



IEEJ e-NEWSLETTER

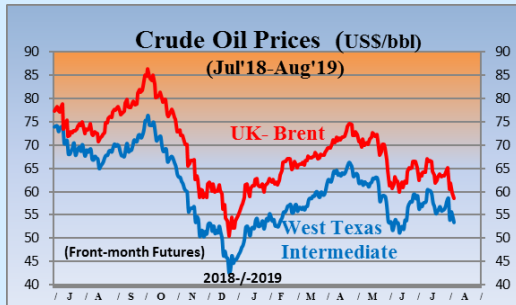
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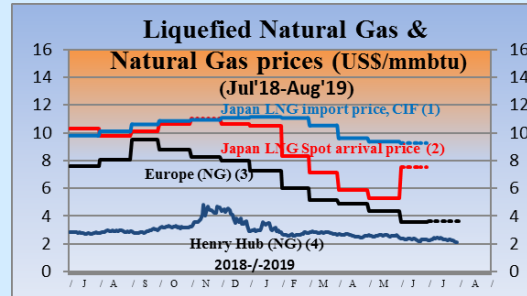
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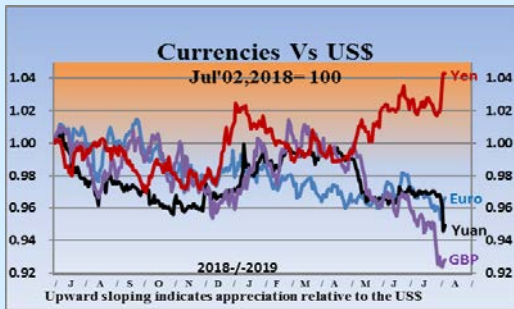
(As of August 6, 2019)



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)
(5) Investing.com and Finance.Yahoo.com



Source: x-rates.com



source: investing.com and finance.yahoo.com

Contents

Summary

【Energy Market and Policy Trends】

1. Economic and Energy Outlook of Japan through FY2020
2. Developments in Nuclear Power
3. Recent Developments in the LNG and Oil Markets
4. Update on Policies Related to Climate Change
5. Update on Renewable Energies

【World Monitoring】

6. Strains Remain in the Persian Gulf



Summary

1. Economic and Energy Outlook of Japan through FY2020

On July 23, the Institute of Energy Economics, Japan released its latest short-term outlook, the Economic and Energy Outlook of Japan through FY2020. The impacts of Nuclear power, oil prices, and the trade war were analyzed as special topics.

2. Developments in Nuclear Power

IAEA Director-General Yukiya Amano has passed away. His contribution to the improvement of nuclear safety is immeasurable. Nuclear new builds are making progress in China, while other countries are also working on SMRs.

3. Recent Developments in the LNG and Oil Markets

Based on the supply-demand balance alone, and without considering the impacts of geopolitical risks, the Brent price is estimated at \$60-70/bbl in the second half of 2019 and 2020.

4. Update on Policies Related to Climate Change

Ahead of the UN Climate Summit in September, the EU failed to agree on setting a net-zero emission target for 2050 while China signaled that it may step up its ambitions.

5. Update on Renewable Energies

The public-private offshore wind power initiative steadily under way in the UK is based on a dual target of expansion within the country and development of the sector. There is much that Japan can learn from it.

6. ME: Strains Remain in the Persian Gulf

As tensions remain in the Persian / Arabian Gulf, US President Trump called for a coalition to escort tankers through the area. The Crown Prince of Saudi Arabia visited Japan for the G20 Summit. The president of Tunisia has passed away.



1. Economic and Energy Outlook of Japan through FY2020

Ryo Eto, Senior Economist
Energy and Economic Analysis Group (EEA)
Energy Data and Modeling Center (EDMC)

Macroeconomy and production activity: Economic growth will slow toward FY2020

The impact of the planned consumption tax raise on the Japanese economy will be smaller compared to the previous raise in FY2014, due in part to various measures being taken. The GDP growth rate will slow to 0.7% in FY2019 and to 0.5% in FY2020 as private investment weakens. Industrial production will become negative (-0.2%) for the first time in four years in FY2019 due in part to the slowing Chinese economy, among other factors. In FY2020, production activity will expand somewhat (+0.3%) with the global economic recovery.

Energy supply and demand: Primary energy supply will increase slightly before declining somewhat. CO₂ will increase for the first time since FY2013

The primary energy supply will increase slightly (+0.3%) in FY2019 as demand for space heating rebounds after the warm winter in the previous fiscal year. It will decrease slightly (-0.3%) in FY2020 as production declines in the material industry and as energy efficiency improves. CO₂ emissions will increase in FY2019 for the first time since FY2013 as nuclear output decreases and energy consumption increases. In FY2020, CO₂ emissions will fall to 1,065 Mt which, according to the statistics, is the lowest level after FY1990. This is a 13.8% reduction from FY2013 levels.

Energy sales: Electricity sales will grow for the second consecutive year, city gas will reach a record high, and fuel oil will decrease for the eighth consecutive year

Electricity sales will increase by 0.6% overall in FY2019 as sales grow for lighting services due to temperature effects and will increase slightly for power services as production recovers in the steel industry. In FY2020, electricity sales will grow by 0.4% overall despite a slight decline in lighting services with the spread of energy-saving equipment, and will grow for power services due to the recovery of production in the machinery sector. City gas sales will rise 1.1% in FY2019 due to the increase in demand for fuel for power generation (for electricity business) for new city gas-fired power plants and a rebound in residential gas sales after the warm winter last year. City gas sales will increase overall in FY2020 driven by significant growth in sales for power generation, setting a record high (+2.4%). Fuel oil sales will fall (-1.1%) despite a rebound from the warm winter last year as the use of oil-fired thermal power decreases, the fuel efficiency of cars improves, and ethylene production decreases. The fall will continue in FY2020 for the eighth consecutive year (-2.1%), falling by one-third from the peak of 246 million kL in FY1999.

Renewable power generation: FIT power generation capacity will reach 78 GW by the end of FY2020

Installed FIT capacity will grow driven by non-residential solar PV at 47 GW. It will produce 151.7 TWh of electricity in FY2020, accounting for 14% of total electricity generation. Meanwhile, the total approved capacity of 90 GW as of December 2018, if all is put into operation, would cause a surcharge of JPY60 trillion during the purchase period, causing electricity tariffs to rise by 3.5 yen/kWh or 15% for residential and 21% for industrial electricity.

Further, the impacts of the following three factors were analyzed: (1) nuclear power, (2) oil prices, and (3) the trade war. The number of nuclear power plants that restart will have a significant impact on Japan's 3E energy policy in terms of the amount of CO₂ emissions and the energy self-sufficiency rate. A rise of US\$15 in oil prices would drag down the Japanese economy by 0.2% and reduce the primary energy supply by 0.4%. If the trade war causes the world's real GDP to shrink by 0.8%, the global primary energy consumption would decrease by 0.7%. Coal will be affected the most, falling by 1.1% due to the fall in China's electricity demand. Consumption will decrease by 0.67 mb/d for oil and by 26.8 billion m³ for natural gas (both declining by 0.7%). The global energy market will continue to be heavily influenced by the trade war.



2. Developments in Nuclear Power

Tomoko Murakami, Senior Economist, Manager
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On June 25, France's Framatome announced that China's Taishan Unit 2 (EPR, 1750 MW) was connected to the power grid (and had started to transmit power). The French company had designed and constructed the power plant, which, if put into commercial operation as scheduled, would be the 46th reactor in commercial operation in China. China is currently ranked third in the world in terms of installed nuclear power capacity but may rise to second alongside France in 2020 as it has around 10 plants currently under construction.

Governments are working on nuclear new builds in Europe as well. On July 8, the Czech government approved plans by state-run power company CEZ to raise funds at a low cost with a government guarantee through its subsidiary Elektrárna Dukovany II to construct two new 1,000 MW plants at its Dukovany Nuclear Power Station. The scheme is similar to federal loan guarantee programs provided to low-carbon power in the US, but it is not yet clear whether it would be feasible. The Czech government said they will prepare for the auction scheduled for 2020 while discussing with the EC whether this investment scheme satisfies the EU market regulations.

Meanwhile, there were developments in some countries regarding small modular reactors (SMRs), which are considered to be a highly promising technology. On July 15, the Canadian government announced they will start an environmental assessment for an SMR (a 15 MW thermal, 5 MW electrical micro modular reactor), which Canada's Global First Power (GFP) is set to construct at the Chalk River site of Canadian Nuclear Laboratories. Comments will be accepted from the public at the construction site and in the neighborhood till mid-August. The timing for licensing and the start of construction and operation are yet to be announced.

On July 19, China National Nuclear Corporation (CNNC) announced they will launch a demonstration reactor construction project for the company's ACP100 SMR in China. ACP100 was the first SMR design to complete the IAEA's Generic Reactor Safety Review in April 2016. Construction is scheduled to start at the end of this year, toward operation starting in May 2025. In the United States, the Nuclear Regulatory Commission is working on the design certification (DC) of NuScale's SMR, NuScale Power Module (NPM). On July 22, NuScale announced they are now in the fourth stage of the six DC stages. NPM aims to obtain a DC in September 2020.

In Argentina, a demonstration SMR called CAREM25 (29 MW) is under construction, and several other countries are also considering adopting the SMR. Even for a mature technology like the light water reactor, it is not uncommon for problems that were not apparent on paper to be found at the construction stage. For the commercial operation of SMRs in the future, it would be useful to analyze why they are not yet in commercial operation despite having existed since the 1980s, and to take necessary measures.

On July 22, the IAEA announced that Director-General Yukiya Amano had died. Mr. Amano made an immeasurable contribution to the global nuclear non-proliferation and the peaceful use of nuclear power. In particular, as a Japanese person, I am proud of the strong leadership demonstrated by Mr. Amano in dealing with the Fukushima Daiichi accident in 2011 and issuing the Action Plan on Nuclear Safety in 2012 and the subsequent accident reports. May his soul rest in peace.



3. Recent Developments in the LNG and Oil Markets

Tetsuo Morikawa, Senior Economist, Manager
Oil Group
Fossil Energies & International Cooperation Unit

A nine-month extension of the joint production cut to the end of March 2020 was agreed at the OPEC meeting on July 1 and the OPEC Plus meeting on the 2nd. The extension itself had already been factored in by the markets and the focus was on its duration and the scale of the cut. However, the amount remained unchanged, causing a sell-off in disappointment. The meeting on July 2 also agreed on the draft Charter of Cooperation between member and non-member states of OPEC. Although the details are not disclosed, the Charter is assumed to have made the joint production cut by OPEC Plus a permanent framework.

According to the International Energy Agency's monthly Oil Market Report released on July 12, demand is expected to be somewhat weak year-on-year for Q4 2019 with an increase of only 0.8 mb/d (0.8%), but is expected to increase by 1.2 mb/d year-on-year on average for 2019 and by 1.4 mb/d (1.4%) for 2020. The economy is currently robust, with stock prices posting record-highs on the New York Stock Exchange in anticipation of U.S. interest rate cuts. However, the market remains wary of a recession as the long- and short-term rates are reversed.

There is significant concern over supplies, particularly in the Middle East. The series of attacks on tankers as well as their seizure by Britain and Iran since May have caused transportation costs to rise due to higher insurance premiums and fuel costs associated with route changes. Although the fall in output in Venezuela, Nigeria, and Algeria may have stopped, there is a possibility of force majeure affecting oil production and exports for Libya where the armed forces are intensifying attacks against the provisional government. Meanwhile, the US Energy Information Administration predicts that US crude output will increase by 1.4 mb/d year-on-year in 2019 and by 0.9 mb/d year-on-year in 2020.

In view of the above, the supply-demand balance may be tight in the second half of 2019 but may rebalance in 2020 as the US and other countries boost production. Accordingly, and without considering factors such as geopolitical risks, the Brent price is estimated at \$60-70/bbl in the second half of 2019 and 2020, and somewhat lower within the same range in 2020.

Meanwhile, in the LNG market, the spot price for Northeast Asia remains at around \$5/MBtu, significantly lower than Japan's average LNG import price (\$9/MBtu as of May). If the current gap between the spot price and the long-term contract price persists or widens, more importers may start opting for more flexible and competitive means of purchasing. On July 9, Workshop 5 of the Japan-EU LNG Workshop Series was held at the IEEJ, where legal experts and buyers and sellers of LNG discussed the destination clause in LNG trade as the main topic. There seems to be progress in the easing and abolition of destination clauses for new contracts since 2017 when the Fair Trade Commission expressed its view that the clause is likely to violate Japan's Competition Laws. Going forward, it is necessary to ease and abolish such clauses in existing contracts while working with the competition authorities of other Asian LNG importers to abolish the clause in the entire region, aiming to enhance the liquidity of the LNG market.



4. Update on Policies Related to Climate Change

Takahiko Tagami, Senior Coordinator, Manager
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Ahead of the UN Climate Summit in September, the EU and China made their moves related to demonstrating their enhanced ambition in addressing climate change.

On June 20, the European Council debated the proposal submitted by the European Commission to slash emissions in the EU to net zero by 2050, but failed to reach agreement due to opposition by Poland, Hungary, Estonia, and the Czech Republic. This eliminates the possibility of the EU presenting a net-zero target for 2050 at the Climate Summit in September. Individually, however, EU member states have taken steps, with the United Kingdom passing legislation to commit the country to net-zero emissions by 2050 in the House of Commons (the lower house) on June 24 and the House of Lords (the upper house) on June 26. In France, meanwhile, the National Assembly adopted a bill on June 28 to cut its emissions and go carbon-neutral by 2050.

In the UK, the Committee on Climate Change showed in a report issued in May scenarios for UK net-zero GHGs in 2050, including (1) resource and energy efficiency, (2) reduced consumption of beef, lamb and dairy products, (3) extensive electrification of transport and heating (battery electric cars and vans: 100%, low-carbon heat in existing homes: 90%, and low-carbon heat in industry: 85%), (4) wider hydrogen roll-out for industrial processes, heavy goods vehicles, and for electricity in peak periods (electric and hydrogen heavy goods vehicles: 91%), (5) carbon capture and storage (100% in industry), and (6) shifting a fifth of the country's agricultural land to tree planting, energy crops and peatland restoration. In addition to these measures, it would require technologies to remove CO₂ from the atmosphere and a major supply of carbon-neutral synthetic fuels. In a letter to the prime minister, Chancellor of the Exchequer Philip Hammond stated that the 2050 net-zero target would cost GBP 1 trillion, mean less money for schools, hospitals, and the police forces, and lead to industries becoming economically uncompetitive. It will be interesting to see what actions the UK and France take to achieve their net-zero targets, how much it will cost, and whether the cost burden will be accepted.

On June 29, China's State Councillor and Foreign Minister Wang Yi vowed, alongside the French Foreign Minister Jean-Yves Le Drian on the margins of the G20 Summit in Osaka, that China will "update" its nationally determined contribution under the Paris Agreement reflecting its "highest possible ambition" and will publish its long-term strategy. On June 2, at the China Council for International Cooperation on Environment and Development consisting of ministers inside and outside China, Zou Ji, former Deputy Director of the National Center for Climate Change Strategy and International Cooperation (NCSC), suggested that China should (1) expand the scope of the target to include GHGs as well as CO₂, (2) make efforts to achieve peaking of GHG emissions by 2025, (3) consider lowering CO₂ emission intensity by 70-75% from 2005 levels by 2030, (4) increase the share of non-fossil energies to 25% by 2030, (5) reduce GHGs by 70% from 2005 levels by 2050 and achieve carbon-neutrality by 2060 or 2070, and (6) adopt absolute CO₂ emission indicators that are based on the current emissions intensity indicators. On June 25, China submitted its latest emissions data of 2014 and trends of future CO₂ emissions to the UNFCCC.



5. Update on Renewable Energies

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In June, Britain's Offshore Wind Industry Council (OWIC) launched the Offshore Wind Growth Partnership (OWGP) program. The program provides support for 650 UK manufacturers and suppliers of offshore power plant components and maintenance companies to strengthen the domestic supply chain, enter global markets, and develop new technologies and services. It also encourages entries from other industries to increase competition. The program will receive GBP 100 million from industry and GBP 250 million from the government in funds in the next 10 years.

The launch of the OWGP program builds on the Offshore Wind Sector Deal established in March. Sector Deals were introduced by the British government in 2017 as a new industrial strategy in which the government promotes deregulation and supports exports in government-designated focus areas in response to requests from industry seeking technological innovation and expansion of exports. So far, other than offshore wind power, areas such as AI, bioscience, and aerospace have been selected.

The goals of the Offshore Wind Sector Deal include expanding the current domestic offshore wind capacity of 8 GW to 30 GW, raising the domestic procurement rate to 60% from 48%, increasing jobs to 27,000 from 7,200, and boosting offshore wind-related exports five-fold (to GBP 2.6 billion).

Thus, the UK government is accelerating efforts to develop the offshore wind sector as a potential growth area, aiming not only to expand the domestic market but also the global market as part of its industrial policy. The ambition is backed by the solid track record of the UK, which accounted for 36% of the global offshore wind capacity of 23 GW in 2018 and has posted annual growth of 1.5 GW for the past two years.

Meanwhile, in Japan, the Bill for the Act of Promoting Utilization of Sea Areas in Development of Power Generation Facilities Using Maritime Renewable Energy was enacted in April this year. This has encouraged private companies, which expect the law to facilitate the offshore wind power business mainly in the promotion zones. At the same time, a joint meeting of the METI's offshore wind power working group and the MLIT's subcommittee for promoting offshore wind power has suggested that rules on using the promotion zones should be set focusing on economic efficiency and economic ripple effects, raising hopes for progress in offshore wind power going forward.

However, in the offshore wind power business, it is essential for a sector to take charge of the business with long-term responsibility from construction to maintenance after the start of operation. As shown by the efforts in the UK, as well as the establishment of development promotion zones, Japan needs to implement policies to develop the sector if it is to expand offshore wind power in the country.



6. ME: Strains Remain in the Persian Gulf

Shuji Hosaka, Senior Research Fellow
Assistant Director
JIME Center

Tensions in the Persian Gulf triggered by an attack on a tanker in the Bay of Oman show no sign of easing. Indeed, tensions are increasing after the police in the British territory of Gibraltar seized an Iranian oil tanker, Iran impounded a British tanker in the Persian Gulf, the US Navy announced that its amphibious assault ship had destroyed an Iranian drone in the Persian Gulf, and Iran announced the arrest of 17 Iranian “spies” for cooperating with the CIA of the United States.

As tensions escalate, the United States revealed plans to form a coalition to escort tankers in the Persian / Arabian Gulf and around the Bab el-Mandeb Strait, and Japan is under pressure to respond. Iran is urging Japan and others not to join the coalition.

In Saudi Arabia, Crown Prince Muhammad bin Salman, the country’s de facto supreme leader, visited South Korea and signed an economic cooperation pact worth USD 8.3 billion. The Crown Prince then visited Osaka to attend the G20 Summit. Saudi Arabia established the “Saudi-Japan Vision 2030 2.0” with Japan and signed many memorandums of cooperation. In Osaka, the Crown Prince met with the Japanese Emperor and had meetings with Prime Minister Shinzo Abe and Makoto Gonokami, President of the University of Tokyo, among others, as well as President Donald Trump and leaders of other countries.

Immediately before the G20 Summit, a UN special rapporteur delivered a report on the murder of the Saudi journalist in October last year, assessed that the incident was an extrajudicial execution by a nation, stated that there is credible evidence that the Saudi Crown Prince MbS and other senior officials should be investigated for being personally responsible for the killing, and recommended that Saudi Arabia offer a public apology to the victim’s family, release political prisoners, implement measures to prevent recurrence, stop the ongoing trial, and cooperate with additional UN-led investigations. Saudi Arabia rebutted the claims, saying that the report contains inconsistencies and unfounded allegations.

Meanwhile, the UAE, which is fighting the Yemeni war alongside Saudi Arabia, announced that it is relocating and downsizing its forces in Yemen. Some associate this development with the fact that the UAE, unlike Saudi Arabia, has close economic ties with Iran. Sheikh Tamim bin Hamad Al Thani of Qatar, who is currently at odds with the UAE and Saudi Arabia, met with President Trump in Washington D.C. on July 9 and signed purchase contracts for aircraft and weapons worth several billion dollars, boosting President Trump’s impression of the sheikh.

In North Africa, Tunisian President Beji Caid Essebsi died on July 25 at age 92. Elected President after “the Arab Spring” in the country’s first democratic election, he was hospitalized at the end of June due to ill health, was once discharged, but was then re-hospitalized in Tunis in the night of July 24 as his condition worsened. Prime Minister Youssef Chahed will act as interim president until the next presidential election.



Past IEEJ Events

Energy and Economy Indicators of Japan

IEEJ Homepage Top

Back Numbers of *IEEJ e-Newsletter*

Back Numbers of *IEEJ Newsletter* (Original Japanese Version - Members Only)



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