

IEEJ e-NEWSLETTER

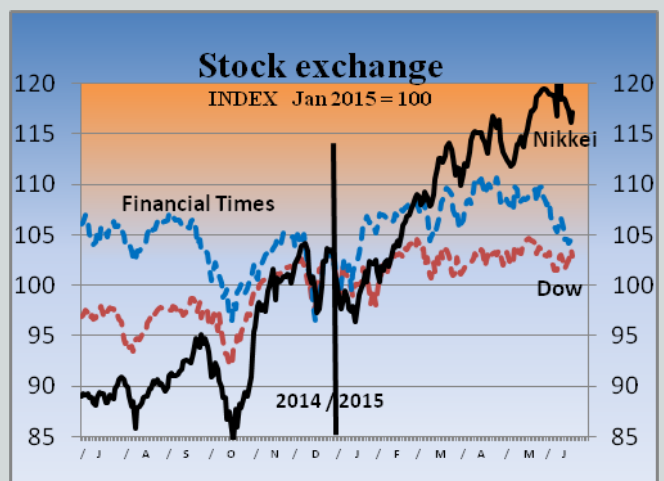
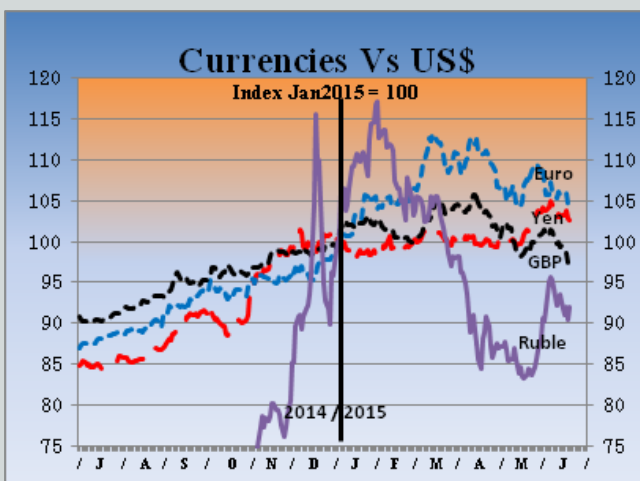
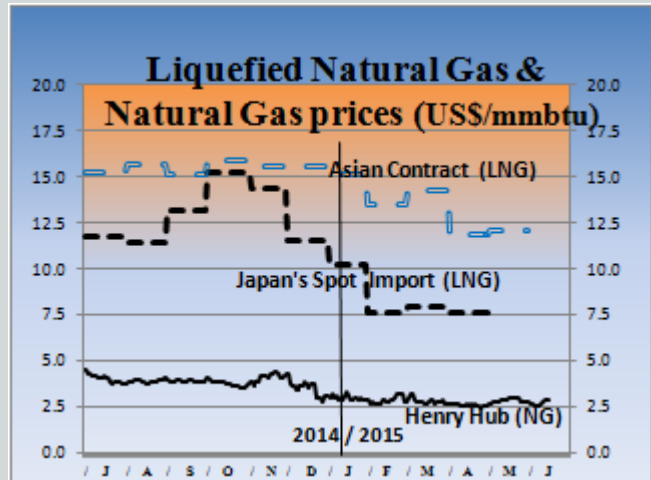
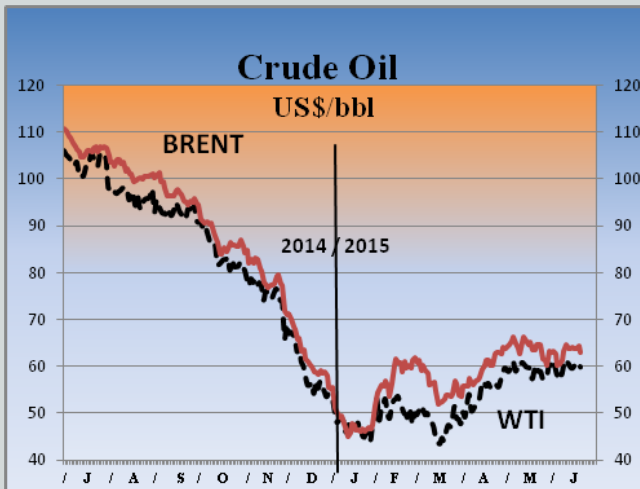
No. 64

(Based on Japanese No. 141)

Published: June 22, 2015

The Institute of Energy Economics, Japan

(As of June 19, 2015) (See Sources on Last Page)



Contents

Summary

【World Monitoring】

1. (US) Expansion of Plug-in Hybrids Not Going Smoothly
2. (EU) Signing of the International Energy Charter
3. (China) Working Hard to Upgrade the Quality of Oil Products
4. (Middle East) Saudi Arabia Undergoes Major Personnel Changes
5. (Russia) Current Status and Future Prospects of China-Russia Gas Negotiation

Summary

【World Monitoring】

1. (US) Expansion of Plug-in Hybrids Not Going Smoothly

President Obama's ambitious goal to ramp up the plug-in hybrid fleet is unlikely to be achieved, due to the higher price than conventional cars and the drop in domestic gasoline prices.

2. (EU) Signing of the International Energy Charter

In May 2015, the International Energy Charter (IEC) was signed off. Whether the Energy Union promoted by the European Commission and the conventional Energy Charter Treaty (ECT) framework will develop side-by-side or compete with each other must be closely monitored.

3. (China) Working Hard to Upgrade the Quality of Oil Products

The government decided to move forward the introduction of an auto fuel standard equivalent to EURO5 from 2018 to 2017. The selection and restructuring of regional refineries and the establishment of a powerful monitoring and surveillance system are the keys to quickly improving quality.

4. (Middle East) Saudi Arabia Undergoes Major Personnel Changes

Whether and how much Saudi Arabia's personnel changes will affect its oil policy is attracting much attention. Once on the backfoot, ISIS/ISIL is pushing back and gaining territory again. Tensions remain high in the waters around the Arabian Peninsula.

5. (Russia) Current Status and Future Prospects of China-Russia Gas Negotiations

Russia and China signed an basic agreement on supplying gas to China via the western route. Russia is hurrying to gain access to the Chinese market, but it is not yet clear when this "western route" will materialize.

1. US: Expansion of Plug-in Hybrids Not Going Smoothly

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

On May 21, Bloomberg reported that the Obama administration has scaled back its goal to ramp up the plug-in hybrid fleet. Upon becoming a Democratic presidential nominee in 2008, President Obama pledged to achieve "One million plug-in hybrid vehicles by the end of 2015". In 2009, for the federal government to take the lead in fulfilling its official promises on energy and the environment, the President signed an executive order to cut the consumption of petroleum-derived auto fuels of federal agencies by 30% from 2005 levels by 2020. In 2011, he announced that the hybrid fleet of the federal government had doubled in the two years of his presidency, and firmly declared that, by the end of 2015, any new cars that the federal government purchases would be highly efficient, clean energy vehicles.

However, in March 2015, the federal government scaled back its target to cut petroleum-derived auto fuels to 30% from 2014 levels by 2024, and the percentage of government purchase of zero emission cars and plug-in hybrids of all its new cars to 20% in 2020 and 50% in 2025. The Bloomberg report analyzed the data from the US General Services Administration (GSA), and pointed out that the number of new hybrids and electric vehicles (EVs) soared from 449 units in 2008 to 8,139 units in 2009, but then declined sharply, before rising slightly in 2014 to 3,806 units, which is only 7% of all new vehicles that the government has bought.

One of the important characteristics of the US political system is the enormous amount of time spent on presidential elections. The 2016 election officially kicks off with the Iowa primary in January 2016, but the debates by the candidates of each party are set for as early as August 2015. The 18 months of public debates test the candidates' policies, and form public promises with specific targets and a feasible road map that can endure criticism. So why did the administration's ambitious hybrid/EV targets not fulfill even the government procurement target?

First, hybrids and EVs are more common among passenger cars and small trucks, but federal purchases are mainly medium- to large-sized trucks. The analyses on car usage by respective government agencies were surely insufficient.

Second, the prices of hybrids and EVs did not fall as expected, and remain much higher than those of conventional cars. The Department of Energy can also be criticized for the failure of its loan guarantee program for advanced car manufacturing to deliver the expected results. Nevertheless, as hybrids and EVs account for only 3% of the entire private sector auto sales under the Obama Administration, the government procurement was somewhat effective, even though it failed to meet the targets.

Third, the sluggish expansion of these cars, especially in the private sector, is largely due to the increase in light crude oil production in the US, which caused gas prices to drop and reduced consumer interest in hybrids/EVs. The rise in domestic oil production was a "nice miscalculation" in terms of the scale of its contribution to energy security and stimulus to consumption through domestic investment and jobs, but also has the negative effects of making people less interested in fuel-efficient vehicles and making tougher auto fuel standards less effective, which could have been one of the greatest achievements of the Obama Administration.

2. EU: Signing of the International Energy Charter

Kei Shimogori, Researcher

Nuclear Energy Group, Strategy Research Unit

In May 2015, the International Energy Charter (IEC) was signed by more than 65 countries and international organizations including the EU and its members (adopted by 75 countries and international organizations). The IEC is the modernized version of the European Energy Charter (EEC) which was adopted in 1991. The signing of the IEC is expected to strengthen the global energy security under the Energy Charter Treaty (ECT).

The EEC is a political declaration that pledged, with the collapse of the Soviet Union, to promote the reform of the energy sector based on the market mechanism in the former Soviet and Eastern European countries, and to promote corporate activities (trade and investment) in the energy sector worldwide. The ECT was signed in 1994 as a legal framework for implementing the EEC. The purposes of the ECT include securing a stable supply of energy to the developed countries from the former Soviet Union and Eastern Europe, and it has been signed by one international organization and 47 countries including the EU and the countries of Western Europe, the former Soviet Union, and Eastern Europe. The ECT consists of four pillars: trade and transit of energy materials and products, investment protection, dispute resolution, and energy efficiency and the environment. It requires its signatories to observe the WTO/GATT regulations and to facilitate transportation by way of pipelines and transmission facilities consistent with the principle of freedom of transit, without distinction as to the origin or destination and without imposing any unreasonable restrictions, and sets forth the procedure for resolving disputes between investors and signatories.

However, with the US, China and the oil-producing countries being mere observers, soliciting new members had always been a problem for the ECT. Signing the EEC is considered to be the first step toward joining a legally-binding treaty (ECT), and to get more countries to sign the EEC, efforts have recently been started to modernize the Convention to reflect the changes in the international energy situation since the 1990s; these efforts finally resulted in the recent signing of the IEC. One of the goals of signing the IEC is to expand the Treaty (ECT) beyond Europe to the rest of the world.

However, the ECT still faces a difficult future. First, Russia, a major natural gas supplier to Europe, has no intention of ratifying the Treaty. As the country is in a dispute over natural gas with Ukraine, involving Europe, it is unlikely to join the Treaty framework at all. Russia has not yet signed the IEC either, but Europe views the IEC as an opportunity to resume collaboration with the country. Meanwhile, in the EU, the Energy Union initiative is also making progress under the new European Commission launched in November 2014. The initiative calls for strengthening the energy security of the entire EU, and seeks to create a single EU market, and to develop energy and encourage energy conservation in the EU. The Energy Union overlaps with the ECT in its purpose of securing a stable supply of energy, but differs in that it aims to tackle issues only through efforts within the EU. As the core of the EEC and ECT, Europe could shift its focus to the new Energy Union or continue developing the framework centered around ECT. Its direction must be closely monitored.

3. China: Working Hard to Upgrade the Quality of Oil Products

Li Zhidong, Visiting Researcher

Professor at Graduate School, Nagaoka University of Technology

On February 6, 2013, with worsening PM2.5 air pollution, then Prime Minister Wen Jiabao who was nearing retirement summoned a standing committee meeting of the State Council, which decided to apply National Quality Standard V (China V: 10ppm or lower sulfur content, equivalent to EURO5) to auto gasoline and diesel oil from 2018. On September 10 of the same year, his successor Prime Minister Li Keqiang released the "Action Plan for Preventing Air Pollution", indicating a specific roadmap for improving the quality of auto fuels including applying China V in the seven provinces and cities of the three areas where air pollution is severe: Beijing, Tianjin, Hebei (Jing-Jin-Ji) Belt, the Yangtze Delta and the Pearl River Delta. As China V was expanded to include Shanghai and Guangzhou from Beijing, a "Plan for Accelerating the Quality Upgrade of Oil Products" (the "Plan") was released on May 5. The "Plan" was produced jointly by seven ministries including the National Development and Reform Commission, and deliberated and approved on April 28 at a standing committee meeting of the State Council chaired by Prime Minister Li.

According to the "Plan", China V will be applied to all auto fuels, including E10 ethanol gasoline and B5 bio diesel, in 11 provinces and cities of the entire eastern area from 2016, up from the original plan of 7 provinces, and then to the whole country from 2017, one year ahead of the original plan. Diesel oil used for agricultural machinery and the others will be subject to China IV (50ppm or lower sulfur content) in the eastern region from 2016, nationwide from July 2017, and to China V (10ppm or lower sulfur content) nationwide from 2018. Further, China VI targeting all petroleum products will be released in 2016 and implemented from 2019. To help realize this scheme, the government will pay the interest on funds that companies raise. These measures will accelerate the efforts to upgrade the quality of oil products.

Why is it necessary to speed up quality upgrading now? According to an announcement by the Environmental Protection Ministry in April, 85-90% of PM2.5 in cities is caused by exhaust from cars and factories, coal burning and soot dust, and car exhaust is the greatest pollutant in cities including Beijing and Guangzhou. Having pledged to fight air pollution and to cut PM10 concentration in all cities nationwide by at least 10%, and to reduce PM2.5 concentration by 25% in the Jing-Jin-Ji Belt, by 20% in the Yangtze Delta, and by 15% in the Pearl River Delta, all from 2013 levels and by 2017, it is imperative to speed up the quality upgrading of oil products if the Xi leadership is to achieve the targets. Another reason is the mounting pressure of the slowing economy. According to China's National Bureau of Statistics, the economic growth rate for the first quarter dropped to the annual target of 7%. The State Council standing committee expects that achieving China V will require investment of 68 billion yuan (1 yuan = 19.6 yen), and hopes that accelerating the investment will boost the economy.

As of May, the percentage of China V in the combined refining capacity of the major oil refiners SINOPEC and CNPC is 55% for gasoline and 52% for diesel oil. Moving forward, major state-owned oil companies such as these are expected to start remodeling their refineries without delay and ahead of schedule. However, it is not easy for medium- to small-sized regional refineries, which account for about 10% of the national refining capacity, to achieve China V, as they lack the necessary technology and funds. The "Plan" indicates further restructuring of refineries by forced "selection" and merger of older facilities, but we need to closely monitor how the regional governments cooperate, as they are the beneficiaries of these refineries in terms of jobs and tax revenues. Another challenge is how to build a powerful monitoring and supervising system for eliminating low-quality fuel from the market.

4. Middle East: Saudi Arabia Undergoes Major Personnel Changes

Koichiro Tanaka, Managing Director &
President of JIME Center

King Salman of Saudi Arabia is ordering one change of personnel after another, surprising Middle East watchers. He dismissed Crown Prince Muqrin, whom he himself had promoted immediately after becoming king, and appointed Interior Minister Prince Muhammad bin Nayef of the third generation as the new Crown Prince, while appointing his own son and young Defense Minister Muhammad bin Salman as Deputy Crown Prince. He has also appointed the Defense Minister to another post of head of the Council of Economic and Development Affairs (CEDA), which replaces the now abolished Supreme Council for Petroleum and Mineral Affairs, while strengthening his influence on the petroleum policy through another son and Deputy Petroleum and Mineral Resources Minister Abdulaziz bin Salman. This wave of personnel changes extends even as far as Saudi Aramco and SABIC, making Saudi Arabia's oil policy less certain than before.

To convince the GCC countries which are becoming increasingly skeptical as the Iran nuclear talks progress, on May 14, US President Obama held the US-GCC Summit in Camp David. However, as many of the GCC leaders, such as King Salman, are elderly and faces health issues, only two countries showed up at the Summit, symbolizing the gulf between the US and the GCC. President Obama is also struggling to reset the relationship with Saudi Arabia under the new King Salman, despite his diplomatic efforts at the funeral of the late King Abdullah in January. Meanwhile, in the US and Europe, Saudi Arabia is drawing criticism and concern over the aggressiveness of its air strikes on Yemen, in which cluster bombs were reportedly used. Under such circumstances, the unilateral 5-day ceasefire, an achievement of Secretary of State Kerry's visit to Riyadh, was not renewed after it expired.

Despite losing control over Tikrit in central Iraq and the murder of one of its senior officials in Syria by US special forces, ISIS/ISIL has struck back by carrying out offensives in both countries and is expanding its rule again. In addition to Palmyra in Syria and Ramadi, capital of Anbar Province in Iraq, it had captured all crossing points between Iraq and Syria by late May. Though ISIS/ISIL's military success could be attributed to the dramatic progress in its information-gathering capacity, the true background and reasons are unknown. ISIS/ISIL has claimed responsibility for the terrorist attacks of May 22 and 29, in Qatif and Dammam, respectively, in eastern Saudi Arabia and in the Yemeni capital Sana'a targeting the Shi'ites, and its threat is clearly increasing in the area.

Iran's Islamic Revolutionary Guard Corps freed the Marshall Islands-flagged cargo ship that it had taken, citing charges of a non-payment of the fee ordered by a court based on an allegation by Iran's Ports and Maritime Organization (IPMO), but then gunned a Singaporean-flagged tanker in the Hormuz Strait to stop the ship following an alleged hit-and-run incident. Further, Iran's "support ship" headed for Port Hodeidah across the Mandeb Strait was stopped by the Saudi Navy. Thus, tensions are rising in the waters around the Arabian Peninsula.

In Israel, the fourth Netanyahu government was launched as a coalition even farther to the right than before, reducing prospects of peace with Palestine under a two-state solution that would recognize a Palestinian state.

5. Russia: Current Status and Future Prospects of China-Russia Gas Negotiations

Sanae Kurita, Senior Researcher

Global Energy Group 2, Strategy Research Unit

On May 8, China's President Xi Jinping and Russia's President Putin held a summit, and signed a total of 32 agreements. In the energy area, a basic agreement was signed for supplying gas to China via the western route. The western route, known as the Altai gas pipeline, is an initiative to build a pipeline that connects the gas fields of west Siberia to the Chinese market across the western China-Russia border between the Altai region and the Xinjiang Uighur Autonomous Region, to supply 30 billion m³ of gas per year for thirty years. The initiative has been discussed since the late 2000s, and a framework agreement was signed in November 2014. Some media reported the recent agreement as a HOA (Heads of Agreement), which is just one step short of a sales agreement, but it is not yet much more than a confirmation of intention of both parties to continue the negotiations.

Russia is hurrying to cultivate and diversify new buyers of its natural gas, because firstly, the European market, traditionally the largest importer of the country's natural gas, is maturing and its demand is unlikely to grow significantly. Europe has also recently been pressing Russia to improve the conditions of its gas supply contract (to abolish the destination clause and lower the price), citing easing demand and diversification of supply options due to new LNG receiving stations within its boundaries. Further, since the Ukraine Crisis, the EU has clearly stated its policy to reduce its dependence on Russian energy, including natural gas. The more uncertain the future of gas exports to Europe becomes, the more Russia is forced to develop new sales channels in the Asian market, including China, where demand for gas is expected to grow.

The "western route", on which an agreement has reportedly been reached, still faces many challenges to becoming reality. First, competition over the Chinese gas market is intensifying among suppliers. A series of LNG receiving stations are being built, and pipeline gas imports from central Asia, including Turkmenistan, and Myanmar are increasing. Second, many think that China will start full-scale development of unconventional resources including shale gas from the 2020s. Third, in terms of the level of regional and economic development in China, it is more advantageous to build an "eastern route" from Far-east Russia to China's northeast, which is growing in importance. Nevertheless, China has shown little enthusiasm, and apparently is in no hurry to discuss the subject without first agreeing on the prices.

In May 2014, the Presidents of China and Russia signed an agreement on the long-term supply of gas (supplying 38 billion m³/year of gas for 30 years), which includes the construction of the "eastern route" pipeline mentioned above. However, the project requires an enormous investment for developing the Chayanda gas fields of the Sakha Republic of Russia, in addition to building the pipeline itself. Construction began later that year in September on the Russian side, but the countries have not fully agreed on the details, including financing, and so completion of construction by the initial target of the end of the 2010s is now practically impossible. As financing becomes harder for Russia due to the EU and US's economic sanctions triggered by the Ukraine Crisis, and its need for Chinese funds grows, China could be taking advantage of Russia's situation, seeking better conditions in the gas supply terms. Thus, Russia was more eager than China to promote the "western route" partly to warn Europe of its toughening stance against Russia, but it is too early to judge the route's feasibility.

Sources of Graphs on Top Page:

Oil	DOE-EIA and Financial Times
Henry Hub gas prices	DOE-EIA
LNG contract prices	World Bank
LNG spot prices	METI
Exchange Rates	x-rates.com
Stock Exchange	Finance. yahoo

[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
