



IEEJ e-NEWSLETTER

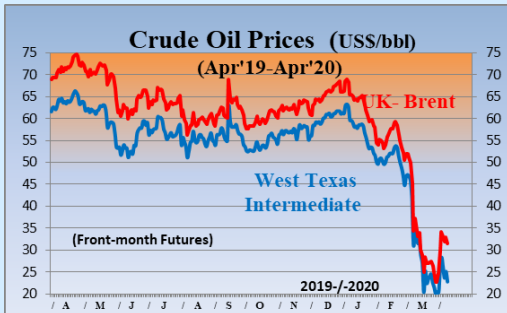
No. 182

(Based on Japanese No. 199)

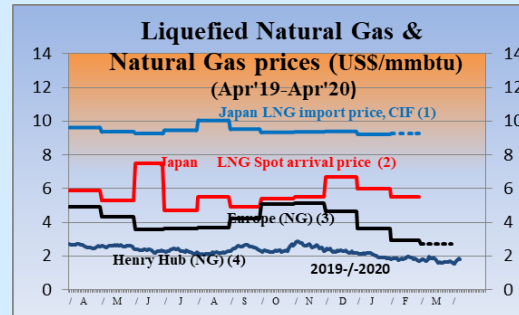
Published: April 13, 2020

The Institute of Energy Economics, Japan

(As of April 9, 2020)

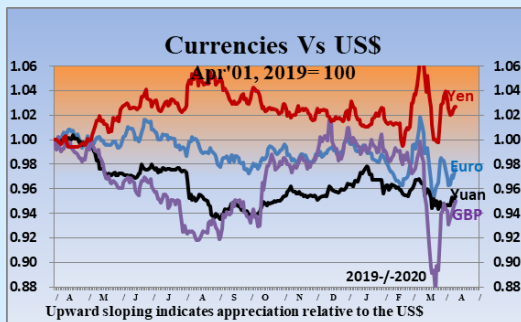


Source: DOE-EIA, Financial Times, NASDAQ

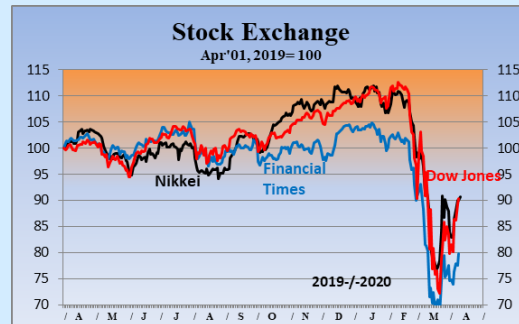


Sources:

- (1) Ministry of Finance "Japan Trade Statistics"
- (2) Ministry of Economy, Trade and Industry (arrival month basis)
- (3) Estimated by World Bank (Netherland Title Transfer Facility)
- (4) DOE-EIA, NYMEX (Front-month Futures)
- (5) Investing.com



Source: x-rates.com



Source: Financial Times

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Summary

【Energy Market and Policy Trends】

1. Developments in Nuclear Power

Tokyo Electric announced a draft method for the disposal of “multi-nuclide removal equipment (ALPS)-treated water” currently stored at its Fukushima Daiichi Nuclear Power Station by releasing it after dilution to below the required concentration, along with measures for preventing damage caused by harmful rumors. A speedy government decision is required.

2. Recent Developments in the Oil Market

Unless the pandemic subsides or a new framework for a joint production cut is established, oil prices will be under serious downward pressure in Q2.

3. Recent Developments in the LNG Market

Development activities of large-scale LNG production projects which have come close to investment decisions could slow down due to low natural gas and crude oil prices.

4. Update on Policies Related to Climate Change

A circular carbon economy will be at the forefront of Saudi Arabia’s presidency of the G20 this year. The European Commission proposed the European Climate Law which enshrines in legislation the 2050 climate-neutrality objective.

5. Update on Renewable Energies

China’s domestic renewables market is gradually normalizing after being hit by the COVID-19 pandemic, but the impact is now spreading to the US where delays in supplies from China are causing renewable power plant construction projects to fall behind.



1. Developments in Nuclear Power

Tomoko Murakami, Senior Economist, Manager
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Electricite de France (EDF) announced that it closed its Fessenheim Unit 1 (PWR, 920 MW, started commercial operation in 1977) on February 22, as scheduled. Unit 2 located on the same site is also due to end operations on June 30, 2020. As of January 2020, there are 58 nuclear reactors in operation in France, and nuclear power accounted for 72% of the country's power mix in 2018. With the closure of these two units, the French government is thought to have taken the first step in its strategy to balance nuclear power and renewables in its electricity production. However, no plans for closing plants other than Fessenheim Units 1 and 2 have been announced.

On March 5, the Nuclear Regulatory Commission granted Peach Bottom Units 2 and 3 their second operational life extension license, the second such case in the country, allowing the plants to operate until 2054 (operational life of 80 years). The plants' owner Exelon has made sizeable investments in the plants to improve their large equipment such as high-pressure and low-pressure turbines and has boosted their performance by increasing the power output by around 12%. However, according to Exelon's Chief Nuclear Officer, the condition for continuing operation until 2054 is that the company's nuclear business remains "financially viable." Considering that some of the plants including Pilgrim Unit 1 closed prematurely due to worsening profitability after their first life extensions, it is not easy to stay profitable for over 30 years amid competition. The competitiveness of nuclear power in the US market must be watched closely going forward.

The Small Module Reactor (SMR), which is seen as a promising next-generation reactor in many developed countries, is now attracting the attention of emerging countries. On March 19, Rolls-Royce of the U.K. signed a memorandum of understanding with Turkey's EUAS International CC (EUAS ICC) to jointly study the feasibility of SMRs in Turkey. As the reason for considering SMRs when Russian reactor Akkuyu Unit 1 is being built, EUAS ICC's CEO Yahya Bayraktarli stated, "Our vision is to diversify electricity resources with nuclear power. Price competitiveness is an important indicator for us." In that respect, if SMRs do not prove to be as price competitive as other power sources, it will not be easy for them to go beyond the "consideration" stage, as is the case in developed countries.

On March 24, Tokyo Electric announced a draft method for the disposal of "multi-nuclide removal equipment (ALPS)-treated water" (water containing radioactive substances) at its Fukushima Daiichi Nuclear Power Station, along with measures for preventing damage caused by harmful rumors. Under the proposed disposal method, the treated water would be released into the sea or as water vapor after dilution to below the required concentration in both cases. Tokyo Electric regards this proposal as reference information for the discussions at the "forum for seeking (public) opinions" organized by the government, and will strive to prevent harmful rumors by making full explanations to the parties concerned once the policy for implementation is decided. More than nine years after the Fukushima Daiichi accident, the time has finally come to move on from the technological study stage. A speedy decision by the government is now needed.



2. Recent Developments in the Oil Market

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Oil prices are at their lowest since early 2016. At the OPEC Plus meeting on March 5–6, Saudi Arabia and Russia, who have led the joint production cut until now, failed to agree on a steeper cut. March 9, the Brent price plummeted by 10.91 dollars or 24% from the previous business day to 34.36 dollars. The fall did not stop there, with Brent plunging to 26.42 dollars on the 18th. On the 19th, President Trump declared that the US would intervene in the oil price war at an appropriate timing. The slide seems to have stopped since the 20th, but the situation remains volatile.

This historic crash, which was caused by the collapse of the OPEC Plus joint production cut system established in 2017, indicates that oil producers have returned to price competition to expand market share. Both Saudi Arabia and Russia aim to halt the increase in output of US shale oil through a low-price strategy and to recapture market share. After keeping its output at as low as 9.65 mb/d in February, Saudi Arabia intends to increase it by as much as 2.35 mb/d (24%) and is set to supply 12.3 mb/d in April by also releasing 0.3 mb/d from its stocks day. The UAE and Russia may also ramp up production by around 1.0 mb/d and 0.5 mb/d, respectively. Though some OPEC Plus countries are calling for a return to the joint production cut, the mutual distrust between Saudi Arabia and Russia runs deep and they are unlikely to return to the negotiating table in the short term. Meanwhile, OPEC and Texas state energy regulator reportedly met to discuss possible cooperation with the US on production curbs, but this is an unprecedented move and its feasibility is questionable.

Saudi Arabia and the UAE are set to not only boost output but also to expand production capacities. However, upstream investment overall will surely stall due to the current market crash. In particular, in the US, which Saudi Arabia and Russia are targeting, the operating rig count has been falling since peaking in November 2018, making a decline in upstream investment in the US inevitable. This decline raises the likelihood of a medium- to long-term output reduction and threatens the stability of supply and thus prices.

In terms of demand, the focus is how long COVID-19 will continue to spread and by how much the global economy will slow. On March 11 the World Health Organization declared the virus to be a pandemic (a global epidemic) and now Europe and the US are the center of an explosion in the number of new cases and deaths. Many countries are restricting the movement of people, suspending factories, and cancelling large events, which will cause the global economy to contract. In its monthly report issued on March 9, the International Energy Agency released the Base Case for 2020 oil demand of 99.9 mb/d, down 90,000 b/d year-on-year. The Low Case, which forecasts more serious damage from the virus, estimates the oil demand at 99.26 mb/d, down 730,000 b/d year-on-year. However, demand is likely to fall even below the Low Case as the pandemic worsens. Increasing production now just when demand is collapsing may cause an unprecedented supply glut of 5 mb/d or more. Unless the pandemic is contained or a new framework for a joint production cut is established, oil prices will be under serious downward pressure in Q2.



3. Recent Developments in the LNG Market

Hiroshi Hashimoto, Senior Analyst
Head of Gas Group

Japan imported 14.15 million tonnes of LNG during the first two months of 2020, decreasing by 5% or 0.74 million tonnes year-on-year, in a stark contrast with Korea's 17% or 1.31-million-tonne increase in the same period. Japan's import of 6.64 million tonnes in February represented five-straight-month year-on-year decreases, maintaining levels of smaller LNG import than those in 2012. Meanwhile, the gap between the average price of LNG imports in Northeast Asia and the historically low spot LNG prices has been significant, causing persisting difficulties to buyers who procure volumes under long-term contracts. While contract LNG prices are expected to decline along with crude oil prices, the lower LNG prices could only come four months later due to a time lag between the immediate crude oil market and term-contract LNG prices. With this background, negotiations over LNG contract prices have not proceeded smoothly. Some parties have already referred their relevant talks to international arbitrations.

Soon after the collapse of international crude oil prices in early March 2020, EIA (US Energy Information Administration) revealed in its monthly Short-Term Energy Outlook that although EIA forecasts dry natural gas production will average 95.3 Bcf/d (724 million tonnes per year equivalent) in 2020, a 3% increase from 2019, EIA expects monthly production to generally decline through 2020, as low oil prices reduce associated gas output from oil-directed wells. Forecast dry natural gas production for 2021 averages 92.6 Bcf/d (703 million tonnes per year equivalent), a 2% decrease from 2020. It would be the first decline in annual average natural gas production since 2016. The longer low crude oil prices continue, the larger the reduction of associated gas production is expected to be.

The low natural gas and crude oil prices are expected to result in much slower development activities of pre-investment-decision LNG production projects. In addition to persistently low spot LNG prices since early 2019, which reached a historical low in February 2020, the latest collapse of crude oil prices is expected to slow down developers' investment plans and appetites from project-financing lenders. At the same time LNG from the United States - as the cost of LNG is dictated by domestic natural gas prices in the country - decreases its relative competitiveness against LNG with crude-oil linked prices. In all, FIDs could be pushed back for those LNG production projects which have come close to the milestone, notably in the United States.

A shift to natural gas in the power generation sector could be accelerated as LNG gains competitive advantage against coal in Japan and Korea, thanks to linkage to the lower crude oil prices. Appetite could also grow in Southeast Asia's power sector. Imported LNG could also become advantageous against domestically produced gas in China. However, urgency to shift to LNG in power generation may ease in markets where gas competes against fuel oils - in Pakistan, Bangladesh, and in some Caribbean markets.



4. Update on Policies Related to Climate Change

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On February 25, Prince Abdul Aziz Bin Salman, Saudi Arabia's Minister of Energy, commented at the International CCU Conference convened in Riyadh that a circular carbon economy will be at the forefront of Saudi Arabia's presidency of the G20 this year. He stated that the circular carbon economy consists of the 4Rs, namely Reduce, Reuse & Recycle, and Remove, and it serves as a platform to address energy issues in a holistic and inclusive manner. The presidency agenda publicized upon assuming the role in December last year included "Safeguarding the Planet" as one of three aims, and, in this aim, proposed the G20 will discuss the concept of circular carbon economy, including research, development and innovations in energy systems, under the agenda item "Cleaner Energy Systems for a New Era."

On March 4, the European Commission proposed the European Climate Law which enshrines in legislation the climate-neutrality objective to reduce greenhouse gas emissions to net zero by 2050. The law will oblige the relevant EU institutions and the Member States to take the necessary measures to ensure the achievement of this objective. The Law will hereafter be deliberated by the European Parliament and the Council of the EU comprised of relevant ministers of Member States. Further, on March 5, the European Council consisting of the leaders of Member States adopted the long-term strategy under the Paris Agreement and submitted it to the UNFCCC. However, this long-term strategy is the European Council conclusions last December themselves, which state that the European Council endorses the objective of achieving a climate-neutral EU by 2050, but one Member State, at this stage, cannot commit to implement this objective. While that one Member State, Poland, cannot veto the European Climate Law, it must be closely observed whether other Member States ram the proposed Law.

On March 6, the UNFCCC Secretariat decided not to hold any physical meetings in Bonn and elsewhere from March 6 till the end of April due to the Coronavirus disease outbreak. Further, on March 16, Patricia Espinosa, Executive Secretary of the UNFCCC, announced that staff of the secretariat will work remotely between March 16 and April 12. On April 1, it was decided that the meetings of the Subsidiary Bodies scheduled for June in Bonn, Germany ahead of the COP26 in November will be postponed until October 4-12. The COP26 scheduled for November in Glasgow, the United Kingdom was also postponed to 2021.

As for the US presidential election, the Democratic primaries have finished in 27 states for 2,311 of the 3,979 delegates by March 17, with Joe Biden winning 1,175 delegates and Bernie Sanders 863. The climate actions of the currently-leading Joe Biden are to achieve net-zero emissions no later than in 2050 by establishing a carbon tax called "an enforcement mechanism" and to invest in clean energy, paid for by reversing the Trump tax cuts for corporations. Sanders withdrew on April 9.



5. Update on Renewable Energies

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As the number of people infected by the new coronavirus soars, the manufacture and supply of solar PV and wind power equipment and batteries stalled in February due to difficulties in securing labor, materials, and components and disruption in transporting products due to chaos in logistics networks.

As the number of new cases of the virus began to fall in China from mid-February, renewable energy factories began to restart gradually, though they have not yet returned to full capacity, and logistics networks are returning to normal step by step. Further, on February 25, the media reported the start of construction of 25 renewable energy projects by the state power company China Three Gorges Corporation in a symbolic move. This renewable energy project includes one of Asia's largest offshore wind farms (1.4 GW off the coast of Guangdong Province and 0.8 GW off the coast of Jiangsu Province). Apparently, the aim of starting construction of these renewable energy projects is to energize the supply chain that has been disrupted by COVID-19, and in turn emphasize both at home and abroad the steady progress of the domestic renewable energy market toward normalization.

The Chinese renewable energy market is showing signs of recovering from the turmoil caused by the epidemic, but chaos is worsening in the international market. One example is the US, where impacts are starting to be observed in wind power-related trade, which is not part of the US' safeguards against China which took effect in January 2018 and caused imports of solar panels to plummet.

In the United States, an extension of the production tax credit (PTC) for wind power (a system of tax refunds depending on output) to the end of 2020 from the initial term of the end of 2019 was approved in last December. For a wind power plant to be eligible for PTC, it has to be completed and connected to the grid by the end of 2020. However, delays in the supply of components and products from China are fueling concern that construction may not proceed as scheduled. A US company reportedly received a request from a wind turbine supplier to execute the force majeure clause at the end of February. Some US wind power businesses have been shifting suppliers from China to India in recent years, but as a whole, the industry remains highly dependent on China. The situation has highlighted the basic problem of the wind power industry, where it is difficult to find alternate suppliers as there are relatively few global suppliers compared to solar PV.

As for major companies in the industry, major solar panel manufacturers Jinko Solar Holding and Canadian Solar have been hit, with their stock prices dropping due not only to the current global stock market crash but also to the uncertain impact of the virus on the renewable energy markets worldwide. GE Renewable Energy has also announced an expected decline in operating profit. The IEA is concerned that the oil market crash and slowdown of consumption in China may damage the performance of global oil and gas majors, suppressing the growth of investments in clean energy that these companies have been working on in recent years.



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IEEJ : April 2020 ©IEEJ 2020