Special Bulletin

A Japanese Perspective on the International Energy Landscape (200) December 25, 2014

A Review of Japanese and Overseas Energy Situations in 2014

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The year 2014 is ending in several days. The year's energy situations in Japan and in the world saw various key events, problems and changes. In the following, I would like to take up from among them the ones that impressed me.

First, I would like to cite rapid crude oil price drops as the year's greatest change in the international energy situation. Average crude oil prices had remained above $100 per barrel over three and a half years since 2011. Until June 2014, they stayed above the level due to geopolitical risks regarding Islamic State rebels as described later. But the second half of the year saw far different developments. Toward the end of the year, particularly, crude oil prices accelerated their fall. So far, the West Texas Intermediate benchmark crude oil price has slipped below $54/barrel to the year's new low. From the year’s peak, the level represented a 50% plunge.

Behind the crude oil price plunge has been the easing supply-demand balance amid a demand slump and a substantial increase in U.S. shale oil output, as well as a decision by the Organization of the Petroleum Exporting Countries, lead by Saudi Arabia, at its general meeting in November to refrain from cutting production or to tolerate the price decline. Crude oil prices are likely to test even lower ground in the immediate future and remain weak in 2015. Attracting attention is how the weakening crude oil prices will affect high-cost oil output including shale oil and the future course of oil, gas and liquefied natural gas projects. Weak oil prices, though expected to benefit the world economy on a net basis, have triggered the Ruble's plunge to the disadvantage of the Russian economy, indicating that they could destabilize oil producing, resource-rich and emerging economies and international financial markets.

Second, the entire international energy market including the oil market saw a general trend of an easing supply-demand balance and falling prices. In addition to the crude oil market, the natural gas/LNG market indicated a shift to an easier supply-demand balance amid slumping European demand and Asian spot LNG price drops, as well as potential growth in U.S. and Australian LNG exports and the conclusion of a China-Russia gas contract that will affect the market over a short to medium term. The international coal market has also seen weaker steam and coking coal prices in response to a coal demand slump in China. We can interpret the oil market as having made the most dramatic developments in response to weakening fundamentals among the energy markets.

Third, serious geopolitical risks involving energy security emerged amid the easing supply-demand balance in the international energy market in 2014 and are likely to remain as

medium to long-term problems affecting the market. Particularly important among the risks was the destabilization of the Middle East as indicated by the Islamic State problem. Radical militants formed the Islamic State group in an unexpected manner and shook Iraq and the whole of the Middle East, prompting Western and Persian Gulf countries to launch military operations against the rebel group. These countries' fighting with the Islamic State is still ongoing. Given that fighting with non-state terrorists or rebels is difficult and takes a long time as indicated by the Taliban problem, the Islamic State problem is feared to destabilize the Middle East, as a center of gravity of the international energy market in terms of oil and gas supply, in the future.

Another serious international problem emerging in 2014 was the Ukraine crisis that has triggered and intensified confrontation between Russia and Western countries. At present, no interruption to gas supply is seen after an agreement between Russia and Ukraine on gas payments. But no optimism can be warranted for the future. The Ukraine crisis has forced Europe to implement very challenging and difficult policies -- the reduction of its dependence on Russia for energy supply and the enhancement of energy security (and energy-related competiveness) -- in addition to its priority policy against global warming even amid an economic slump. In the face of the crude oil price plunge as a strong headwind, Russia for its part had no choice but to shift to the east, bringing about Russia's strategic access to China and new geopolitical conditions in Eurasia.

In the complicated international energy situation, Japan experienced various key developments regarding the energy policy and market. It was significant that the Cabinet adopted a new Basic Energy Plan in April after massive time and labor consumption and heated discussions, providing basic long-term energy policy guidelines including the position of nuclear power generation as a key base-load electricity source. But the plan fell short of clarifying a quantitative energy mix for the future, leaving the matter for future discussions. Regarding nuclear energy, the Nuclear Regulation Authority approved a report assessing Kyushu Electric Power Co.'s Sendai Nuclear Power Plant (Units 1 and 2) as conforming to the new safety standards in September. Relevant local governments later agreed to restart the nuclear power plant, allowing final arrangements to be made for the restart. In December, the NRA approved a similar assessment report for Kansai Electric Power Co.'s Takahama Nuclear Power Plant (Units 3 and 4). While all nuclear power plants remained offline in Japan in 2014, progress was made in preparations for restarting them in or after 2015.

In another development in Japan, the diffusion of renewable energy in particular nonresidential solar photovoltaics made progress far faster and more massively than expected under the feed-in tariff system for renewable energy as non-fossil energy on which great hopes are placed. But the excessively rapid renewable energy diffusion (authorization of relevant equipment) has indicated that additional costs estimated at 46 trillion yen over the 20-year FIT period would have to be passed on to consumers and that the expansion of volatile renewable energy electricity sources beyond peak electricity demand could destabilize electricity supply and demand in some regions of the country. The government thus decided to make a comprehensive review of policies for the appropriate and workable promotion of renewable energy diffusion in the year. At the same time, the government proceeded with discussions on electricity and gas system reform. In 2015, it will take new steps for the system reform, including the submission of a bill for revising the Electricity Business Act to Parliament during its ordinary session. It will also further promote discussions on

the reform and design details of future electricity and gas systems. In this respect, the government will have to deepen discussions on the reform that should meet the fundamental energy policy objective of the Three Es plus S -- energy security including stable electricity/gas supply and enhanced fuel procurement capabilities, environmental protection including global warming prevention, and economic efficiency plus enhanced safety.

Discussions on the energy mix failed to make progress in 2014. In order to respond to the fast-changing international situation and prepare for the 21st Conference of Parties to the U.N. Framework Convention on Climate Change in late 2015, Japan should avoid delaying energy mix discussions further. We may position 2014 as the year for preparations for full-blown discussions on the energy mix that should start in early 2015.

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