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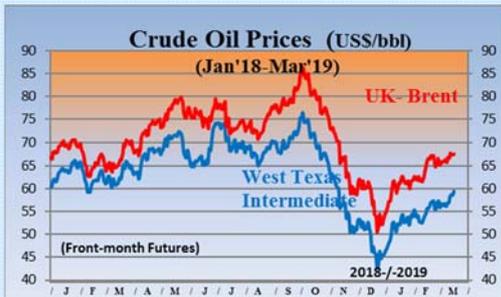
No. 157

(Based on Japanese No. 186)

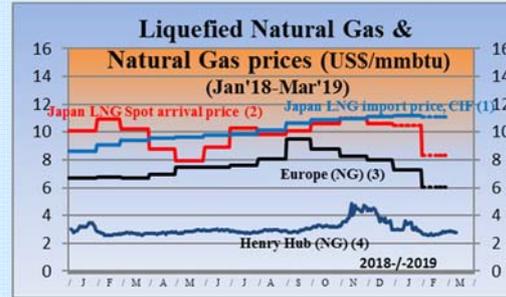
Published: March 21, 2019

The Institute of Energy Economics, Japan

(As of March 18, 2019)



Source: DOE-EIA, Financial Times, NASDAQ



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



Source: x-rates.com



Source: Financial Times

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Summary

【World Monitoring】

1. US: Escalating Battle between the Trump Administration and California

The battle between the Trump Administration and the state of California has resumed, this time over the auto fuel regulation and the high-speed rail project, and fiercer than ever.

2. EU: Provisional Agreement on the Revised Gas Directive

A provisional agreement was reached on the amendment to the EU Gas Directive. The proposed amendment aims to improve the existing Gas Directive by ensuring that the principles of EU energy legislation apply to all gas pipelines to and from third countries.

3. China: Progress in Switching to NEVs and Renewable Energy

In 2018, sales of NEVs increased to 1.26 million units while the percentage of renewable electricity rose to 26.7% (including wind power and solar PV at 7.7% combined). The switch to NEVs and renewables is likely to continue steadily.

4. Russia: US Congress Tightens Economic Sanctions against Russia

Russia has a surplus budget for 2019, the first in 10 years, but bipartisan US Senators submitted a bill that would impose additional sanctions against Russia, to further squeeze the Russian oil and gas sectors.



1. US: Escalating Battle between the Trump Administration and California

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The battle between the Trump Administration and the state of California is escalating. The state has so far opposed all of the Administration's controversial policies, including the ban on Muslims entering the US, the ban on LGBT (sexual minorities) in the military, and the elimination of environmental rules. This time, however, the conflict is more direct. Through its policies, the Administration not only aims to "discredit the Obama Administration," as is widely believed, but also to politically condemn the policies of liberals and their capacity to implement them, and execute the federal authority inscribed in law to counter state authority in the run up to the 2020 presidential election.

In August 2018, the Trump Administration released revisions to the greenhouse gas emission standards and corporate average fuel economy standards for cars and light trucks of model years 2017-25, freezing the standards for 2020 and lowering those for 2021 and beyond, claiming that the standards are technically infeasible and cost too much. The standards had been established by the Obama Administration's Department of Transportation (DOT) and Environmental Protection Agency (EPA). The Trump Administration is also proposing revoking California's special authority which allows the state to impose standards that are more stringent than the federal standards based on the Clean Air Act. The authority, called "waiver," had been approved by the Obama EPA and forms the basis of the ZEV regulation formulated by California and adopted selectively by 13 states. The states introducing the ZEV regulation together account for about 40% of the nationwide auto market, meaning that the US auto market is divided between the federal fuel standard and the ZEV standard.

Since the proposed revisions were announced, the Trump Administration's DOT and EPA have been in talks with the California Air Resources Board (CARB), urging them to review the ZEV regulation. However, the White House announced that the talks had been ended as there was no prospect of reaching an agreement. California's waiver application was rejected in the past by the W. Bush Administration citing a lack of grounds for the state to set its own standards, before the decision was reversed by Obama's EPA. By law, Trump's EPA could re-assess the waiver's conformity with the Clean Air Act and revoke it unilaterally. If this were to happen, California and the ZEV states would likely file a lawsuit against the Administration, but the fact that the auto industry is unlikely to achieve the standard by selling ZEV-compliant cars provides a strong reason for the Administration to support the decision to revoke the waiver.

Another conflict is over the high-speed rail project. In November 2008, California approved a high-speed rail project by referendum, to alleviate air pollution and reduce GHG emissions by reducing the use of cars. The project was to be funded with \$2.34 billion in federal grants extended under the Obama Administration based on the American Recovery and Reinvestment Act, in addition to financing with state bonds. However, the Trump Administration recently called the California High Speed Rail Authority's project a failure, and decided to look into canceling the grant and recoup the funds already spent, citing a scaling-back of the project due to delays and cost overruns, and differences between the announcement and the actual situation. Conservative groups advocating tax cuts and small government welcomes this decision as an effort to take back "hard-earned tax money" from a wasteful project. Republican politicians are accusing mismanagement of the project under Democratic governorship.

Some criticize the Trump Administration for attacking California with political motives, but the "cost" of such politicizing must eventually be shouldered by consumers. Meanwhile, oil and gas majors whose investments have been stymied by environmental lawsuits by the state and residents are hoping for a strong federal government and intervention by the Administration. The battle between federal and state authority in the election will be interesting to watch. (as of 02/28/2019)



2. EU: Provisional Agreement on the Revised Gas Directive

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On February 12, a provisional agreement was reached among the negotiators of the European Parliament, the EU Council, and the European Commission on the proposed amendment to the EU Gas Directive. The proposed amendment, announced by the European Commission in November 2017, aims to improve the existing Gas Directive (2009/73/EC) by ensuring that the principles of EU energy legislation (third-party access, tariff regulation, ownership unbundling and transparency) apply to all gas pipelines to and from third countries. Exceptions are only possible under strict procedures in which the Commission plays a decisive role. Following this provisional political agreement, the text of the Directive will be prepared in all EU languages and will have to be formally approved by the European Parliament and the Council.

The impact of this amendment is particularly important for the Nord Stream 2 gas pipeline. The pipeline is scheduled to start operation at the end of 2019, and if the Revised Gas Directive goes into effect, Nord Stream 2 AG, as a subsidiary of Russia's Gazprom, is expected to request Germany to file for exemption from the new rule to avert the third-party access rule. The German and Russian governments have so far stressed that the project is purely economic and has no political purpose, to soften the strong opposition of EU member states against Nord Stream 2, particularly in Eastern Europe. However, since France, which has always stood by Germany, declared its support for the amendment in early February, Germany is becoming increasingly isolated on the pipeline issue. Europe's gas imports are constantly increasing as gas demand remains relatively steady while gas production in the Eurozone continues to decline. Whether Nord Stream 2 will be exempted from the new Directive will be the focus going forward.

Even though the United States is a strong potential supplier for diversifying the EU's gas sources, the EU continues to oppose the US over restarting sanctions against Iran. On January 31, France, Germany, and Britain officially established a special-purpose vehicle (SPV) for trading with Iran without going through the dollar. The aim of this SPV is to continue to facilitate legitimate trade between European countries and Iran even after the US restarts sanctions against Iran. The new organization is called the Instrument for Supporting Trade Exchanges (INSTEX) and is registered in France. INSTEX has said that it will initially focus on pharmaceuticals, medical equipment, and agricultural produce, which are essential for the Iranian people.

In an interesting move, the European Commission began consultation on enhancing the international role of the euro in the energy area. The effort is based on the policy document of the European Commission adopted in December 2018. According to the document, though the EU is the world's largest energy importer with an average annual import value of approx. 300 billion euros over the past five years, around 85% of the imports are paid for in US dollars. The European Commission believes that enhancing the role of the euro in energy trade and investment will support the Energy Union's objective of keeping Europe's energy supply safe and economically efficient. A hearing will be held until the end of March. The possible impact on energy-related transactions, which are now mostly in dollars, must be monitored.



3. China: Progress in Switching to NEVs and Renewable Energy

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To achieve sustainable development and build a low-carbon society, China is pursuing two shifts simultaneously: one from gas-fueled cars to electricity-driven new energy vehicles (NEVs), and the other from coal-fired power to renewable power sources. Progress was made in both areas even in 2018 amid the US-China trade war.

According to the China Association of Automobile Manufacturers (CAAM), automobile production in 2018 was 27.81 million units, down 4.2% year-on-year, with sales of 28.08 million units, down 2.8%. The market shrank from the previous year for the first time in 28 years due partly to the trade war. Meanwhile, production of EVs and other NEVs increased by 59.9% to 1.27 million units and sales grew by 61.7% to 1.26 million units (including 984,000 EVs, 271,000 PHEVs, and 1,527 FCVs), making China the first country to reach one million units in a year. The percentage of NEVs in total car sales increased by 1.8 percentage points to 4.5%. Behind this rapid growth of NEVs despite a 30% cut in purchase subsidies from last year was the restriction imposed on gasoline vehicles, which limited the days they can be driven on the roads, and the number of new number plates issued. More important, however, is the improved usability of NEVs, especially the rapid growth in charging infrastructure (778,000 chargers as of 2018) and increase in cruising distance (300 km or more for major vehicles, catalogue performance-basis). Also significant was the effect of the regulations and credit trading system for expanding NEVs, which are due to be introduced in 2019. The system requires auto manufacturers that cannot meet their targets to either purchase credits or be subject to restrictions on the sale of new products, forcing them to focus on expanding NEVs as the best available option.

Meanwhile, according to the China Electricity Council (CEC) and the National Energy Administration, in 2018, power generation capacity increased by 120 GW (6.5%) from the previous year to 1,900 GW. This includes 174 GW of solar PV, up 44.26 GW (34%), 184 GW of wind power, up 20.59 GW (12.4%), 352 GW of hydropower, up 8.54 GW (2.5%), and 17.81 GW of biomass power, up 3.05 GW (20.7%). Renewable power sources together accounted for 38.3% of all power sources on a capacity basis, up 1.7 points, and 26.7% on an output basis, up 0.2% (of which wind accounts for 5.2% and solar PV for 2.5%). On the other hand, nuclear power increased to 44.66 GW, up 8.84 GW (24.7%) but accounted for only 2.4% of all power sources on a capacity basis and 4.2% on an output basis. The number of construction permits for nuclear power plants was zero for the third consecutive year and was also zero for new builds for the second consecutive year, due to mounting concern for safety and falling cost competitiveness. Coal-fired thermal power increased to 1,010 GW, up 29.03 GW (3%), but its percentage of capacity dropped 2.2 points to 53%. Decarbonization of the generation mix is under way driven by renewable power sources.

Despite being one of the sticking points in the ongoing US-China trade negotiations, “Made in China 2025,” the country’s industrial development strategy which includes NEVs and renewable energy, is a non-negotiable policy of the country. China will continue to shift steadily to NEVs and renewable energies, regardless of whether the negotiations succeed or fail. CAAM predicts that the sales of NEVs will surpass 1.6 million units in 2019, while others estimate that the number will reach around 1.8 million with the effect of the regulations and credit trading system, and the rapidly improving convenience of NEVs. Regarding power source development, CEC predicts that renewable energies will increase and account for 39.5% of all power sources, with hydropower increasing to 360 GW, wind power to 210 GW, solar PV to 200 GW, and biomass power to 21.0 GW. I predict that solar PV may increase even more due to the percentage regulation on renewable electricity consumption and the introduction of the Green Certificate Trading System.



4. Russia: US Congress Tightens Economic Sanctions against Russia

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With the price of Brent oil hovering in the \$60 range, the government budget seems to reflect Russia's growing confidence. In FY2019, Russia expects revenue of RUB 19.9693 trillion (\$300.5 billion) and expenditure of RUB 18.0372 trillion (\$271.5 billion), generating a surplus of RUB 1.932 trillion (\$29.1 billion). This is the first surplus initial budget in 10 years since FY2009. Oil and gas account for 41.6% of the revenue at RUB 8.2982 trillion (\$124.9 billion). The predicted oil price (the average Urals oil price), which serves as the base for budgeting, is \$63.4/bbl, up from \$40/bbl from the previous year (the actual price for 2018 was \$69.9).

However, Russia's rosy prospects may be affected significantly by the stiff new sanctions being drawn up in Congress in the US. On February 13, a bipartisan group of US Senators submitted the Defending American Security from Kremlin Aggression Act (DASKA) of 2019, which aims to introduce new sanctions against Russia. The bill aims to impose additional sanctions on Russia over its meddling in US elections and aggression against Ukraine. It sets tougher sanctions in the energy area compared to DASKA-2018, which was submitted in 2018 but not adopted.

Targets of the sanctions are: (1) Russian banks that support efforts to interfere in foreign elections, (2) the country's cyber sector, (3) new sovereign debt, (4) individuals who engage in illicit and corrupt activities directly or indirectly on behalf of President Putin, (5) the ship-building sector, (6) the oil and gas sectors (including individuals or groups supporting LNG or other overseas energy projects, or domestic oil-related projects). Oil-related projects are thought to include "repair work" and "new project activities" but not "maintenance," but as was the case with Countering America's Adversaries Through Sanctions Act (CAATSA) of August 2017, detailed definitions have not been revealed. Mr. R. Nephew of the Center on Global Energy Policy, Columbia University points out that Congress may vote on the bill around the end of March 2019 at the earliest and by early August before the August recess at the latest, following deliberations in the Senate.

On February 15, Russian Finance Minister Anton Siluanov said the US bill introducing new sanctions against Russia aims to sabotage the Arctic LNG 2 project, and stressed that the country can implement the project on its own using its sovereign wealth fund as an option. According to the Finance Minister, the fund is set to surpass 7% of Russia's GDP in 2019. Arctic LNG is an LNG export project on the Gydan Peninsula in Northern Russia led by major private gas company Novatek. Set to start production in 2022 to 2023, the project is estimated to cost \$35 billion to develop. Various foreign companies including Germany's Siemens, Italy's Nuovo Pignone and Saipem, and Turkey's Renaissance Services have signed supply and construction contracts for the project. If DASKA becomes law, it may have a massive impact as did the sanctions on Russia's aluminum giant Rusal last year. Deliberations on the bill must be closely monitored. (as of 2/28/2019)



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