



IEEJ e-NEWSLETTER

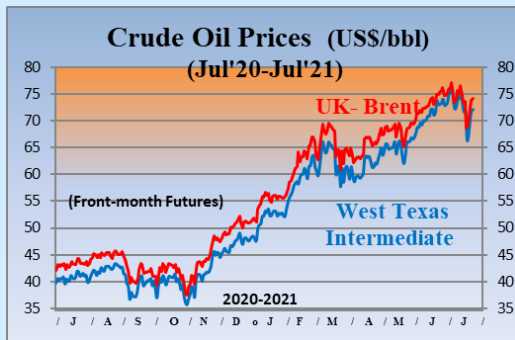
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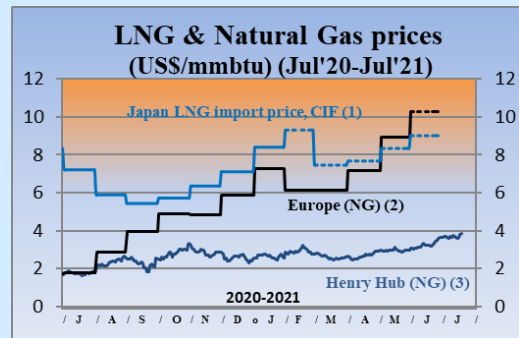
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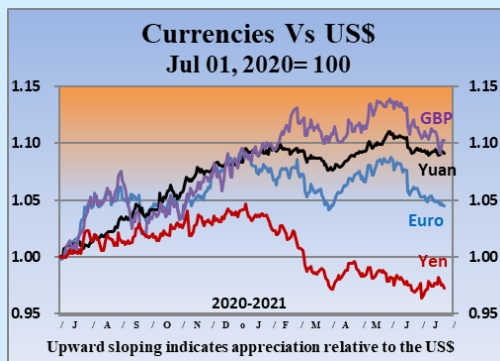
(As of July 23, 2021)



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



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



Source: x-rates.com



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

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Summary

【Global Monitoring】

1. US: Course of the Key Infrastructure Bill

Much attention is focused on the course of the infrastructure bill supported by a bipartisan group of Senators. The bill has been shrunk drastically from President Biden's original plan and the proposal to raise taxes to fund the plan was called off, attracting criticism from progressive Democrats.

2. EU: EU Council Agrees on Revisions to the TEN-E Regulations

EU energy ministers reached an agreement on revisions to the TEN-E Regulations. The handling of natural gas infrastructure is the key as member states remain divided over natural gas.

3. China: Trends in Final Consumption and Decarbonization of Electricity and Hydrogen Supplies

China is pushing ahead with electrifying the final demand, making renewables a main power source, and expanding green hydrogen, aiming to reach net-zero carbon emissions. Electricity supply costs may increase in the short term but are expected to decrease in the long run.

4. ME: Ebrahim Raisi Wins Iran's Presidential Election

Ebrahim Raisi, a conservative hardliner and prospective successor to Supreme Leader Ali Khamenei, won Iran's presidential election. There is keen interest in the rebuilding of the nuclear deal and the lifting of US sanctions on Iran.

5. Russia: US-Russia Summit and Resurgence of Covid-19 in Russia

The US-Russia summit saw agreement on starting bilateral talks on cybersecurity and nuclear disarmament but highlighted the gap between the countries on human rights and Ukraine. Covid-19 is resurging in the country.



1. US: Course of the Trademark Infrastructure Bill

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In April, the Biden administration unveiled the 2.2 trillion-dollar American Jobs Plan, which focuses on decarbonization and rebuilding the country's infrastructure. Currently, negotiations on the infrastructure bill for implementing the Plan are at a critical juncture. On June 23, a bipartisan group of Senators and the President had talks and were later reported to have reached a basic agreement. According to media reports, new fiscal spending for upgrading infrastructure was slashed drastically from the President's initial plan for \$576 billion, and the plan to secure funds by raising taxes was also called off. However, the bipartisan agreement is now at risk of collapse due to what the President said and did immediately after it was reached, as described later.

Needless to say, getting the bill through before the August recess of Congress would be a huge achievement for the administration. President Biden has already passed 17 bills since taking office, including the relief bill for industries and households hit by the pandemic-induced slump in economic activity and the anti-Asian hate crimes bill. Those legislative results are comparable to the number of bills signed into law by President Obama in the first five months of his presidency, in addition to a major economic stimulus bill enacted immediately after his inauguration. Furthermore, vaccinations are well underway and economic activity is gradually restarting in many regions. In fact, some consider that the recovery in employment and strong demand are causing supply constraints including shortages of manpower and materials, and disruptions to logistics. This is a far faster economic recovery than that under the Obama administration which took two years. As a result, President Biden's popularity rating remains constantly above 50%.

However, the hopes of progressive Democrats for the administration have turned to disappointment in the last five months. They are becoming openly frustrated with the administration and the lack of commitment by the President after the Senate Republicans filibustered a voting rights bill, which would have enabled wider early voting and protected the rights of African American voters by automatic voter registration of driver's license holders, in addition to the police reform bill drawn up after police violence and the killing of George Floyd, a black man.

Progressive Democrats are also condemning the bipartisan infrastructure plan. The President's original plan included climate action as well as a decarbonized power sector and promotion of electric vehicles, and funding them with the proceeds from rolling back the corporate tax cut enacted during the Trump presidency. In April, the Biden administration also unveiled the 1.8 trillion-dollar American Families Plan, which includes free universal pre-school, direct support for childcare, and paid family and medical leave. Progressive Democrats are demanding spending of around 4 trillion dollars on social infrastructure under the two bills, based on their views on fairness that "climate change brings inequitable public health issues to communities of color or low income" and "the climate issue is inseparably linked with income and racial disparities." However, the bipartisan agreement has drastically slashed infrastructure spending and does not contain any elements of the American Families Plan. As of June 23, 21 Senators (11 Republicans and 10 Democrats) are supporting the bipartisan agreement while progressive Democrats are demanding that the bill, with the removed initiatives included, be passed through a special budget maneuver with a simple Democratic majority (51 votes, including the Vice President). Taking this demand into account, President Biden announced the shift to a two-step approach to "social infrastructure" that consists of the bipartisan infrastructure bill and the budgeting maneuver. He also suggested exercising a veto, drawing fire from Republicans.

President Biden has vowed to heal the serious bipartisan conflict, drawing on his 36 years of experience as a Senator. This "deal" will decide not only whether the massive investment in infrastructure will happen but also whether the United States debt ceiling will be raised. Last-minute negotiations continue.



2. EU: EU Council Agrees on Revisions to the TEN-E Regulations

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On June 11, the EU Council discussed and reached an agreement on revisions to the Trans-European Networks for Energy (TEN-E) Regulations. This revision focuses on the elevated 2030 climate target and the 2050 climate neutrality target. The objective of the revision is to ensure that the rules address and interface with the role of electrification in the future energy mix and the infrastructure needs of future clean energy systems, including decarbonizing the gas sector using hydrogen, biogas, and synthetic gas, in order to reach the stricter emissions reduction targets.

The discussions at the EU Council saw a sharp divide in opinions between Central and Eastern European countries and Western European countries over the handling of natural gas infrastructure. While the former support using natural gas into the future, the latter considers that the EU must shift from the conventional use of natural gas to decarbonizing it. To date, under the TEN-E Regulations, the EU has designated Projects of Common Interest (PCIs), from among cross-border energy infrastructure projects and provided them with financial assistance. The initial European Commission proposal said that natural gas infrastructure and oil pipelines are not eligible for PCI status. As a result of discussions, the EU Council decided to end all support for new natural gas and oil projects and introduce a mandatory assessment of sustainability contribution for all projects. According to the EU Council decision, during a transition period until December 31, 2029, dedicated hydrogen assets converted from natural gas can be used to transport or store a pre-defined blend of hydrogen with natural gas or biomethane. At the same time, in order to be designated as PCI, a project must demonstrate how its infrastructure will be converted from natural gas assets to dedicated hydrogen assets by the end of the transition period. The draft revisions will be negotiated with the European Parliament going forward.

Among Western European countries, France has been criticized by environmental NGOs for not committing to removing natural gas from the scope of support. French Ecological Transition Minister Barbara Pompili has acknowledged the importance of removing new gas infrastructure projects from the scope of EU financial support but has also expressed support for providing a framework for existing gas infrastructure conversion projects to enable the temporary use of a natural gas-hydrogen blend mix. In Europe, which has highly developed gas pipeline networks, the remodeling of existing facilities for expanding the use of hydrogen is becoming a major discussion point. However, it will not be easy to bridge the differences among member states.

In France, the Climate and Resilience Bill is being deliberated in parliament. The bill incorporated part of the environment policy recommendation from the Citizen's Convention Climate and was approved by the cabinet in February 2021. As part of the deliberation process, the Senate has adopted a proposed revision that gives a mayor one month to review a wind power plant project and exercise a veto if necessary. The objective of this revision is to enhance the social acceptance of wind power plants by creating opportunities for discussion and dialog on the development of wind power. Many EU states including France incorporate further development of wind power into their strategies. Social acceptance of renewable energy will become increasingly important in Europe just as the social acceptance of nuclear power is essential worldwide. (As of 30 June 2021)



3. China: Trends in Final Consumption and Decarbonization of Electricity and Hydrogen Supplies

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China is pushing ahead with decarbonizing both final energy consumption and electricity and hydrogen supplies, aiming to reach net-zero carbon emissions before 2060.

Decarbonizing final energy consumption requires shifting from fossil energy to electricity (electrification) and increasing the use of hydrogen in hard-to-electrify areas, in addition to using energy more efficiently. According to the China Electricity Council (CEC), the share of electricity in final energy consumption (percentage of electrification) has risen from 21% in 2015 to 27% in 2020. As for the future, under a net-zero emissions scenario, Tsinghua University and others predicted in October 2020 that this percentage will rise to 36% in 2030 and 71% in 2050 and the Global Energy Interconnection Development and Cooperation Organization (GEIDCO), an international NGO launched under China's leadership to establish an international transmission network, predicted in March 2021 that it will rise to 66% in 2060. Both organizations state that "maximum electrification" is indispensable to reaching net-zero carbon emissions. Furthermore, more widespread use of hydrogen will also be necessary as an alternative for coke in manufacturing steel and the fossil fuel resources used as raw materials for chemical products, and as fuel for fuel cells and power generation. The China Hydrogen Alliance predicted in April 2021 that hydrogen demand will increase from 33 million tonnes in 2019 to 60 million tonnes in 2050 and 130 million tonnes in 2060, and that the percentage of hydrogen in final energy consumption will reach 10% in 2050 and 20% in 2060.

China's main focus in decarbonizing its electricity supply is the expansion of renewable power sources. According to CEC, the installed capacity of renewable power grew from 494 GW in 2015 to 935 GW in 2020 (including 282 GW of wind power and 253 GW of solar PV and heat power), with its share in the total generation capacity of all power sources rising from 32.4% to 42.5% (wind: 12.8%, solar PV and heat power: 11.5%). Its share in power output has also risen from 23.5% in 2015 to 29.1% (wind: 6.1%, solar PV and heat: 3.5%). Under a net-zero carbon emissions scenario, Tsinghua University and others forecasted that the installed capacity of renewable power will reach 5,576 GW in 2050 (wind: 2,740 GW, solar PV and heat: 2,367 GW), accounting for 89% of total generation capacity (wind: 44%, solar PV and heat: 38%) and 75% of total power output (wind: 40%, solar PV and heat: 22%). CEIDCO forecasts that the installed capacity of renewable power will be 7,230 GW in 2060 (wind: 2,500 GW, solar PV and heat: 3,800 GW), accounting for 90% of the total generation capacity (wind: 31%, solar PV and heat: 48%).

As variable power sources become main power sources, measures to ensure grid stability such as using pumped-storage hydropower and power storage, introducing more gas-fired thermal power, establishing ultra-high pressure transmission networks, and utilizing the charge and discharge function of EVs are considered to be effective, but they will inevitably push up costs. According to Tsinghua University and others, under a scenario in which the current policy will continue without a net-zero emissions target, power supply costs will decrease from 0.35 yuan/kWh in 2018 (1 yuan \approx 17 yen as of June) to 0.24 yuan/kWh in 2050. Meanwhile, under a net-zero emissions scenario, power supply costs will increase to a peak level of 0.49 yen/kWh in 2028, up 41%, before decreasing to 0.32 yuan in 2050. Working toward net-zero emissions will be more costly than not doing so, but costs will fall below the present level in the long run as technologies mature. A study by CEIDCO shows that the costs of solar PV and land-based wind power will decrease to as low as 0.07 yuan/kWh and 0.15 yuan/kWh, respectively, in 2060. Hydrogen produced through electrolysis stood at just 500,000 tonnes in 2019. CHA states that as renewable electricity costs decrease, hydrogen from water electrolysis will become more cost-competitive, causing the production of green hydrogen to soar to 40 million tonnes in 2050 and 100 million tonnes in 2060. Whether the costs of electricity and hydrogen supplies can be reduced will be critical.



4. ME: Ebrahim Raisi Wins Iran's Presidential Election

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On June 18, conservative hardliner Ebrahim Raisi won Iran's presidential election, as expected. Raisi is a prospective successor to Supreme Leader Ali Khamenei, and there is keen interest in whether the Iran nuclear deal (JCPOA) will be revived under the new president, and if so, how the US sanctions on Iran will be lifted.

It is still not clear when Iran and the US can reach an agreement. Iran is allegedly demanding guarantees that the US' decision will not be "reversed easily when there is a change of government." Meanwhile, the US is seeking negotiations on Iran's missile development and regional activities as well when the countries return to the JCPOA, and is reportedly requesting Iran's consent. If an agreement is reached under the Rouhani administration before the new Raisi government gets inaugurated at the beginning of August, the Raisi administration will put the agreement into action. However, if the negotiations are carried over to after the new government commences, it is likely to take longer to reach an agreement.

Unless the JCPOA is restored, Iran will expand its nuclear development activities and demand that sanctions be lifted. The country's uranium enrichment level, capped at 3.67% under the JCPOA, is currently at 60%. Multiple improved centrifuges have been installed and Iran's stocks of low enriched uranium are also far above the JCPOA limit. Israel thinks this situation is unacceptable and has allegedly carried out various acts of sabotage including explosions at the Natanz nuclear facility in central Iran on two separate occasions. The confrontation is continuing, with Israel attacking Iranian vessels in the Mediterranean and the Red Sea and Iran hitting back. There remains a risk of unintended clashes.

In Israel, on June 13, the new government led by Naftali Bennett, the leader of Yamina, a political alliance of right-wing parties, was launched with the confidence of parliament. The Bennet administration is a coalition of eight parties including a Palestinian party. Binyamin Netanyahu stepped down after serving as prime minister for 12 years. The Bennet administration has been called a patchwork of parties held together only by their opposition to Netanyahu. However, the foreign policies of the new government, in particular toward Iran, are not expected to change significantly from those of the previous government. This means that as long as the rebuilding of the JCPOA continues to be delayed and Iran's nuclear development continues, acts of sabotage by Israel are likely to continue and regional tensions are expected to remain high.

On the occasion of the North Atlantic Treaty Organization (NATO) summit held in Brussels on June 14, Turkey's President Erdogan and US President Biden held talks. President Erdogan has offered to station Turkish troops in Kabul, the capital of Afghanistan, after the US and NATO forces withdraw, to assist US efforts to stabilize Afghanistan. However, the Taliban has stated that Turkey must also withdraw, and so the viability of Erdogan's proposal is in doubt.

5. Russia: US-Russia Summit and Resurgence of Covid-19 in Russia

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On May 19, US State Secretary Blinken revealed that the US had waived sanctions on the operating company of Nord Stream 2 and its CEO. The State Department investigation report submitted to Congress had concluded that the company and the CEO had been engaging in activities to which sanctions might apply. There are no set time limits for the exemption and it can be withdrawn by the Secretary of State. On May 25, President Biden described the reason for the waiver as the risk of damage to the US-Europe relationship resulting from imposing sanctions on the nearly-complete Nord Stream 2, suggesting that the US prioritized cooperation and solidarity with Europe to counter Russia and China. Another aim of the US may have been to avoid “fighting on two fronts” against China and Russia by yielding some ground to Russia ahead of the US-Russia summit.

On June 16, the first in-person US-Russia summit since the inauguration of President Biden was held in Geneva, Switzerland, and an agreement was reached on starting bilateral talks on cybersecurity and nuclear disarmament. President Biden proposed excluding certain key infrastructure from the scope of cyberattacks and provided a list of 16 specific targets. In the area of energy, infrastructure related to chemicals, energy, nuclear reactors, nuclear materials, and nuclear waste, and transportation systems were included. Meanwhile, the summit also highlighted the gap between the countries on human rights issues and Ukraine.

On June 10, Russian state-run oil company Rosneft signed a sales agreement with a consortium of traders, Vitol and Mercantile & Maritime Energy, to sell a 5% stake in Vostok Oil. Vostok Oil is an oil development project in northern Krasnoyarsk in the Arctic. According to Rosneft, the region’s oil fields hold over 6 billion tonnes of reserves of low-cost, low-carbon footprint, low-sulfur crude oil. Rosneft has been calling on foreign companies from Japan, India, and other countries to participate since December 2019, and in December 2020, Trafigura, a trader, acquired a 10% interest.

On June 15, the Russian Federal State Statistics Service announced a 0.7% year-on-year decline in Russia’s real GDP growth rate in Q1 2021. Further, the Central Bank of Russia released forecasts that GDP growth, which fell 3% year-on-year in 2020 due to the pandemic-induced decline in demand and oil prices, will recover to pre-pandemic levels in Q2 2021 as vaccination makes progress worldwide and demand recovers. However, the number of cases is now surging again as the vaccination rate remains at just 12%. In the capital city of Moscow, emergency measures were taken including closing most private companies for five days starting from June 15. The case count was 20,182 on the 24th, equivalent to 69% of the peak daily number on December 26 last year. The authorities are ramping up measures to accelerate the rollout of vaccines, offering new cars and houses as prizes in a lottery for getting vaccinated while warning that anyone who refuses vaccination may have their salary reduced or lose their job. The authorities are seeking to encourage vaccinations by imposing restrictions on daily life for unvaccinated people, but the resurgence of the pandemic could cause domestic demand, which has been driving economic growth, to shrink again. Developments must be closely monitored.



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