Special Bulletin

A Japanese Perspective on the International Energy Landscape (322) May 8, 2017

Participation in CSIS/IEA-sponsored Natural Gas Workshop

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On May 5, the U.S. Center for Strategic and International Studies and the International Energy Agency sponsored a workshop titled “The Strategic Role of Natural Gas” at the CSIS headquarters in Washington. Some 70 energy policy and industry stakeholders and experts mainly from the United States participated in the workshop, having vigorous discussions in three sessions titled “The Role of Natural Gas in North America,” “The Role of U.S. Gas in the Global Market” and “The Strategic Role of Natural Gas” under the Chatham House Rule. I had an opportunity to take part in the third session as panelist. In the following, I would like to summarize impressive points at the workshop.

First, workshop participants focused on the strategic role of natural gas, particularly liquefied natural gas, as indicated by the title. U.S. natural gas production has expanded at a once unimaginable speed and in a larger-than-expected scale on progress in the shale revolution and is expected to sustain further growth. As a result, the United States has become the only country where the IEA-touted “Golden age of gas” has been realized. Substantial supply growth has helped stabilize gas prices at low levels, exerting wide, deep influences on the energy market and economy, and external energy policy in the United States.

Gas has taken advantage of its reduced prices to increase its market competitiveness in the United States, obtaining the largest share of the power mix in place of coal in 2016. The gas price fall and a subsequent drop in power costs have lowered U.S. energy costs as a whole, producing wide, positive effects on the U.S. economy. The petrochemical industry has exploited lowered gas prices to invigorate its production and investment, with the shale gas (and oil) industry prospering, making great contributions to the U.S. economy and employment. Based on lowered gas prices, many projects have been launched to export LNG using facilities that had been constructed on an assumption that the United States would have to import LNG. The United States is now about to become one of the leading LNG exporters in the world.

LNG (and pipeline gas) exports and a substantial drop in oil imports under the shale revolution can help reduce the U.S. trade deficit. By becoming one of the leading LNG exporters in the world and expanding shale oil production substantially, the United States has contributed to easing the supply-demand balance in international natural gas, LNG and oil markets and checking competing gas, LNG and oil suppliers. As a new gas supplier, the United States has increased its strategic presence for many major gas importing countries. It is now considering a foreign policy

strategy taking into account the strategic significance and value of energy exports. In addition, gas's large-scale continuous replacement of coal has been coupled with renewable energy expansion to contribute to reducing U.S. carbon dioxide emissions. Indeed, growth in shale and other gas production has contributed to increasing U.S. national power in various areas. Discussions at the workshop reminded me of the strategic significance of natural gas in the United States.

Second, I would like to point out that the next matter of concern is how the Trump administration would face natural gas production and exports having strategic value, what policies it would develop on gas and what impacts the policies would have. Almost undoubtedly, the Trump administration is destined to give priority to fossil fuels, particularly to expanding production and exports of shale and other oil and gas. The destination has been indicated by policies put forward by executive orders. However, specific points or details of the policies have not been clarified. Furthermore, it is difficult to predict how the policy slogan of "America First" would influence energy trade and export policies.

Basically, the Trump administration is expected to recognize the strategic significance of LNG and other energy exports and promote the expansion of oil and natural gas production and exports. If U.S. domestic energy prices increase amid the expansion of exports, however, attention will be paid to how such event would affect policy decisions, as suggested by discussions at the workshop. While U.S. LNG exports feature the advantage of more flexible supply than traditional or conventional LNG exports, they are not necessarily price competitive under the current natural gas and LNG price conditions in the world. Strategic moves of other major natural gas and LNG exporters such as Qatar and Russia conscious of the presence of U.S. LNG exports are of great importance. These points should be fully recognized, as suggested by discussions at the workshop.

Third, workshop participants made interesting arguments from various angles on the role that natural gas and LNG should and could play in Asian and European markets where the "Golden age of gas" seen in the United States has not been realized. Natural gas that emits less carbon dioxide than other fossil fuels and little sulfur and nitrogen oxides is expected to play a key role in future low-carbon and air pollution prevention initiatives. In Asia where energy and electricity demand continues high growth, natural gas featuring stable supply is expected to play a great role in reducing the dependence on coal and diversifying energy sources.

Nevertheless, natural gas has price competitiveness problems particularly in the power generation sector, facing fierce competition from coal, renewable energy and nuclear energy that have their respective advantages in Asia. Under such situation, some workshop participants argued that natural gas and LNG should enhance their price competitiveness and further improve their supply flexibility to increase their overall attractiveness and competitiveness in order to play the expected role. Others argued that it is very important to expand and explore gas demand in the industry sector, the buildings sector and the transport sector including ships, as well as in the power generation sector featuring fierce competition. While there is no perfect energy source, natural gas and LNG have clear advantages as well as some problems. Policy and industry stakeholders will be required to be conscious of the strategic significance of natural gas and LNG and overcome these

problems to allow natural gas and LNG to play a greater role in the Asian energy mix.

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