



IEEJ e-NEWSLETTER

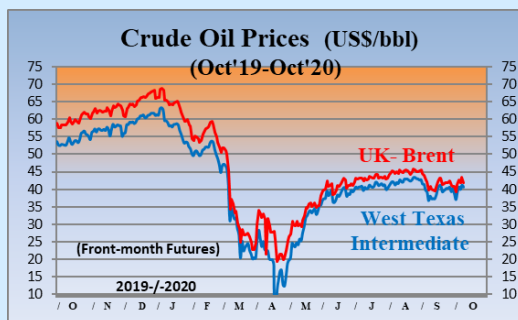
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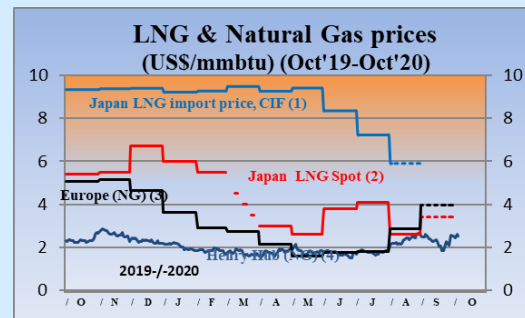
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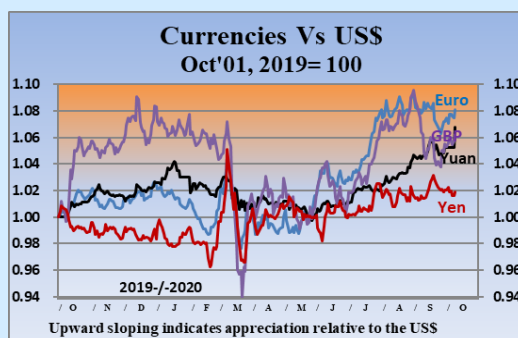
(As of October 9, 2020)



Sources:
(1) DOE-EIA
(2) Investing.com



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



Source: x-rates.com



Sources:
(1) Finance. Yahoo.com
(2) Investing.com

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Summary

【Energy Market and Policy Trends】

1. Developments in Nuclear Power

While a new nuclear construction project was approved in China, Hitachi announced its withdrawal from a nuclear new build project in the UK. Japan's nuclear export strategy needs an overhaul.

2. Recent Developments in the Oil Market

If China's oil exports fall considerably, as happened in August, and more countries impose tighter restrictions on travel due to Covid-19, OPEC Plus is likely to have to deepen its production cut.

3. Recent Developments in the LNG Industry

In the global LNG market in the first half of 2020 of 5% growth year-on-year, Japan decreased import while China and Europe increased imports significantly. The growth of LNG production was driven by the United States.

4. Update on Climate Policies

The European Commission presented its plan to raise the EU's 2030 GHG emission reduction target from 40% to 55%. China's President Xi Jinping said at the UN General Assembly that the country aims to achieve carbon neutral before 2060.

5. Update on Renewable Energies

Germany issued the country's first-ever green bond. How will the issuance of green bonds by Germany, the global leader in increasing renewable energies, affect the development of the green bond market and expansion of renewable energies?



1. Developments in Nuclear Power

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On August 28, the US Nuclear Regulatory Commission (NRC) completed its review of the design certification application for the NuScale Small Modular Reactor (SMR) and issued the Final Safety Evaluation Report. NuScale thus became the first SMR to fulfill the regulatory design requirements set forth by the NRC. The simple fact that “the regulator will issue a license if requirements are met” must have been a relief and encouragement for many vendors such as product and equipment suppliers engaged in the development of innovative reactors.

With vendors having given their endorsement, users have now reached the stage where they can discuss the pros and cons of the actual construction more specifically. The reaction of users to the NRC’s recent decision must be closely monitored.

On September 2, China’s State Council approved nuclear new build projects for four reactors at two sites: Phase 2 of the Changjiang Nuclear Power Plant (Hainan Province) and Phase 1 of Sanao Nuclear Power Station (Zhejiang Province). Both will be Hualong One reactors (HPR1000), which are a new type of Chinese reactor.

According to media reports, the total investment will be at least 70 billion yuan (approx. \$10 billion). However, this amount, even as a minimum baseline, is extremely low considering that the estimated total construction cost for Hinkley Point C (two reactors) being built in the UK has been announced to be 21.5–22.5 billion British pounds (approx. \$27.0–28.5 billion). If this price is indeed feasible, it will be interesting to know what factors made it possible.

In stark contrast to China’s nuclear new build projects, on September 16, Hitachi announced its withdrawal from the Horizon nuclear new build project on the Isle of Anglesey in Wales, UK. Hitachi has had multiple negotiations with the UK government after announcing that it was freezing the project in January 2019 before now deciding to withdraw. In its 2019 announcement, Hitachi said that they had decided on a freeze as it would take longer than expected to agree on various terms; it appears that Hitachi could no longer hold the project frozen and keep waiting patiently. It is important to verify what factors stopped this project, from the perspective of both ballooning costs and the financing structure. Further, Japan’s nuclear export strategy will need overhauling now that Japan has withdrawn from all overseas nuclear projects.

Following our report last month that Hokkaido’s Suttso Town is considering signing up for preliminary literature survey in the process of selecting a host for a high-level waste disposal facility, on September 11, it was learned that the chamber of commerce of Kamoenai Village, also in Hokkaido, is interested in the literature too. The local chamber of commerce has filed a petition with the village assembly to consider applying. On October 9, the two municipalities announced that they will apply for the literature survey. As this matter is of critical importance both for the municipality and for the future of nuclear power, detailed and exhaustive discussions are keenly awaited.



2. Recent Developments in the Oil Market

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Oil prices are softening. The Brent price has weakened since peaking at \$46/bbl on August 26, falling below \$40 on September 8 for the first time in two and a half months.

Behind this decline in prices is pessimism about a recovery in demand, triggered by falling oil imports in China which had led the rebound in demand. China had been increasing oil imports since April, taking advantage of low prices. The country's oil imports grew by 25% year-on-year and 15% month-on-month to 12.98 mb/d in June before its economy had yet to fully recover. This is estimated to be far faster than the recovery of demand and a considerable amount has presumably been added to its stockpiles, though the details are unknown. However, the course of the rebound of China's demand suddenly became uncertain as media reports emerged that the country's imports declined to 11.18 mb/d in August, down 14% from June. Furthermore, the number of Covid-19 cases has surpassed 33 million worldwide with no end in sight. The number of new cases has stabilized in the US which has the largest number of cases, but continues to increase in India and remains high throughout the world. The number of cases is surging again in Europe, with the UK, France and others imposing shorter business hours on restaurants and restrictions on leaving the home. The US has entered the season of easing gasoline demand as the driving season has ended. Further, its demand for airline travel was extremely low in July at minus 80% year-on-year, and the serious situation presumably persisted in September. As a result, the recovery of demand for transport fuels, particularly gasoline and jet fuel, is lagging. Under such circumstances, in its Oil Market Report dated September 15, the International Energy Agency revised the 2020 demand forecast downward by 200,000 bbl/d to 91.70 mb/d from the previous month.

Meanwhile, there is no major change in supply. OPEC Plus eased its production cut from July and the compliance rate remains extremely high at 97% as of August. The US had 172 rigs in operation in mid-August and its oil output is probably bottoming out since late August at 9.7 mb/d, but is showing no sign of a dramatic recovery. In Iran, Venezuela, and Libya where output has plunged, the output is now stable although at extremely low levels. The US is cracking down on Iran, declaring the reinstatement of UN sanctions against the country while acting as a mediator in establishing diplomatic relations between Israel and the UAE, but Iran has not yet responded aggressively. Thus, although supply risks do exist, the market is paying little attention to them as factors for higher prices, given the extremely weak demand at present.

The industry stock level of OECD countries is still high but has apparently stopped increasing. At the Meeting of the Joint Ministerial Monitoring Committee (JMMC) on September 17, OPEC Plus called on member countries to fully meet the agreed production cut but did not go so far as to propose reinstating deeper cuts. However, the Saudi Energy Minister Abdulaziz bin Salman Al Saud has said that an extraordinary meeting may be called in October if prices soften further. While an extraordinary meeting would be a step toward deeper output cuts, the greatest uncertainty up to October is China's imports in September and the spread of Covid-19. If China's imports drop considerably as happened in August and more countries impose tighter restrictions on movement, OPEC Plus is likely to have to deepen its production cut.



3. Recent Developments in the LNG Industry

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According to China's preliminary trade statistics, the country imported 5.96 million tonnes of LNG in August 2020, slightly more than Japan's 5.84 million tonnes in the same month. It was the fourth time that China took the position of the largest LNG importing country on monthly basis, following November 2019, May and June 2020. During the first eight months of 2020, China imported 42.17 million tonnes, yet smaller than Japan's 48.28 million tonnes in the same period. However, Japan's LNG import so far in 2020 has been at the lowest levels during the last ten years. Japan's average LNG import price in August was below USD 6 per million Btu for the first time since June 2016. Although volumes arrived at average prices of around USD 5 from Southeast Asia, the Middle East, and Russia, the average price of LNG from the United States was in the USD 9s.

Countries around the world imported more than 180 million tonnes of LNG in the first half of 2020, an increase of nearly 5% from the same period of 2019. While Japan decreased its share in the global market to 20%, or 36.40 million tonnes, China and India increased LNG imports significantly. While India increased LNG import significantly in the first quarter, volumes decreased year-on-year in the second quarter. On the other hand, China's growth of LNG import slowed in the first quarter, followed by a rebound in the second quarter. European countries imported more than 51 million tonnes of LNG in the first half of 2020, an increase of over 15% from the same period of 2019, after importing more than 87 million tonnes in 2019 increasing by 70% year-on-year. The increase of European import in the first half of 2020 amounted to nearly 7 million tonnes out of the total global increase of more than 8 million tonnes. Performances varied markedly between the quarters here, too: increases of 28% in the first quarter and 3% in the second quarter.

Natural gas consumption in Europe decreased by 7% year-on-year in the first half of 2020. As the gas production in the region decreased by 9%, the gap was filled with imports and withdrawals from storage. As import of LNG increased by 15%, import of gas via pipeline from Russia decreased by about 20% in the same period. One of the factors that have enabled the increase of LNG import in Europe in recent years, is the large underground storage capacity equivalent to 70 million tonnes of LNG. However, as the storage was more than 50% full as of the end of the winter withdrawal season at the end of the first quarter, 80% as of the end of the second quarter, and 94% full as of the middle of September, the region's gas and LNG infrastructure system has largely lost spare capacity and flexibility to accept further incremental LNG import until the next withdrawal season from November.

The increase in LNG export concentrated in the United States, increasing volumes by 9 million tonnes, or 58%, compared to an increase of 8 million tonnes in the world with some decreases in some exporting countries. But the monthly exported volumes decreased month-on-month from April, after peaking in January at 5.2 million tonnes. The monthly volumes were smaller year-on-year in June and July. However, due to recovery of international crude oil prices between June and August, LNG export from the United States is expected to regain competitiveness toward the fourth quarter, returning to the increasing trend.



4. Update on Climate Policies

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With the end of the summer holiday season, discussions on climate change targets and countermeasures have begun in Japan, the EU, and China.

On September 1, the first joint meeting of the Central Environment Council's Subcommittee to Study the Medium- to Long-term Climate Actions and the Working Group to Study Global Warming Countermeasures of the Industrial Structure Council was convened. The joint meeting will review the Plan for Global Warming Countermeasures and deliberate on the future climate actions considering the impact of Covid-19 on domestic and overseas economic and social activities and the resulting changes.

On September 17, the European Commission released a Comprehensive Impact Assessment of the social, economic, and environmental impacts of raising the 2030 GHG emissions reduction target from 40% to 55%, compared to 1990 levels, and stated that this course of action "is realistic and feasible." Accordingly, the Commission invited the European Parliament and the Council of the European Union to confirm this 55% target as the EU's new Nationally Determined Contribution (NDC). Further, the Commission set out legislative proposals to be presented by June 2021 to implement the new target, including: revising and expanding the EU Emissions Trading System; adapting the Effort Sharing Regulation which sets targets of each country in non-ETS sectors; reinforcing energy efficiency and renewable energy policies; and strengthening CO₂ standards for road vehicles.

On September 22, President Xi Jinping of China said at the UN General Assembly that China aims to have CO₂ emissions peak before 2030 and achieve carbon neutrality before 2060. The President also said that China will scale up its NDC by adopting more vigorous policies and measures. Before this speech, at the China-EU Summit on September 14, the EU had pushed China to commit to climate neutrality domestically by 2060 and to peak its emissions by 2025, and had said that failing to do so would eventually push the EU side to impose punitive carbon tariffs, aimed at concluding a bilateral trade agreement by the end of the year.

In China, the draft allocation rules for its emissions trading system have reportedly been circulated by the Ministry of Ecology and Environment among industrial participants. The draft rules show that (1) it backdates the start of compliance obligations to 2019 and covers carbon emissions from 2019 and 2020; (2) the benchmarks (allocation per MWh) are set lenient; (3) natural gas power plants do not have to purchase extra allowance for emissions; and (4) the proposal limits the maximum amount of extra allowances a coal power plant would have to purchase to 20% of its total emissions so as to ease the burden on power producers.

On the same day, September 22, the Climate Change and Environment Task Force of T20, a network of think-tanks and researchers of G20 countries, co-hosted a webinar with the IEEJ. IEEJ Chairman and CEO Masakazu Toyoda participated in a panel discussion on the circular carbon economy. The discussion included the point that adopting the circular carbon economy that features reducing, reusing, recycling, and removing carbon (4 Rs) is the best way to address the climate issue effectively and to achieve the goals of the Paris Agreement. Policy recommendations developed by T20 will be presented to the G20 Summit in Riyadh, Saudi Arabia in November.



5. Update on Renewable Energies

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On September 2, Germany issued the country's first-ever green bond (environmental bond). The 6 billion euros of 10-year bonds issued attracted purchase orders for 33 billion euros, demonstrating extremely high investor interest. Chancellor Angela Merkel has stressed that Germany must adopt environmentally-sound funding for recovering from the impact of Covid-19 and plans to issue up to 12 billion euros of green bonds with maturities ranging from two to 30 years within this year.

In Europe, green bonds have already been issued by France, the Netherlands, and Sweden, and this large issuance by Germany is expected to boost the expansion of the European green bond market. German government bonds serve as a benchmark for the European bond market and a baseline for bond transactions. Germany's green bonds may also become a benchmark for the pricing of other environmental bonds in the green bond market.

A green bond is one that is issued solely for funding businesses that help improve the environment, such as renewable energies and low-carbon buildings, and is categorized as a type of ESG bond together with social bonds, which fund businesses that tackle social issues, and sustainability bonds for businesses that contribute to the environment and development. Since the European Investment Bank launched the first-ever bond designed to tackle climate change in 2007, the green bond has been growing steadily as a core of ESG bonds. The green bond market had grown to \$1.45 trillion worldwide by 2018 (Climate Bonds Initiative 2018) and \$263 billion of green bonds were issued in 2019 (Moody's). More than 30% of the proceeds from green bonds are used to fund renewable energy projects such as wind power development and construction, followed by low-carbon buildings and energy efficiency, clean transport business, and so on.

Green bonds are differentiated from regular bonds by their impacts on environmental improvements on which they are spent. A framework needs to be established for correctly quantifying the environmental improvements that would not have been achieved without a green bond, and for reflecting such improvements in the pricing of the green bond through the market mechanism. However, while regular bonds can be compared such as by yield and credit rating, there is still no established method for quantifying the contribution of green bonds.

Under the current Covid-19 crisis, not only green bonds but also social bonds designed to fund efforts to fight Covid-19, such as the development of remedies and R&D, are also quickly growing in the market. Japanese financial institutions have also issued bonds to fund loans to hospitals and pharmaceutical companies. In light of the rapid increase in ESG bond issuance, there are now expectations for the creation and development of a market that can correctly evaluate the environmental and social impact of the issuers' initiatives, such as through ongoing disclosure of how the proceeds of bonds are used after issuance. Attention must be paid to how the issuance of green bonds by Germany, the global leader in increasing renewable energies, will affect the development of the green bond market and expansion of renewable energies, as well as their role as an index for pricing.



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