

11th China-Japan Joint Symposium on Oil & Gas

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On November 8, the 11th China-Japan Joint Symposium on Oil & Gas took place in Beijing. China's CNPC Economics and Technology Research Institute and the Institute of Energy Economics, Japan, have cosponsored the annual symposium alternately in Beijing and Tokyo. The two institutes have presented reports on the most important or hottest energy market challenges in their respective countries and the relevant international situation at the time, followed by panel discussions. At the latest symposium, the Chinese and Japanese sides presented one report each at two sessions on "World Energy & Trends of Oil and Gas" and "Opportunities and Challenges for Oil & Gas Industry" before panel discussions. A total of 110 people, including representatives from Japanese companies, participated in the symposium on a registration basis, conducting active discussions.

In the first session, IEEJ Director Yukari Yamashita outlined our IEEJ Outlook 2018 (see A Japanese Perspective on the International Energy Landscape (345) for details) and introduced an analysis on "peak oil demand." In the second session, I reported on the international oil market, including recent crude oil price hikes, and the present status of and future prospects for the LNG market. Significantly, Chinese participants made numerous questions and comments on the two IEEJ reports, leading to active discussions. However, the Chinese side's reports at the symposium were very interesting to me. In the following, I would like to summarize the Chinese reports.

The first Chinese report was made by Dai Jiaquan, director of oil research at the CNPC ETRI, discussing "the Development of China New-Energy Vehicles and Its Impact." In a manner to respond to the Yamashita report in the first session, the Chinese report analyzed how the diffusion of new-energy vehicles in the vehicle market would impact the Chinese oil market, particularly oil demand. The IEEJ analysis on "peak oil demand" covers the global oil market while considering rapidly spreading global moves to regulate sales of internal combustion engine vehicles and the automobile industry's initiatives to diffuse advanced vehicles including electric, fuel cell and plug-in hybrid vehicles. Given China as the largest vehicle market in the world and its initiatives to strategically and aggressively diffuse next-generation clean vehicles under its industrial and environmental policies, however, I have paid much attention to China as the most important country in this regard.

China has designated electric, plug-in hybrid, fuel cell and other vehicles as new-energy vehicles, or NEVs, and taken proactive support measures for their diffusion from the viewpoints of environmental policies for urban air pollution and climate change countermeasures and industrial policies for the Chinese automobile industry to lead the world in next-generation vehicles. In

September 2017, the Chinese government announced regulations to boost NEVs' share of new vehicle sales to 10% in 2019 and to 12% in 2020 and decided on the introduction of NEV-related credit trading and other systems. Based on these actions, the Chinese report analyzed NEV technology development and relevant cost cuts and pointed out that there are numerous cost and infrastructure challenges for the rapid diffusion of NEVs. It also assumed that the number of NEVs would increase to 5 million units (accounting for 2.3% of total Chinese vehicle ownership) in 2020 and to 30 million units (7.5%) in 2030 and that these vehicles could work to reduce oil consumption by about 25 million tons (or petroleum product consumption by 7%) in 2030.

In this way, the future diffusion of NEVs could hold down China's oil consumption and cap a rise in its dependence on oil imports, bringing about some benefits, the report said. As far as the power mix remains unchanged from the present one, however, NEVs may not necessarily produce environmentally friendly results as indicated by the lifecycle analysis of pollutant emissions including CO₂, PM2.5, sulfur oxides and nitrogen oxides, it said. The Chinese report thus indicated that how the power mix changes should be promoted toward more environmentally-friendly way would be important particularly for China regarding the diffusion of electric vehicles. It also noted that it would be more important to have a comprehensive view covering not only the NEV introduction but also overall fuel efficiency improvement, automatic driving and other next-generation vehicle technologies, and sharing and other vehicle utilization styles in considering China's future oil demand. Given such comprehensive or extensive viewpoint, the Chinese report concluded that China's oil demand could peak around 2030. This conclusion is interesting.

Another Chinese report was made by Duan Zhaofang, a senior natural gas market researcher at the CNPC ETRI, which was titled "China Natural Gas Market Status and Outlook." The most impressive point in the report was that natural gas demand in China is resuming rapid expansion after a temporary growth deceleration. Factors behind the natural gas demand recovery include an economic growth recovery, business environment improvements for energy-intensive industries, enhanced air pollution countermeasures and LNG import price drops through crude oil price plunges and global LNG oversupply, according to the report. China's natural gas consumption in the first nine months of 2017 increased by 17% from a year earlier. In line with the demand expansion, domestic gas production grew by 11% and imports posted an even steeper expansion of 21%. Particularly, LNG imports increased by 35% to 33.3 billion cubic meters, surpassing 31.5 Bcm in pipeline gas imports.

The Asian and global LNG market is still amid oversupply. A mainstream view among LNG market participants is that while LNG demand will continue to expand mainly in Asia, oversupply will remain until around 2023 as LNG projects subject to past investment decisions mainly in Australia and the United States continuously start production. However, China may sharply expand gas demand by switching from coal to gas, promoting a gas market reform and developing relevant infrastructure including pipelines and LNG terminals. Depending on shale and other domestic gas resources development, China's gas demand could expand even more than expected. The Chinese report forecast that China's LNG imports would expand rapidly from 27 Bcm in 2015 to 60 Bcm in 2020 before growing more slowly to 70 Bcm in 2030 due to assumed domestic shale gas development and increasing pipeline gas imports. It is very difficult to accurately project the future

course. Future LNG demand and imports in China (and other Asian emerging countries including India and Southeast Asian nations) will greatly impact the global LNG market. We will have to closely watch future developments.

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