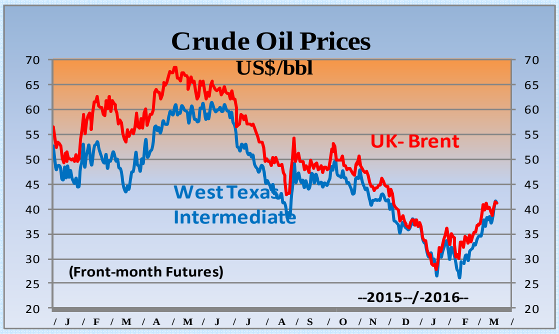
IEEJ e-NEWSLETTER

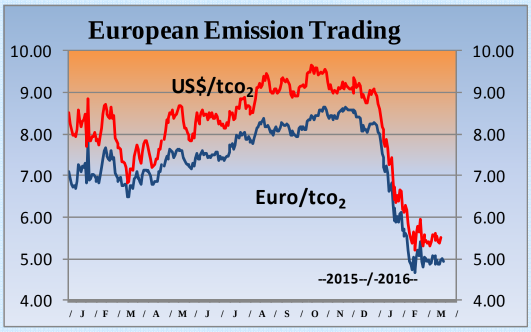
No. 82

(Based on Japanese No. 150)
Published: March 23, 2016
The Institute of Energy Economics, Japan

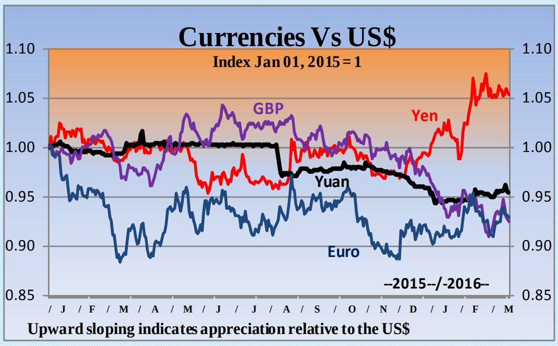
(As of March 18, 2016)



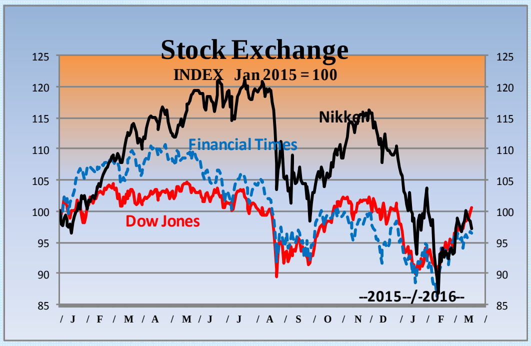
Source: Financial Times



Sources: European Energy Exchange AG



Source: x-rates.com



Source: Financial Times

Contents

Summary

【World Monitoring】

1. US: Gulf Oil Production Continues to Increase amid Low Oil Prices

Despite the tough situation of low oil prices and higher safety costs, oil production in the Gulf of Mexico is expanding due to the development investment decisions made during the period of high oil prices, to reach a record high of 1.91 million B/D at the end of 2017.

2. EU: EU-wide Policies and Accepting New Members

The European Commission unveiled a sustainable energy security package. The European Council agreed on reforms to prevent Britain's exit from the EU. The future of the EU's expansionary policy must be closely monitored.

3. China: Progress in Introduction of Next-Generation Vehicles and Medium- to Long-Term Outlook

The systems and infrastructure needed for expanding next-generation vehicles are being established. As comprehensive measures, the introduction of Corporate Average Fuel Consumption regulations and the corresponding credit trading system is being considered.

4. ME: Syrian Civil War Grows in Complexity and Chaos

It is not clear whether the peace talks on Syria will yield result shortly. The political and economic environment is worsening for Saudi Arabia which continues to intervene in Yemen. In the elections in Iran, ousting the hard line conservatives from the parliament was considered to be the key.

5. Russia: Further Financial Dependence on the Oil Industry

Amid the low oil prices, conflict is growing between the Finance Ministry, which wants to secure financial resources by raising taxes on the oil industry, and the Energy Ministry and the Natural Resources Ministry, which oppose the idea and want to promote upstream development. The developments must be closely monitored from economic and oil market perspectives.

1. US: Gulf Oil Production Continues to Increase amid Low Oil Prices

Ayako Sugino, Senior Researcher
Coal & Gas Subunit
Fossil Fuels & Electric Power Industry Unit

In February 2016, the DoE announced its view that oil production will increase in the Gulf of Mexico to a record 1.91 million barrels/day by the end of 2017. As the output of shale oil increased from 2011, the percentage of Gulf oil in domestic oil production dropped from 29% in 2009 to 16% in 2014, and public attention turned to shale. The increase in Gulf oil output under the current low oil prices may be one reason for the further easing of supply and demand and hence a downside.

Oil output in the Gulf of Mexico fluctuated around 1.2 million barrels/day from 2005 to 2008 due to hurricane damage each year. After reaching a record high of 1.56 million barrels/day in 2009, output continued to decline from 2010. Output then started to rise again in the latter half of 2013, and is continuing to rise amid low oil prices. Meanwhile, after a boom in the early 2000s due to high gas prices, drilling has remained low in the Gulf for gas fields since 2008 as upstream companies shifted to land-based gas fields. Regarding oil fields, however, the number of operating rigs began to increase after the lull from 2006 to 2009, and drilling boomed, with approximately 20 rigs operating between the second half of 2011 to the first half of 2012 and 40 to 45 rigs from the second half of 2013 to early spring of 2015. The number then fell slightly, but has remained at around 20-25 rigs since the second half of 2015, similar to when oil prices were at $100/barrel. The prospect of further increases is based on the oil fields discovered mainly between 2009 and 2015 that are starting to enter the production phase.

During the above period, the oil spill from the Macondo exploration well in the Gulf of Mexico in April 2010 had various consequences. The Interior Department holds a bidding for gulf mining lots based on a five-year plan. The accident occurred in 2007-2012 when the lease plan for 2010-2015 was being considered in line with the policy of the Obama administration. Following the accident, it was necessary to determine the environmental impact of the oil spill, conduct an environmental impact assessment, and consider higher safety standards, resulting in a delay in planning. The current plan, 2012-2017, was not released until December 2010. In the process, the bid for mining lots planned for 2010 was cancelled.

Further, in August 2012, the Interior Department's Bureau of Safety and Environmental Enforcement promulgated safety requirements for offshore oil and gas drilling based on the Macondo experience, newly requiring a well design procedure and an operation test of blowout prevention devices, and a third-party certification of these operating procedures. The safety requirements have been modified since then, and in March 2016, additional rules will be promulgated. These tougher safety requirements have increased the cost of oil development in the Gulf and the cost burden on the companies that have the expertise and funds to develop as operators. The recent low oil prices exacerbated the situation, and in May 2015, Conoco Phillips announced plans to downsize its exploration business in the Gulf and sell off its assets. Despite such circumstances, Gulf oil production has been growing steadily, thanks to the start of production of development projects for which investment decisions were made during the recent period of high oil prices.

Since 2011, the fluctuations in oil production in the US have been determined by shale output. In the next few years, the price durability of American oil production will need to be determined based on two factors with different time-sensitivities: the production cut of shale oil and the production hike in the Gulf.

2. EU: EU-wide Policies and Accepting New Members

Kei Shimogori, Researcher
Nuclear Energy Group, Strategy Research Unit

In February 2016, the European Commission unveiled a sustainable energy security package. The package consists of four decisions and strategies for strengthening the security of the EU's natural gas supply.

(1) Security of gas supply regulation: The European Commission suggested shifting the approach from the national level to regional level when designing supply security measures. Further, the proposal introduces a solidarity principle among Member States to ensure supplies to households and essential social services, such as homes and healthcare, in case of a severe crisis.

(2) A decision on Intergovernmental Agreements in energy: The EU introduces an ex-ante compatibility check by the Commission to ensure that intergovernmental agreements signed by its Member States with third countries and relevant to EU gas security are more transparent and fully comply with EU law.

(3) Liquefied natural gas (LNG) and gas storage strategy: The Commission introduces a liquefied natural gas (LNG) strategy that will improve access of all Member States to LNG as an alternative source of gas. The central elements of this strategy are building the strategic infrastructure to complete the internal energy market and identifying the necessary projects that will contribute to diversifying the supply sources of the Member States.

(4) Heating and cooling strategy: The proposed strategy focuses on reducing the consumption of energy for heating and cooling buildings such as homes, offices, hospitals, and schools, as well as industry and food refrigeration in the overall supply chain, and promoting the use of renewable energies in these areas. Further, the power system is better integrated with regional air-conditioning systems.

The Commission is requesting the European Parliament and the Council of the European Union to urgently pass this bill, thus taking a step toward realizing the "Energy Union Strategy".

Meanwhile, the European Council meeting held on February 18 and 19 discussed Britain's possible exit from the EU. Unanimous agreement was reached in the four areas of competitiveness, economic governance, sovereignty, and social welfare benefits, in which Britain was demanding reforms, and the Member States made concessionary gestures to prevent Brexit. Based on this result, Prime Minister Cameron announced that a referendum will be held on June 23 on whether to stay in or leave the EU, and that he will persuade his ministers and the public that Britain should stay. In six polls from February 5 to 20, an average of 46% answered Yes and 54% answered No to Brexit. Thus, the result of the referendum hangs in the balance.

Prior to the European Council meeting, on February 15, Bosnia Herzegovina filed an application to join the EU. Among the former Yugoslav states, Slovenia joined the EU in 2004 and Croatia in 2013, with three states having filed applications and obtained the position of candidate Members. For East European countries, EU membership offers "reinstatement in Europe" and stable economic growth but also requires the rapid adoption of EU law as domestic law. Further, the EU's financial assistance is not unlimited. The Member States appear to have differing attitudes toward EU-wide policies, so the future of the EU's expansionary policy must be closely monitored.

3. China: Progress in Introduction of Next-Generation Vehicles and Medium- to Long-Term Outlook

Li Zhidong, Visiting Researcher
Professor at Graduate School, Nagaoka University of Technology

According to the China Association of Automobile Manufacturers, the output of next-generation vehicles, including electric and fuel cell vehicles, increased 3.3-fold to 340,471 units in 2015, with sales of 331,092 units. The projection at the beginning of the year of 150 thousand to 200 thousand units was far exceeded, but cumulative output and sales remained at 464 thousand and 451 thousand units, not quite reaching the target of 500 thousand units. The perceived high cost of these vehicles has more or less evaporated thanks to support including central and regional governmental subsidies and purchase tax exemption. Nevertheless, introduction has not advanced as planned probably due to insufficient charging infrastructure and the auto industry's inability to meet consumer demand for longer cruising distance, shorter charging time, and better safety.

The construction of charging infrastructure is expected to accelerate: the investment environment has improved thanks to the release of the Guiding Opinions on Propelling the Construction of Electric Vehicle Charging Infrastructure in October 2015, which sets construction targets and comprehensive measures, as well as the Guidelines to Promote Electric Vehicle Charging Infrastructure (2015-2020), which sets the construction plan (see the November 2015 issue of this Newsletter), and the establishment of a national standard for chargers in December.

The auto industry is expected to face stricter environmental and decarbonization requirements. In 2016, the China IV standard (equivalent to EURO4) will come into effect to regulate auto fuel consumption, improving the Corporate Average Fuel Consumption (CAFC) to 5 liters/100 km in 2020. In the long term, the target will be raised to 4 liters by 2025 and 3.2 liters by 2030. Further, a target was set for introducing next-generation vehicles: 5 million zero emission vehicles (ZEV), or at least 5% of annual sales of all vehicles, by 2020. The long-term plan is to achieve at least 20% of all sales by 2025 and annual sales of at least 10 million units by 2030.

To achieve these medium- to long-term targets, the market mechanism is crucial. At the China EVl00[1] forum held in January, Finance Minister Lou Jiwei and Industry and Information Technology Vice-Minister Xin Guobin both announced the abolition of subsidies from 2021 and the introduction of CAFC regulations and ZEV regulations and the corresponding credit trading system, drawing on the efforts of California. CAFC regulations will be applied to companies and will use CAFC-Credits trading. A company earns resalable credits with a three-year expiry limit if it surpasses in meeting the regulatory standards, and if it fails to meet them, it either pays a fine or must buy credits from the market. This will encourage the introduction not only of existing high-efficiency, low-emission vehicles but also next-generation vehicles that can earn more credits. Similarly, ZEV regulations and the ZEV-Credits trading system are also expected to expand the introduction of next-generation vehicles. According to government sources, the procedure for managing CAFC may be established as early as within this year to specify CAFC regulations, though it is still under consideration, and ZEV regulations will be introduced nationwide from 2021 at the latest.

For Japanese auto makers which are world-leaders in the area of low fuel consumption and next-generation vehicles, whether they can maintain and increase their technological advantage will be the key for survival. The companies must keep a close watch on China's policies and market trends in developing and executing their comprehensive strategies.

[1] The China EV100 is an industry-academia-government organization advised by minister-level government officials, established in May 2014 to strategically promote the expansion of next-generation vehicles and to foster the industry. It is influential in planning, policy-making, and formulating strategies related to electric vehicles.

4. ME: Syrian Civil War Grows in Complexity and Chaos

Koichiro Tanaka, Managing Director &
President of JIME Center

The peace talks over war-tom Syria have made little substantive progress due to the different intentions of the disparate participants and countries supporting them. At present, Saudi Arabia, which has deployed military aircrafts at Turkey's Incirlik Air Base, is intent on sending troops into Syria, under certain conditions, with its Gulf Cooperation Council ally UAE and Turkey which is wary of Kurdish organizations' gaining influence. The conflict over the war in Syria is becoming ever more complex.

Meanwhile, an agreement to cease hostile actions between Assad's forces and anti-government forces brokered by the US and Russia, has displayed positive effect on the ground by significantly reducing civilian human casualties. It is imperative that the cessation of hostilities remain in force while the peace talks are conducted between belligerent parties. Since the commencement of the 'ceasefire' on February 27, both the Americans and Russians have announced violations and breaches to the agreement, but, in general terms, warring factions, with the exception of ISIS/ISIL, Nusra Front, and other extremists groups, remain to be in compliance with the agreement. Now that President Putin has announced the withdrawal of Russian forces from Syria, anti-Assad militias could negotiate with better confidence under an improved environment. Thus, peace talks may have a better chance of succeeding.

In Yemen, Saudi Arabia is stepping up air-strikes and sending ground troops despite its financial deficits, but has not reached its expected goals. On the contrary, Houthi militants continue crossing into Saudi territory along the Saudi-Yemeni border and scud missiles target military installments. In fact, Saudi forces have not managed to remove the threat of incursion, let alone recapture the capital Sana'a and reinstate the Hadi transitional government. As ground operations fall behind, Saudi Arabia is coming under increasing criticism in Europe and the US for indiscriminately attacking both enemy forces and civilians, and the European Parliament has therefore advised countries to ban weapons exports to Saudi Arabia, seriously damaging its image. The sudden announcement of secret negotiations between the Kingdom and delegates from the Houthi militants has caught media attention, but the talks have yet to prove its usefulness.

have begun, two national elections were held on February 26. In the parliamentary election, pro-government candidates overwhelmed the hard line conservatives. Former President Rafsanjani's campaign for centrist President Rouhani and his pragmatic policy has resulted in weakening the solidarity among the conservatives, which enjoyed majority in the parliament for years, while in the election of the Assembly of Experts that appoints and dismisses the Supreme Leader, Ayatollah Khamenei strongly warned against the spreading influence of the scheming US. Iran welcomed the agreement between Saudi Arabia, Russia and others to curb oil production, but maintains its position that Iran is an exception. As ISIS/ISIL intensified attacks on Libyan oil facilities, the US forces conducted air-strikes after a long lull, destroying the group's base near the Tunisian border.

5. Russia: Further Financial Dependence on the Oil Industry

Sanae Kurita, Senior Researcher
Global Energy Group 2, Strategy Research Unit

Russia's oil and gas output and export data for 2015 were released. Crude oil output (including gas condensate) increased 1.4% year-on-year to 534.08 million tonnes (10.73 million barrels/day), and gas output rose 1.6% year-on-year to 548 billion m^3. By region, the Sakhalin region, which includes the Arkutun Dagi field of the Sakhalin 1 Project launched in January 2015, has grown significantly at 334,000 barrels/day, up 14.3% year-on-year (Federal State Statistics Service). Oil exports were 244.49 million tonnes (up 9.4% Y-o-Y), natural gas exports including LNG were 193.1 billion m^3 (up 7.1% Y-o-Y), and the much-awaited figure for exports to Ukraine was down 58% Y-o-Y. With the sharp decline in oil prices, the value of oil and gas exports dropped by 42% and 15%, respectively (federal customs statistics).

Accordingly, oil and gas tax revenues, which account for roughly 40% of Russia's revenues, are plummeting (down 21.1% Y-o-Y), and the government's rainy-day funds for covering fiscal deficits could run out in two years. In response, the government is seeking to secure revenues by raising taxes on the oil and gas industries. In December 2015, the Finance Ministry secured 200 billion rubles by temporarily freezing plans to lower the oil export tax. There are also plans ahead to raise taxes on oil and gas production.

On February 16, Russia, Saudi Arabia, Venezuela, and Qatar agreed to freeze oil production at January levels on condition that other oil producers follow suit. Russia's production of 10.88 million barrels/day (up 0.8% Y-o-Y) in January is the highest since the collapse of the former Soviet Union, and thus the total for 2016 would still be higher even if output is frozen at January levels. Deputy First Prime Minister Dvorkovich commented that "raising taxes on oil companies will reduce corporate investment in development and production, and can prevent a major increase in output", emphasizing Russia's positive stance toward freezing output levels. However, the comment could also be construed as domestic justification for the policies of the government which has to raise taxes on the oil and gas companies to increase revenues.

According to the Mid-Term Oil Market Report 2016 released by the IEA on February 22, Russian oil output is projected to decrease by 280,000 barrels/day between 2015 and 2021. According to the Russian Energy Ministry's worst-case scenario released on the 18th, if oil prices remain at $31 to $33/barrel between 2016 and 2017 and only rise to $42/barrel by 2020, investment could drop by at least 10-15% and oil output to 460 million tonnes by 2020-2025 (9.2 million barrels/day, down 14% from 2015 levels). The Ministry points to the tax policy as the greatest negative contributor. Thus, conflict is growing between the Finance Ministry, which prioritizes securing financial resources and seeks to raise taxes on the oil industry, and the Energy Ministry and the Natural Resources Ministry, which object to the idea and want to promote upstream development. The developments in the tug-of-war between the Ministries will affect not only the Russian economy but also the global supply and demand balance for oil, and must be closely monitored.

Past IEEJ Events

Energy Indicators of Japan

IEEJ Homepage Top

Back Numbers of *IEEJ e-Newsletter*

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

IEEJ e-Newsletter Editor: Yukari Yamashita, Director
IEEJ Newsletter Editor: Ken Koyama, Managing Director
Inui Bldg. Kachidoki, 13-1 Kachidoki 1-chome, Chuo-ku, Tokyo 104-0054
Tel: +81-3-5547-0211 Fax: +81-3-5547-0223