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2021 Begins with Rises in Crude Oil, LNG, and Japan's Electricity Prices

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The first two weeks of the year 2021 saw a tightening supply-demand balance and price hikes in energy markets. The key futures price of the West Texas Intermediate crude oil topped $53 per barrel for the first time in 11 months, but a tightening electricity supply-demand balance and LNG price hikes under cold waves in Japan attracted greater attention in Japan and the rest of the world.

Energy price hikes have come at a time when there are numerous factors that make it difficult for energy prices to rise. The COVID-19 pandemic, which was the largest factor behind energy price weakness in 2020, has accelerated its global spread since late last year. New COVID-19 infections have been increasing at unprecedentedly high paces in Western countries and Japan. While a rising number of countries have launched vaccinations, no sign of an end to the COVID-19 pandemic is seen, with lockdowns and other restrictions on economic activities being reintroduced in many countries. Japan declared a state of emergency for Tokyo and three neighboring prefectures again on January 7 and subjected seven other prefectures to the declaration later. In such situation, the global economy's recovery has not been smooth. In its world economic outlook in the beginning of the year, the World Bank lowered a global economic growth projection for 2021 by 0.2 percentage points to 4.0%. It also pointed to further downside risks, indicating that the growth could fall to 1.6%. Nevertheless, energy prices have been generally rising, as noted above. Why? Energy markets have their respective reasons for price hikes.

Crude oil prices began to moderately rise last November, when the WTI price soared from around $40/bbl to around $45/bbl in November and rose close to $50/bbl in December. On January 6, it finished at $50.63/bbl, topping $50/bbl at last. On January 12, the front-month WTI futures contract closed at $53.21/bbl, topping $53/bbl for the first time in 11 months, since $53.38/bbl on February 21, 2020. On the same day, the key Brent crude futures price rose beyond $55/bbl to $56.58/bbl.

There are two major reasons for crude oil price hikes even amid concerns about the serious COVID-19 pandemic and weak economic growth. First, Saudi Arabia made a surprise offer to voluntarily cut its production by an additional 1 million barrels per day in February and March at a meeting of the Organization of the Petroleum Exporting Countries and non-OPEC oil-producing countries on January 5, after the OPEC-plus group indicated a plan to narrow the OPEC-plus group's production cuts by 0.5 million bpd from January. The surprise offer pushed up crude oil prices. It is speculated that Saudi Arabia considered its relations with the incoming U.S. Biden administration in making the voluntary offer. Undoubtedly, the surprise offer has supported crude oil prices. Second, democrats won two U.S. Senate seats from Georgia in a run-off election on January 5, securing a simple Senate majority for President-elect Joe Biden's Democratic Party and avoiding a divided Congress. This led market players to expect that the Biden administration could stand in a better position to implement its economic stimulus package to ensure a U.S. economic recovery, prompting

the Dow Jones industrial average on the New York Stock Exchange to shoot up above 31,000 for the first time ever. Amid monetary easing, massive money flew into commodity markets, pushing up crude oil and other commodity prices.

However, LNG price hikes early this year were more remarkable than crude oil price increases. Behind the LNG price hikes were strong cold waves and a tighter electricity supply-demand balance in Japan. In Japan ranked as the world's fifth largest electricity generator after the United States, China, India, and Russia, the electricity supply-demand balance has remarkably tightened under strong cold waves since late last year. A record cold wave and heavy snowfall around the turn of the year and another strong cold wave from January 7 triggered a rapid increase in electricity demand. Maximum demand topped an assumed once-in-a-decade level, leading the supply-demand balance to rapidly tighten. The demand rise was coupled with a decline in solar power generation under bad weather and troubles at some thermal power plants to lower the reserve margin, or reserve power generation capacity's ratio to demand, to fall close to the minimum necessary level of 3% for stable electricity supply at some power utilities. The tightening supply-demand balance brought about rapid electricity price hikes. Prices on the Japan Electric Power Exchange skyrocketed from 10 yen/kWh in the first half of last December to more than 120 yen/kWh on January 9 and to far more than 200 yen/kWh temporarily from January 12.

The tightening electricity supply-demand balance and spot power price spikes prompted power utilities to take all available supply-expanding measures such as additional thermal power generation, the utilization of enterprises' private power plants, and electricity supply arrangement among major utility companies, while requesting users to hold down power consumption. However, they have remained in a tightrope situation to keep demand below supply. Further cold waves and unexpected troubles could make it difficult for power utilities to sustain stable power supply. No optimism can be warranted. In concluding the power sector outlook for 2021 in my previous bulletin (514th issue), I warned that the risk is growing that heat or cold waves and other contingencies would tighten the power supply-demand balance, as I did at a regular IEEJ forum on research work late last year. Unfortunately, the warning has come true. Given that electricity and energy hold the key to stabilizing civic life and economic and national management, stable electricity supply will remain a top priority for Japan and all other countries.

Record cold waves have hit not only Japan but also other Northeast Asian countries, accelerating a seasonal LNG demand increase. Japan is the world's largest LNG consumer, followed by China. Japan, China, and South Korea account for more than 50% of global LNG consumption. The tightening electricity supply-demand balance led hopes to grow on LNG-fired power generation that is highly subservient and flexible. Given LNG's characteristics, however, LNG inventories is extremely expensive and cannot be stocked as much as oil inventories. While hopes are growing on LNG-fired power generation, additional LNG consumption or a decline in LNG inventories is expected to affect future LNG plant operation, exerting pressure on power utilities to procure additional LNG. Even before the cold waves hit Japan, spot LNG prices in Asia had been rising on a winter demand increase and troubles for some LNG supply projects. The cold waves and the tightening electricity supply-demand balance since the turn of the year have increased pressure for LNG procurement to be expanded, leading spot Asian LNG prices to soar to unprecedentedly high levels. Those prices reportedly shot up from a little more than $10 per million British thermal units in mid-December to a record high of more than $30/MMBtu on January 12. Future price changes will depend on additional cold waves or whether Japan's electricity supply-demand balance would tighten further or ease. The current high prices may be difficult to sustain over the long term. However, the latest spot LNG price spikes have attracted attention from LNG stakeholders in the

world and led LNG market participants to recognize the importance of stable LNG supply and consider what would be the best LNG trade contracts or pricing systems anew.

Another point that must be recognized anew is that market-based prices are characteristically volatile. If the supply-demand balance substantially eases, market prices may crash. If the balance tightens for some reason, however, market prices may shoot up. While stable prices of energy as an indispensable good are significant for both energy consumers and producers, those who choose to leave markets to price energy must be prepared to see and respond to price volatility.

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