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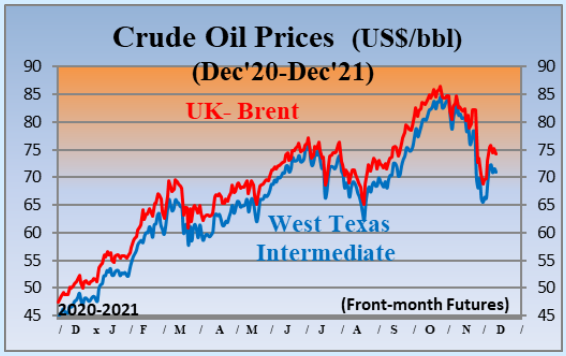
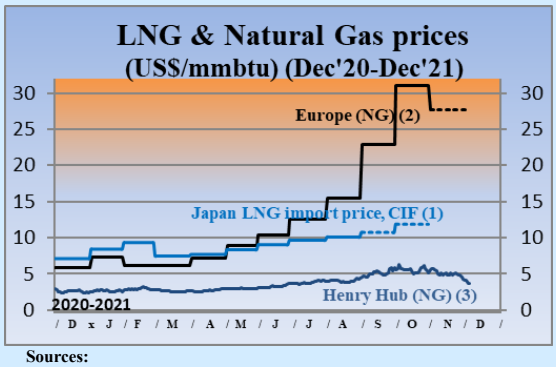
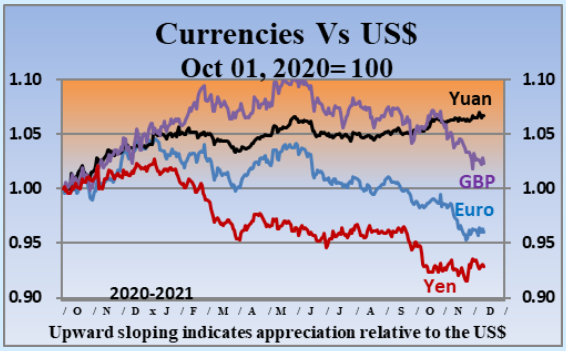


Sources:
(1) DOE-EIA
(2) Investing.com



Sources:
(1) Ministry of Finance "Japan Trade Statistics"
(2) Ministry of Economy, Trade and Industry (arrival month basis)
(3) Estimated by World Bank (Netherland 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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France announced plans to start building new nuclear power plants again. This is the first announcement since the one on the construction of Flamanville Unit 3 currently under way. Further details are keenly awaited.

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The decision by the US, Japan and others to release their national oil reserves has weakened OPEC Plus' incentive to boost production. Unstable spot LNG prices are adversely affecting the introduction of LNG in emerging LNG importing countries in Asia.

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COP26 closed on November 13 after adopting the Glasgow Climate Pact. Countries called the decade up to 2030 the "decisive decade" and agreed to strengthen climate measures, but there were disagreements over what should be done.

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Japan's renewable energy value trading market held its first auction. Launched to provide consumers with direct and inexpensive access to renewable energy value certificates, upcoming transactions in the market and improvements to the system deserve attention.

1. Energy Policies

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On October 31, the 49th House of Representatives election was held. The Liberal Democratic Party secured an absolute majority with 261 seats, though fewer than the 276 seats held before the election, enabling Fumio Kishida to remain at the helm as the 101st prime minister of Japan.

The Kishida government's energy policies are in line with the Sixth Strategic Energy Policy approved by the Cabinet in October and the Green Growth Strategy, and there has been no major reversal of policy of the Suga government. In his first policy speech, the prime minister announced his vision of developing a "new form of capitalism" towards "a virtuous cycle of the environment and economy." He spoke little about his environment and energy strategy, and only said: "In working to achieve carbon neutrality by 2050, we will also formulate a clean energy strategy that ties global warming mitigation into growth and will vigorously promote that strategy." This contrasts with the inaugural speech of former prime minister Yoshihide Suga, who stressed his commitment to the 2050 carbon neutrality goal, a year ago.

On November 19, the Cabinet approved the "economic measures to overcome new coronavirus infections and to carve out a new era," the largest economic stimulus package ever with fiscal spending of 55.7 trillion yen. The program includes the clean energy strategy towards 2050 carbon neutrality as one of its growth strategies, and sets clean energy investment as one of its key measures. In addition to assistance for increasing electric vehicles, securing production bases for battery cells and semiconductors, and making renewables a main power source, the program includes support for R&D and expansion of all options including nuclear and hydrogen.

The program also includes a subsidy for easing the wild fluctuations in petroleum product prices, as a temporary measure until March next year. When the national average price of regular gasoline surpasses 170 yen per liter, a subsidy of 5 yen per liter will be provided to gasoline, diesel oil, and kerosene wholesalers to prevent higher retail prices. In addition, the Japanese government will join the United States and others in releasing its oil reserves to stop the rise in fuel prices. Both the subsidy to wholesalers and the release of oil reserves to lower prices are new attempts, and it will be interesting to see their impact on oil markets both in and outside Japan.

While it is imperative to secure stable and inexpensive energy supplies for the coming winter and beyond amid serious increases in resource prices, it is also necessary to work steadily on the mass introduction of non-fossil fuels (nuclear, renewables), and thorough energy conservation by 2030 in line with the Sixth Strategic Energy Plan. Now that COP26 is over, we must watch closely how the new government implements the measures of the Energy Plan and takes action to achieve the ambitious 2030 targets and 2050 carbon neutrality goal.

2. Developments in Nuclear Energy

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In a televised speech broadcast on November 9, French President Emanuel Macron announced that France will start building new nuclear power plants again. He said that in order to keep energy prices at appropriate levels and ensure energy security without depending on other countries, it is necessary to invest in energies that do not produce climate change-inducing carbon emissions. He then declared that it is necessary to start building new nuclear power plants again for France to maintain its energy self-sufficiency rate and go carbon neutral by 2050.

France has the second largest installed nuclear capacity in the world at 64 GW as of January 2021, but has been considering its nuclear policy since the Fukushima Daiichi accident, which prompted debates on safety. In August 2015, France enacted an act on energy transition for green growth and decided to lower the ratio of nuclear power from 75% to 50% by 2025, indicating that it would continue to use nuclear power but give it a less important role. However, the timeline for achieving the target was later delayed by 10 years to 2035 from 2025 due to electricity shortages in the 2020s and rising concern about increasing CO_2 emissions. Consequently, the Macron government adjusted the goal of reducing dependence on nuclear power set by the Hollande administration, and put France on a more realistic course.

Regarding its nuclear policy, France has announced plans to invest 1 billion euros on introducing small modular reactors (SMRs) in its domestic investment plan, “France 2030,” released on October 12. Also, the government had said that an announcement would be made in early November on the issue of allowing nuclear new builds, which the Multi-Year Energy Program (PPE) published in April 2020 had stated would be decided by 2021 through consultation with industry. The announcement this time refers to nuclear new builds after Flamanville Unit 3, which is currently under construction.

The Glasgow Climate Pact released at the 26th Conference of the Parties to the UNFCCC (COP26) held in the UK included the goal of striving to limit the temperature increase to 1.5°C above pre-industrial levels, once again endorsing the aspiration confirmed at the Paris Agreement, the internal rule for addressing climate change. The importance of nuclear power in tackling climate change was recognized, and discussions focused on technological innovations including the feasibility of SMR deployment and hydrogen production using nuclear power.

The fact that France announced that it would restart nuclear new builds during the COP26 term was a clear sign that the French government sees nuclear power as a means to fight climate change. Specific construction plans that are due to be released hereafter will be closely monitored.

3. Recent Developments in the Oil and LNG Markets

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On November 23, the United States announced plans to release 50 million barrels of crude oil from its Strategic Petroleum Reserve. The release is scheduled from January through April 2022. According to the U.S. Department of Energy, this is a coordinated effort with Japan, China, India, South Korea, and the UK, which will also release their reserves. Prime Minister Fumio Kishida announced on the 24th that Japan will release 4.2 million barrels of its reserves. According to reports, China will release 7 to 15 million barrels, India 5 million, South Korea 3.5 million, and the UK 1.5 million. This is the first time for consumer countries to release their oil reserves explicitly for the goal of curbing high oil prices. President Biden has said that oil prices are rising because oil producing countries are not increasing production fast enough, and predicted that the joint release of reserves would eventually bring oil prices down. If released from the beginning of January to the end of April as announced or reported, roughly 0.6 million barrels of petroleum will be made available per day.

Market reaction to the release of reserves has been muted. After rising to $86 in early October, the Brent price had fallen below $80 by November 19 amid reports of a possible release of reserves, anticipating an easing of the supply-demand balance. However, the market then judged that the amount to be released would be inadequate and assumed that OPEC Plus would respond by tightening supply again, sending the Brent price up $2.6 to $82 from the previous day. The UAE Energy Minister Suhail Al Mazroui has said that the release of reserves is the United States' issue, and that he saw no logic in OPEC Plus increasing supply when the oil market foresees an oversupply in Q1 of 2022. OPEC Plus is set to meet on December 2 to discuss the policy on production cuts in 2022, but the decision to release reserves is believed to have undermined its incentive to continue easing production cuts.

In its November 16 Oil Market Report, the International Energy Agency predicted that demand will grow 4.8 mb/d year-on-year to 98.9 mb/d in Q4 of 2021. Demand is continuing to recover, and the outlook for 2022 has also been revised upward from the previous month by 0.1 mb/d to 99.7 mb/d. However, it is important to continue monitoring the possibility of a resurgence of the pandemic and supply chain disruptions which would slow down the macro economy and thus affect oil demand. The impact of winter temperature on demand also requires attention.

Meanwhile, the spot LNG price for Asia, which rose to an extreme of $36/Mbtu in late October, remained around $30 in November. However, this price does not represent the LNG procurement price of the entire Asian market. For example, the average import price for Japan, whose imports are based mostly on long-term, oil indexed contracts, is approximately $12 as of October, and is expected to rise only slightly within this year. Thus, the impact of soaring spot prices on importer countries varies significantly depending on each country's dependence on spot LNG purchases. For Asian buyers, higher spot prices will boost their incentive to maintain or increase oil price contracts. Unstable spot prices will have a negative effect on the expansion of the LNG market in Asia, particularly on the introduction of LNG in emerging LNG importing countries that depend heavily on spot purchases.

4. Update on Policies Related to Climate Change and Energy Conservation

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COP26, which gathered some 40,000 people from around the world, closed on November 13 after adopting the Glasgow Climate Pact and other documents. With calls for ambitious climate action coming from leaders of various countries, and the decade up to 2030 designated the "decisive decade," the event attracted global attention. However, the meeting also highlighted the differences in measures among countries, as shown by fierce arguments over the handling of coal thermal power. This report summarizes the main points of the discussions.

The Parties to COP26 reconfirmed the goal of the Paris Agreement of holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit it to 1.5°C. However, the total of the Nationally Determined Contributions (NDCs) submitted by the countries is not enough to reach a CO_2 emission reduction of "45% in 2030 from 2010 levels," the level necessary to limit the temperature increase to 1.5°C. At the Conference, an agreement was reached to strengthen the NDCs "as necessary, taking into account different national circumstances" by the end of 2022.

Regarding efforts on coal power, the President suggested a "phase-out" of unabated coal power (without emission reduction measures in place) and inefficient subsidies for fossil fuels. However, in the final version of the Pact, the wording was watered down to "phase-down" coal power even though the expression "phase-out" was maintained for inefficient fossil fuel subsidies, and was incorporated in the document as part of the efforts to deploy clean power generation and energy efficiency measures.

To achieve the 1.5°C target, developing countries need support. Each country expressed deep disappointment that developed countries' commitment to mobilizing $100 billion by 2020 has not been met, and strongly demanded that developed countries double their collective support for adaptation, including disaster preparations, by 2025 from 2019 levels.

Article 6 of the Paris Agreement stipulates rules on the "market mechanism" for the cross-border trading of carbon credits. At COP16, the "Paris Agreement rulebook" on the implementation of Article 6 became complete. The Parties reached agreement on matters that ensure enhanced reliability and wide use of the market mechanism, including introducing a system to avoid "double counting" of emissions reductions in the country that purchased credits and the country that actually reduced emissions.

At COP26, not only nations but also cities, state governments, and companies committed themselves to voluntary efforts. The activities span an unprecedented range of areas, including agriculture and land use, aviation, automobiles, finance, forests, and energy. For automobiles, for instance, over 30 countries as well as cities, states, and companies have signed a commitment to "work towards all sales of new cars and vans being zero emission (EVs and FCEVs) by 2040 or earlier, or by no later than 2035 in leading markets." However, countries with a large auto industry including Japan, the United States, China, Germany, and France are exploring PHEVs and e-fuel options as well as EVs and FCEVs, and have not signed this voluntary target. The parties are required to step up specific measures to spread these new technologies, including R&D, execution of policies, and allocation of funds.

5. Update on Renewable Energies

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Japan's renewable energy value trading market held its first auction on November 19. Until now, the value of renewable energy had been traded in the non-fossil-value trading market open only to electricity retailers. However, amid the growing momentum toward decarbonization and accelerated calls to expand eco-friendly electricity purchasing to individual electricity consumers, the renewable energy value trading market was launched to allow consumers to buy renewable energy value certificates directly and inexpensively.

The non-fossil-value trading market was launched to help electricity retailers achieve a minimum non-fossil electricity ratio of at least 44% in their electricity sales by 2030, a mandatory requirement under the Act on Sophisticated Methods of Energy Supply Structures. The market was designed to trade certificates for electricity from FIT renewables, non-FIT renewables, nuclear energy, and wastes, and the prices of certificates were decided through auction with a price cap. In November, the non-fossil-value trading market was split into the "renewable energy value trading market," which allows consumers to directly purchase renewable energy value, and the market for facilitating retailers to fulfill their obligations under the Act on Sophisticated Methods of Energy Supply Structures.

The key discussion points in launching the renewable energy value trading market were the "nature" of the FIT certificates, trading frequency, price levels, requirements for consumers and brokers, the validity period of certificates, and how to handle unsold ones. In particular, the nature of the FIT certificates and their price levels were studied in detail by referring to European and American systems and conducting consumer surveys. According to the draft sixth interim report by the Basic Policy Subcommittee on Electricity and Gas issued in November, regarding the nature of the FIT certificates, the plan is to start by simply guaranteeing that the electricity is produced from renewable sources ("renewable electricity certification"), and eventually move on to guaranteeing more specific sources and places of production ("power origin certification").

While renewable electricity certificates are designed solely to demonstrate the value of renewable energy itself to consumers and do not accommodate their choice of preferred renewable power sources, a "power origin" certificate is linked to a particular renewable power source and place of production, as is the case with the environmental value trading systems in Western countries, and allow trading to be conducted for each particular power source. For example, in North America, the Renewable Energy Certificate (REC) was introduced in 1999 in Texas as the first system for guaranteeing the environmental value of renewable power generation. RECs are used widely as a means for companies to purchase renewable energy, and for power companies to achieve their RPS targets. In Europe, the EU directive to promote the use of renewable energy was established in 2001, and with it, the framework for the Guarantee of Origin (GO) system was developed. GO carries clear information on the power source of renewable electricity, as well as where and when it was produced, and is used in Europe to guarantee that the electricity sold by the renewable power producer indeed comes from renewable sources.

There are many challenges in introducing power origin certificates in Japan, including building a system for tracking power source attribute information and measures for avoiding double counting when certificates are traded. It is hoped that discussions will be conducted while paying close attention to the transactions in the renewable energy value trading market and the status of renewable energy procurement by consumers who obtained FIT certificates.

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