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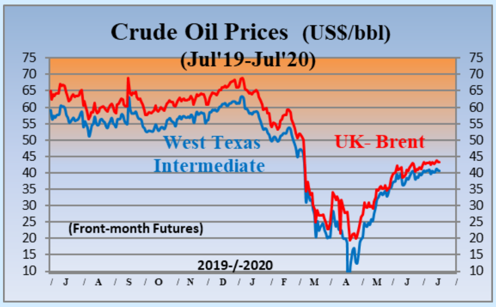
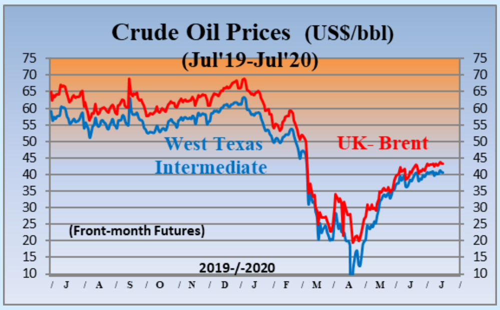
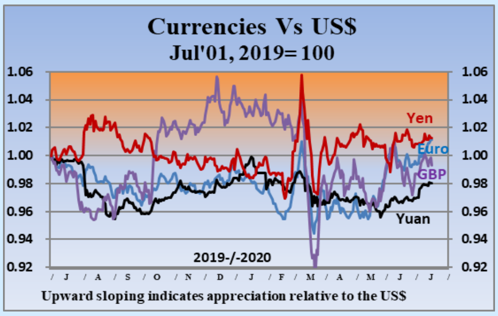


Sources:
(1) DOE-EIA
(2) Investing.com



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) Investing.com
(2) Finance. Yahoo.com

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Infrastructure investment is the center of attention as a means of economic stimulus amid plunging economic growth due to the coronavirus. The proposals by the President, the Republicans, and the Democrats all lack funding and seem unrealistic.

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Moves are afoot in Europe related to hydrogen as the German government formulates its national hydrogen strategy and private companies announce plans for producing using green hydrogen. The hydrogen strategy being formulated by the European Commission also deserves attention.

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In 2019, as the US-China trade war intensified, the share of renewable power output (including hydropower) among all power sources increased to 27.9% (including wind and solar PV at 8.6% combined). Despite the Covid-19 crisis, decarbonization will continue to make progress this year, led by renewables.

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1. US: Debates on Infrastructure Policy as a Covid-19 Countermeasure

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The Federal Reserve Bank of Atlanta predicts that Covid-19 will cause the US GDP growth rate to fall by 5% year-on-year in January-March and by 52.8% in April-June 2020. To recover from such serious damage, debates on large infrastructure investments are gathering steam.

In June, President Trump unveiled a $1 trillion infrastructure plan for roads, railways, water supply systems, and others. In 2016 the President had made a campaign promise of $1 trillion infrastructure investment, but the plan then was to cover just $200 billion with federal government funds and to procure most of the rest by contributions from states and municipalities and by accelerating private-sector investment through tax breaks. However, this infrastructure plan has made no progress during the past three and a half years, with states and municipalities reluctant to share the responsibility so far assumed by the federal government, and the federal government also reluctant to disburse as much as $200 billion. The new government plan is designed to be funded entirely by the federal government, but the federal gasoline tax, a traditional source of infrastructure funds, can cover only about half the amount, and no other sources have been presented. Congressional Republicans are already criticizing the release of a proposal that has no clear source of funding.

Meanwhile, in January 2020 the Democratic Party compiled a draft infrastructure bill to spend $760 billion over five years. The bill featured climate actions including achieving net-zero emissions in federal buildings using CO_2-absorbing building material, shifting the aviation industry to renewable fuels, switching from automobiles to public transport and railways, and upgrading inland waterways. However, funding was the problem also with this plan. As the Covid-19 crisis became increasingly serious, the Democratic Party put this bill aside in June and began work on a new, $1.5 trillion infrastructure bill that includes support for regional healthcare centers fighting the pandemic and improving the broadband network. The bill allocates $494 billion to the transportation infrastructure budget and includes initiatives to decarbonize the transportation sector.

The Republican Party immediately criticized this bill, stating that climate action has nothing to do with economic recovery from the virus, the bill is a jumble of random elements, is excessively “progressive” and reckless, has little flexibility or room for states and municipalities to exert discretionary authority, and overall, would not lead to modernizing aging infrastructure which is the most pressing goal. The House Republicans released their own bill.

Thus, the President, the House Republicans and the House Democrats have each submitted their own bill on infrastructure investment, which many are hoping will help the economy recover and cure unemployment. However, the bills have one point in common: the gasoline tax will not be enough to cover any of the bills. The most powerful solution would be to raise the gasoline tax, which has not changed since 1993, but suggesting raising taxes is unthinkable even for Congress Democrats, let alone the President and Congress Republicans. Meanwhile, with deficits ballooning due to the enormous fiscal measures taken to fight the virus, it will not be easy to find alternative sources of funds.

With Joe Biden having an average 10% lead nationwide in popularity in the race toward the autumn presidential election as of June 26, infrastructure will almost certainly be the focus of intense debate going forward. However, it is difficult to be optimistic and to expect a bold policy beyond just a few months’ extension of existing programs, even in 2021 after the elections.
（As of June 26）

2. EU: Recent Developments regarding Hydrogen

Kei SHIMOGORI, Senior Researcher
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Strategy Research Unit

On June 19, the EU Council met to discuss the recovery fund to deal with the Covid-19 crisis and the new long-term EU budget for the first time. The meeting, however, was kept to a general consultation, and EU Council President Charles Michel announced that substantial negotiations with the member states will start immediately and concrete proposals will be discussed at a physical summit around the middle of July. The shift to a green economy and digitalization to become climate neutral by 2050 are being treated as key features of the EU's economic recovery from the Covid-19 pandemic. In terms of green transition, recently there have been major movements particularly in regard to hydrogen, and the European Commission is due to present a hydrogen strategy in early July. Some media have reported that while renewable hydrogen will be at the center of the strategy, it will consider hydrogen from fossil fuels with CCS to be low-carbon hydrogen as well, and for the time being, existing hydrogen production will be decarbonized by introducing CCS and other technologies.

On June 10, the German government released its national hydrogen strategy, which states that hydrogen will serve as the key to decarbonizing Germany's steel, chemical, and transportation industries and that hydrogen technologies also have potential as exports. A national hydrogen council will be set up to play a central role in the effort. The German government predicts that approx. 90–110 TWh of hydrogen will be necessary by 2030 and has set a goal of increasing offshore and land-based wind power capacities to 5 GW by 2030 or 10 GW by 2040 at the latest for producing renewable hydrogen. Further, it will invest EUR310 million in research and innovation on renewable hydrogen by 2023 on an ongoing basis.

Alongside these moves by the German government, a series of private company initiatives have also been publicized. RWE announced they will build a 100 MW electrolysis plant to produce green hydrogen and supply it to steel and engineering major ThyssenKrupp. RWE has signed an agreement with ThyssenKrupp Europe to develop and build a hydrogen plant in Lingen and supply hydrogen to the steel plant in Duisburg. The electrolysis plant will be able to produce 1.7 tonnes of hydrogen every hour, enough for 70% of the hydrogen gas needed by the blast furnaces at the Duisburg plant; such supply is scheduled to start in mid-2020.

Furthermore, Spain's Repol announced a plan to construct a plant that will produce net-zero-emission synthetic fuel using green hydrogen and captured CO_2. The plant will be located adjacent to the Spanish Port of Bilbao. The CO_2 will be captured at a refinery owned by Repsol's partner Petronor and will be combined with hydrogen from renewables to produce the synthetic fuel. The plant will be fully operational in four years' time and is planned to produce 50 barrels of the fuel per day.

Ahead of the release of a hydrogen strategy by the European Commission, the energy ministers of Germany, Austria, France, the Netherlands, Belgium, and Luxemburg issued a joint statement, calling for the formulation of a 2030 EU hydrogen production target and a labeling system for encouraging the use of "clean" fuels. The Clean Hydrogen Alliance is scheduled to be established at the EU level amid and various hydrogen-related moves in Europe are attracting attention. （As of June 26）

3. China: Decarbonization of the Power Mix Makes Progress, Led by Renewables

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China is working to decarbonize its power mix, aiming to achieve sustainable development and build a low-carbon society. Decarbonization continued to make progress last year despite the intensifying US-China trade war.

According to the annual report on China's power industry development released by the China Electricity Council (CEC) on June 12, the country's installed power capacity was 2.01 TW in 2019, up 110 GW (5.8%) year-on-year. Renewable power sources including hydropower increased by 64.89 GW (8.8%) to 795 GW in total, consisting of 204 GW of solar PV, up 29.85 GW (17.1%), 209 GW of wind power, up 24.88 GW (13.5%), 358 GW of hydropower, up 5.45 GW (1.6%), and 23.99 GW of biomass power, up 4.71 GW (24.4%). The share of renewables in all power sources increased by 1.2 point to 39.6% in terms of capacity and by 1.1 point to 27.9% in terms of output (including 5.5% wind power and 3.1% solar PV). In contrast, the share of nuclear power remained flat at 2.4% of the total capacity and added only 0.6 point to 4.8% of the total output although it grew by 4.08 GW or 9.2% to 48.74 GW. Coal-fired thermal power grew by 32.28 GW (3.2%) to 1.04 TW but its share declined by 1.3 point to 51.8% of the capacity and 1.9 point to 62.2% of the output. Renewable power sources are acting as drivers toward a low-carbon power mix. Meanwhile, the transmission-end efficiency of thermal power units with a capacity of 6,000 kW or more improved by 0.2 point to 40.1%, reducing the CO_2 emissions per kWh (CO_2 emissions intensity) by 3 g-CO_2 to 838 g-CO_2. Thanks to the decarbonization of the power mix and improvement in thermal power efficiency and CO_2 emissions intensity, the CO_2 emissions intensity of the entire power output decreased by 15 g-CO_2 to 577 g-CO_2.

The Covid-19 pandemic which began at the end of last year has yet to end completely as of the end of June, but decarbonization is expected to make further progress. The basic government activity policies for this fiscal adopted at the National People's Congress in May declared that the development of renewable energies will continue. CEC predicts annual electricity demand to grow by 2–3% year-on-year, and power generation capacity to increase by 120 GW to 2.13 TW. Of this figure, non-fossil power sources will expand by 89 GW to 930 GW, with their share in total capacity increasing by 1.6 point to 43.6%. While the breakdown of non-fossil power sources has not been specified, according to the comprehensive guide to energy measures for this fiscal year published by the National Development and Reform Commission and the National Energy Administration on June 18, the installed capacity of solar PV and wind power will each expand to 240 GW, and that of general hydropower from 327 GW last year to 340 GW. Further, on June 16, the China Nuclear Energy Association (CNEA) released an outlook that nuclear power will increase to 52 GW by the end of the year. Putting all this information together, renewable power will remain the driver in decarbonizing the power mix this fiscal year, and its installed capacity will expand to 878 GW and its share in all power sources by 1.6 point to 41.2% on a capacity basis.

This year is the final year of the 13th Five-Year Plan. The goal of increasing renewable power sources to at least 712 GW was already surpassed in 2019. Meanwhile, the goal of increasing nuclear power to at least 88 GW (including 30 MW or more currently under construction) will be impossible to meet as last year's total capacity was only 62.94 MW. As factors behind this trend, some point to growing concern about the safety of nuclear power and the improved cost-competitiveness of wind power and solar PV.

4. ME: Economy Reopens as the Covid-19 Pandemic Persists

Shuji HOSAKA,
Director of JIME Center

Even as Covid-19 continues to spread throughout the Middle East, many countries have shifted gear to reopen their economies from around May 24 after the end of Ramadan. In Iran and Turkey, which have had the highest numbers of cases in the Middle East, the number of new cases per day seems to have peaked. This, however, is not true for Saudi Arabia where new cases have soared since June and a second wave has presumably arrived. The cumulative number of cases had surpassed 100,000 as of June 7 and reached 140,000 just 10 days later. The number of new cases per day is over 4,000 as of June 14, with the number of deaths also increasing since early June and reaching 40 on June 15 for the first time.

Qatar is seeing the second highest number of cases among the Gulf Arab countries after Saudi Arabia, with over 90,000 cases already recorded. This number is enormous for a country with less than 3 million people. The number of cases per day, however, is declining after peaking at the end of May.

Public frustration is mounting in Middle Eastern countries as cities remain under lockdown and people are unable to go out freely. In Iraq, all ministers in Prime Minister Mustafa al-Kadhimi's cabinet have now been appointed with the approval of the oil minister and the foreign minister by the parliament. The new oil minister Ihsan Abd al-Jabbar Ismail is the former president of the state-run Basra Oil Company and an oil expert. However, with rising criticism about the new oil minister even in his local city of Basra, overseeing the oil industry will not be easy. The United States and Iraq held a strategic dialog on cooperation in the areas of the economy and national security, and the policy to downsize the US forces in Iraq was confirmed. Local sentiment toward the US nevertheless remains hostile and US military bases have been attacked on several occasions. In Iraq, there have been frequent protests against corruption in Najaf and other cities. Countries such as Lebanon, Syria, Algeria, Egypt, Tunisia, and Israel are also seeing occasional protests.

Having greater financial resources than other countries, Gulf countries have begun to reopen their economies. Saudi Arabia has begun to gradually reopen domestic transportation such as travel between cities and travel by air and rail since the end of May, allow businesses to reopen except those for which social distancing is difficult, and from June 21, lifted the stay-at-home order and reopened businesses including barbers, hairdressers, gyms, and cinemas. However, Umrah pilgrimages remain prohibited and national borders closed. Nevertheless, the number of new cases has not decreased and restrictions could be tightened again.

Meanwhile, many of the foreign workers, who are the most vulnerable members of the Gulf communities, are starting to lose their jobs due to city lockdowns and stay-at-home orders, and there have been protests in some places. Some governments are expelling foreign workers who have lost their jobs because of economic downsizing, and there is concern about restarting projects after the Covid-19 crisis.

In Iran, the 11th Iranian Parliament commenced on May 27, and former Tehran mayor Mohammad Bagher Ghalibaf was appointed as Speaker. Iran exchanged hostages with the US in June, but it will be difficult to repair relations with the US and return to the international community as the country is strengthening ties with US' foe Venezuela, and the IAEA has unanimously passed a resolution requiring Iran's full cooperation with IAEA inspections.

5. Russia: Beset by Challenges including the Covid-19 Crisis and Tougher US Sanctions

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Global Energy Group 2
Strategy Research Unit

On May 29, a fuel tank collapsed at the CHPP-3 thermal power station owned by a subsidiary of Russia's metal major Norilsk Nickel, spilling 21,000 tonnes of diesel oil and polluting surrounding roads and rivers over a wide area. The state oil company Gazpromneft immediately dispatched an emergency rescue team at the request of Energy Minister Novak, and announced plans to cooperate in dealing with the accident. On June 5, Russia's prosecutors said that the accident had been caused by the melting of the permafrost due to global warming which caused the ground and concrete platform to sink, and ordered a thorough inspection of infrastructure facilities located in places with less solid ground. In recent years, there have been concerns that the melting permafrost in the Arctic and Siberia will cause the atmospheric release of carbon dioxide and methane long-trapped underground, as well as landslides and serious damage to infrastructure such as buildings, roads, and oil pipelines. On June 20, a record-high temperature of 38°C was observed in Verkhoyansk, an Arctic city in Sakha Republic in Far East Russia.

On June 4, a bipartisan team of US lawmakers submitted a bill to the Senate which would strengthen US sanctions on the two undersea natural gas pipeline projects, Nord Stream 2 between Russia and Germany and TurkStream between Russia and Turkey. The bill was forwarded to the Senate Foreign Relations Committee. The bill, put forth by Republican Senator Ted Cruz (Texas) and Democratic Senator Jeanne Shaheen (New Hampshire), expands the scope of the US sanctions from undersea pipeline-laying ships and operators selling or leasing them, as specified under the Defense Authorization Act of December 2019, to groups related to the pipeline-laying ships and organizations providing underwriting services, insurance, and re-insurance to the project. The bill will need to pass both chambers and be signed off by President Trump to become law. The Russian government is criticizing this action by the US, saying that it is intended to crush Russia's pipeline projects in order to sell US LNG to Europe at high prices.

On June 6, OPEC Plus consisting of OPEC and non-OPEC oil producers such as Russia held a video conference and agreed to extend the current joint production cut of 9.7 mb/d from the baseline until the end of July. On the 19th, Kirill Dmitriev, CEO of the Russian Direct Investment Fund and a Russian oil negotiator in OPEC Plus, said in an interview with local newspaper RBC Daily that there is no need to extend the agreed steep production cut because the world economy and oil prices are recovering from the damage done by Covid-19, and that the cut should be scaled back at the end of July as planned.

On June 21, President Putin said in an interview on the national TV station that he would not rule out the possibility of running in the next presidential election if the constitutional change allowing a fifth term is approved, but also said that "nothing has been decided yet." Russia is set to hold a national referendum on a constitutional amendment on July 1, but amid the multiple difficulties such as the spread of Covid-19 in the country, world-wide decline in oil and gas demand, serious infrastructure damage caused by global warming, and tougher US sanctions on Russia, President Putin will continue to face many difficult decisions in domestic and foreign affairs. （As of June 26）

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