy field as well, Russia has attracted global attention in recent years. Russia accounts for 8% of global nuclear power generation, ranking as the world's third largest nuclear power generator after the United States and France. In particular, state-run nuclear energy company Rosatom has attracted attention with its aggressive overseas expansion (undertaking overseas nuclear power generation projects), boosting Russia's presence in the international nuclear energy market.

Regarding fossil fuels again, Russian energy exports' presence is conspicuously higher in Europe than in the world. In 2020, Russia accounted for 33% of oil imports into the European market (including Turkey), 57% of natural gas (pipeline gas and LNG) imports and 50% of coal imports. Russia is the largest exporter of each fossil fuel to the European market.

Factors behind such large Russian shares of energy exports to Europe include not only geographical proximity and pipeline connection but also Russian energy supply's excellent competitiveness which has made Russian energy supplies economically attractive for Europe. Meanwhile, the European market is extremely significant for Russia, absorbing 53% of Russian oil exports, 78% of Russian natural gas exports and 35% of Russian coal exports. Clearly, Europe's shares of Russian exports are particularly high for oil and natural gas. Russia and Europe heavily depend on each other through Russian energy supply.

Russia might have developed and implemented its energy strategy based on its understanding and recognition of the strategic significance of its energy supply to the world including Europe. As the energy sector represents the Russian economy's bread and butter, it is natural for Russia to have a strategic intention to take advantage of the energy sector and exports for maximizing Russian national interests. For such strategic purpose, powerful state-run companies or corporations with close relations with the Putin government exist and flourish. They include Gazprom, Rosneft, Novatek and Rosatom.

In 2000 when Vladimir Putin assumed his first presidency, crude oil prices launched an uptrend in the international market. As crude oil prices retained the uptrend in the 2000s, Russian crude oil production entered an expansion phase. The crude oil price hikes and production expansion brought about a massive oil revenue increase for Russia, supporting the recovery and development of the Russian economy. As Putin led Russia's recovery from the 1990s known as its lost decade, he might have felt the strategic significance of the energy sector. While Russia expanded its presence in the international oil market again through the oil production increase, an energy strategy linked closely to Russia's national will was implemented to exert great influence on the world.

In fact, Russia has demonstrated its presence in recent international energy markets with its strategic actions as well as its export volume and shares. Russia is now a central player in the OPEC-plus group of oil-producing countries in oil supply and demand adjustments. When oil prices weakened due to a sharp increase in U.S. shale oil production and the COVID-19 pandemic, Russia cooperated with the Organization of the Petroleum Exporting Countries in arranging a coordinated production cut, playing a key role in rebalancing oil supply and demand to achieve an oil price recovery. This is because OPEC leader Saudi Arabia has emphasized its cooperation with Russia in cutting oil production and remained cautious of increasing oil production as requested by oil-consuming countries even amid the Ukraine crisis. Such Saudi attitude also reflects its soured relations with the United States. In the natural gas market, Russia suppressed its pipeline gas supply to Europe plagued with LNG oversupply under the COVID-19 pandemic in 2020, indicating a strategic action to avoid further deterioration of the supply-demand balance and natural gas price falls.

The Ukraine crisis has led the world to recognize Russia's great presence in international energy markets. However, the significant presence in markets has become a significant risk factor for the stability of international energy markets including Europe. In the face of the significant risk, the rest of the world including Europe has begun to implement strategies to phase out dependence on Russia. Europe is about to phase out dependence on Russia with powerful initiatives that would have been inconceivable without the Ukraine crisis. Russia's significance as supplier in international energy

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markets may not decline substantially or immediately. However, the Ukraine crisis has dramatically transformed the international situation regarding Russia. From the medium to long-term perspective, we will have to watch the future of Russia as a giant fossil fuel exporter.

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