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Energy Security during transitional period of "Global Energy Transition"

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On April 28, the Institute of Energy Economics, Japan, and the Asia Pacific Energy Research Centre held their seventh joint international energy symposium, titled "Multiple Pathways to Carbon Neutrality -- Reality, Innovation and Resilience." The annual symposium has been held since the first one marking the 50th anniversary of the IEEJ and the 20th anniversary of APERC in 2016, becoming a flagship IEEJ/APERC event. Like the fifth and sixth ones, the seventh took the form of an online meeting under the COVID-19 disaster. As consideration was given to the time difference problem regarding speakers from Europe and the United States, Session I ended at shortly past 10:30 a.m. and was followed by the next session that started at 3 p.m. The symposium featured panel discussions in three sessions and a special address by Shin Hosaka, Commissioner of the Japanese Agency for Natural Resources and Energy. Panelists also held vigorous discussions with other participants.

As indicated by the title, the symposium was designed for participants, including experts in the world, to discuss various challenges and problems that should be considered for promoting carbon neutrality initiatives. In this sense, the symposium was a timely event. Particularly timely was Session 3 titled "Stabilization of energy prices and supply-demand balance during the transition period to carbon neutrality," which came amid the destabilization of energy markets through simultaneous energy price spikes since the second half of 2021 and the escalating Ukraine crisis. Panelists for Session 3 that I moderated were three famed experts who can be described as leading authorities in this field: Prof. Jonathan Stern, Distinguished Research Fellow, Natural Gas Research Programme, Oxford Institute of Energy Studies; Dr. Kenneth Medlock III, Senior Director, Center for Energy Securities, Rice University's Baker Institute; and Mr. Keisuke Sadamori, Director of Energy Markets and Security, International Energy Agency. In the following, I would like to make my personal comments on key points of discussions at the Session 3 of the symposium, as well as the latest developments regarding the Ukraine crisis.

First, the discussions indicated that natural gas and LNG pose the most complicated, difficult and serious issue regarding energy security that has become an urgent global issue amid high energy prices after their spikes through the destabilization of international energy markets under the Ukraine crisis. Energy prices peaked on March 7 when benchmark crude oil prices rose above $130 per barrel to the highest level since the global financial crisis in a manner to make headlines in the world. It is understandable that crude prices are the most important for analyzing the global economy and the overall energy situation and have an extremely high news value.

Regarding the tightening of the supply-demand balance and the degree of market destabilization, however, it is easily understandable that European gas hub and Asian LNG spot prices' rises above $70 per million British thermal units or $400/bbl oil equivalent were a far bigger problem. Asian LNG sport prices do not necessarily represent natural gas prices in Asia. In Japan known as the second largest LNG consumer in the world, for instance, LNG prices that are mostly indexed to crude oil prices, which rose along with crude oil prices but were not as high as spot LNG prices. However,

Europe is in a different situation. European gas hub prices basically represent overall gas prices. Their hikes directly affect consumers. Given that gas is a key fuel for power generation, gas price hikes lead to electricity price increases.

European gas prices rose so much because the market understood that a severe gas supply and demand situation in which disruptions to Russian gas supply would leave the market without any alternative gas supply sources, with LNG reserves limited. A Russian gas supply decline would be equivalent to a global gas supply fall, forcing Europe to race with other gas or LNG consumers to secure gas supply. This is the reason European gas hub prices soared above $400/bbl oil equivalent.

On April 27 just before the symposium, Russia suspended gas supply to Poland and Bulgaria for the reason that the two countries failed to make payments for gas in rubles as requested by Russia. This was Russia's first decision to suspend energy supply since the start of the Ukraine crisis. Earlier, energy consumers such as the United States, Canada and the United Kingdom, as well as the Group of Seven industrial democracies and the European Union, announced their embargoes on Russian energy sources. The EU plans to accommodate gas supply to Poland and Bulgaria and dip into underground gas inventories. Whether Russia would expand gas supply suspension is attracting attention.

On March 8, the United States and Canada banned energy imports from Russia. However, they have not been dependent on Russian energy supply. The problem has been responses from Europe and Japan that depend on Russian energy supply. In this respect, the G7 and EU decided to impose an embargo on Russian coal on April 7. At a time when oil was expected to become the next embargo target, the European Commission on May 4 proposed to phase out Russian oil imports within 2022. The oil embargo would be gradually expanded. A measure is under consideration to allow EU countries that depend heavily on Russian oil to delay the phaseout deadline until the end of 2023. Earlier, any embargo on Russian oil had been viewed as not easy. As the war and damage in Ukraine have escalated, however, oil imports from Russia have come under growing fire, prompting the European Commission to consider the embargo on Russian oil. The proposal seemingly indicates that the commission now views a Russian oil phaseout by the end of this year as feasible.

However, a Russian gas embargo, even though being phased in, would not be easy. The EU's REPowerEU plan seeks to replace Russian gas imports totaling 155 billion cubic meters with alternative energy sources by 2030. Many experts see the plan as extremely ambitious, although the EU countries are expected to strive to implement the plan. Although it may be feasible to replace some of Russian gas imports by renewable energy, energy savings and nuclear energy to some extent, most Russian gas imports may have to be basically replaced with other gas imports. Unless global gas supply is expanded to meet the additional EU demand, the supply-demand balance would tighten to push up prices. In this sense, the EU, if willing to use LNG for breaking away from dependence on Russian gas, would have to promote investment in the entire gas supply chains, including the upstream sector, in order to make its LNG procurement feasible and stabilize the international LNG market.

In the symposium, it was pointed out that the United States would play an extremely important role in expanding LNG supply. U.S. LNG supply has continued expanding and is expected to increase further if relevant investment decisions are secured. U.S. LNG supply expansion will not only contribute to stabilizing the supply-demand relationship in the international LNG market but also increase U.S. export revenue and allow the United States to maintain international energy order through energy exports. LNG supply expansion will thus be strategically important for the United States. How the Biden administration would assess these points and take advantage of them for its

energy policy would attract attention in the future. At the same time, we will have to pay attention to what influence hikes in U.S. domestic prices for gas, gasoline, electricity and other energy sources would exert U.S. energy policy as well.

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