

IEEJ e-NEWSLETTER

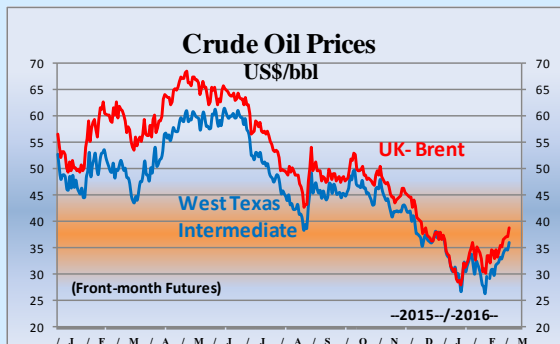
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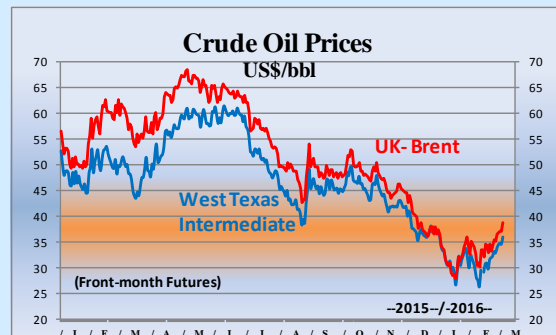
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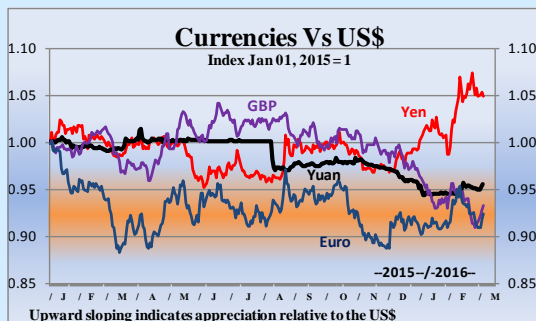


Source: Financial Times

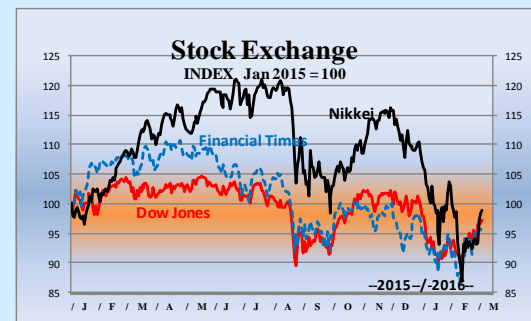


Sources:

- (1) Ministry of Finance "Japan Trade Statistics"
- (2) Ministry of Economy, Trade and Industry (contract month basis)
- (3) Estimated by World Bank and World Gas Intelligence
- (4) DOE-EIA, NYMEX (Front-month Futures)



Source: x-rates.com



Source: Financial Times

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Summary

【World Monitoring】

1. US: Interior Department Announces Plans for Coal Program Reforms

The Interior Department has announced plans for coal program reforms to reflect the environmental cost of coal development and usage in the price of coal. The impact on coal usage must be closely monitored.

2. EU: Cyber Security in the Energy Area

The Network and Information Security Directive is being drawn up in the EU. This is expected to be a focus of attention in this year's G7 Energy Ministers' Meeting, and Japan is expected to lead concrete discussions.

3. China: Comprehensive Decarbonization & Energy Targets for 2016

Aiming to firmly establish the New Normal and to fulfill the Paris Agreement, the National Energy Administration set numerical targets in the first year of the new 5-Year Plan for four areas, including decarbonization of energy mix and reduction of energy consumption. The Agency's efforts must be closely monitored.

4. ME: New Tensions Emerge as Sanctions Are Lifted

The sanctions against Iran were lifted as Iran and the US overcame their differences, but certain serious issues remains between the two. Saudi Arabia has severed diplomatic ties with Iran and is increasing diplomatic pressure. Multiple terrorist threats have emerged in various places since the turn of the year.

5. Russia: Economic Predicament under Falling Oil Prices

The plummeting oil prices are hitting the Russian economy and people's lives hard. Concern about the spread of the IS threat in Russia is starting to loom on the horizon. Whether President Putin manages to maintain his high popularity remains to be seen.

1. US: Department of the Interior Announces Plans for Coal Program Reforms

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In his last State of the Union Address, President Obama declared that he would reform the use of oil and coal resources. Accordingly, on January 16, Department of the Interior announced plans for coal program reforms within federal borders. The highlight of the reforms is to suspend the leasing of new coal fields on federal land for the next three years, and in the interim, to set a new leasing procedure and royalties, taking into account the environmental and health impacts of air and water pollution and deforestation caused by coal mining and their environmental costs, as well as the issues associated with the supply-demand structure of energy inside and outside the country, all with the aim of achieving "appropriate" coal pricing. The Department's last environmental assessment for coal leasing was in 1983-84, since when coal fields have been leased without assessment. This is why a review is needed, according to the Department.

The research institute that drafted the reform plan states in a report on the "hidden cost" of coal that when including the methane emissions from coal mines, GHG and air pollutant emissions in the transportation stage, and the social costs of traffic congestion, noise, and accidents, royalties need to be raised by 70%, and estimates that the cost of coal procurement for electric utilities would rise by approximately 21%. The plan is merely a proposal by a research institute; it is the Interior Department that will finalize the new coal program after considering the opinions of industry and experts and soliciting public comments. However, if the electric utilities' coal procurement costs soar, combined with the CO₂ emission regulations on power plants already in effect, the reforms would significantly affect the generation mix of the US.

This move is part of the focus on using executive order to implement as many policies as possible without going through Congress during the President's last year in power. This approach is being heavily criticized as being disrespectful of Congress, hostile to industry, and an unconstitutional extension of executive power. The administration is likely to face a spate of challenges from state governments, companies, industry groups, and public interest groups during the elections in November, legislation in Congress, and through lawsuits.

While the Obama administration may appear too dependent on executive orders, the administration is taking a cooperative rule-making approach in the energy and environment area. Regarding the DOE's new energy efficiency standard for residential air-conditioners based on the 1975 Energy Policy and Conservation Act, it was announced on January 21 that industry, namely equipment manufacturers, sales companies, and electric utilities, and the working group consisting of representatives of public interest groups and state governments, had agreed on a 7% efficiency improvement mandate for all home air-conditioners, to be launched from 2023. This rule-making process is known as "negotiated rule-making", in which representatives of stakeholders, including the regulated parties, gather to discuss the regulations together, and the executive branch adopts the regulations that have been agreed upon. This approach was first adopted in the early 1980s to set technically and economically feasible regulations with the input from regulated parties, and to avoid lawsuits and achieve substantial policy results by building a consensus in advance among stakeholders. It is interesting to see this diverse approach to implementing policies in the US, which combines soft and hard methods.

2. EU: Cyber Security in the Energy Area

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Cyber security in the energy area is a new issue now being tackled by countries. The EU has stated its comprehensive strategic framework in the EU Cyber Security Strategy and European Agenda on Security that it formulated. In 2013, the European Commission issued a Directive to ensure network and information security, and in December 2015, the European Parliament and the Council of Ministers agreed on the draft Network and Information Security (NIS) Directive. In January 2016, the draft NIS Directive was passed by the Internal Market Committee of the European Parliament, and will subsequently go through the Council of Ministers and the plenary session of the European Parliament for approval.

The draft NIS Directive includes: 1) Improving the national cyber security capabilities of Member States, 2) improving cooperation among Member States, and 3) requiring operators in critical sectors such as energy, transport, banking and health, as well as providers of key digital services such as search engine and cloud computing, to take appropriate security measures and report major incidents to the national authorities. The targets in the energy area are electricity, oil, and gas operators. Based on the Directive, each member state is required to adopt its NIS strategy, and designate a team that implements and executes the Directive and an incident response team called CSIRT (Computer Security Incident Response Team). Further, as an EU-wide cooperative effort, a Cooperation Group of Member States will be established, and the EU Agency for Network and Information Security (ENISA) will provide the CSIRT network secretariat.

The EU is also keen to work with the US, which is ahead of other countries in cyber security. The EU and the US established the EU-US Working Group on Cyber Security and Cybercrime in November 2010. Further, in November 2014, a workshop was held to compare America's cyber security framework with the EU's NIS platform approach. The EU is also focusing on enhancing the cyber security industry within its borders, and plans to strengthen public-private collaboration.

In the G7 Hamburg Initiative for Sustainable Energy Security announced at the G7 Energy Ministers' Meeting in May 2015, all countries agreed to cooperate to strengthen cyber security in the energy area. Cyber security is also likely to be highlighted again at the G7 Energy Ministers' Meeting this year in Kita-Kyushu, Japan. As the chair of the Meeting, Japan is expected to lead concrete discussions on dealing with the increasingly complex and cunning cyber threats to the energy system.

3. China: Comprehensive Decarbonization & Energy Targets for 2016

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At the beginning of 2016, the National Bureau of Statistics announced that GDP growth for 2015 was 6.9%. It projects that stable growth will continue in 2016, but the outlook is attracting closer attention as stock prices have plummeted since the beginning of the year. Meanwhile, the National Energy Administration held a national meeting on December 29, 2015 to analyze the supply-demand trend of energy and check the progress toward achieving plans and targets, and to announce the policy goals for 2016.

Primary energy consumption for 2015 is expected to increase by 4.3 billion tce (tonnes of coal equivalent, 1 tce = 7×10^6 kcal), up only 0.9%, the smallest rise since 1998. Coal consumption decreased by 1.5% to 2.77 billion tce, down for the first time in 17 years. Primary energy output dropped by 0.5% to 3.58 billion tce and coal output fell 1.8% to 2.58 billion tce; the first drop in 17 years for overall output and for the second consecutive year for coal. Electricity consumption rose 0.5% to 5,550 TWh, and installed generation capacity increased by 10.5% to 1.51 TW while average operating time decreased by 349 hours to 3,969 hours, indicating that the supply glut is growing.¹ Regarding decarbonization, the percentage share of primary energy consumption was 64.4% for coal, down 1.6 points, and 12% for non-fossil energy, an increase of 0.8 points. Meanwhile, energy consumption per unit GDP dropped by 5.6%, down 18.2% from 2010. The result will exceed the binding targets of the Twelfth 5-Year Plan (raising the share of non-fossil energy consumption to 11.4%, and lowering energy consumption per unit GDP by 16% and CO₂ emissions per unit GDP by 17%).

The basic policy of the Thirteenth 5-Year Plan is to build a modern energy system that is clean, low-carbon, safe and highly efficient modern energy system in order to firmly establish the New Normal and to fulfill the Paris Agreement. For 2016, policies goals are set for four areas:

(1) Decarbonizing the energy structure: lowering the share of coal in primary energy consumption to 62.6% or lower, and raising that of natural gas to 6.2% and of non-fossil energies to 13.2%. In terms of power generation mix, the installed capacity of non-fossil power sources will be raised to 35.7% by increasing the installed capacities of wind and solar PV to at least 20 GW and 15 GW, respectively. (2) Effective reduction of energy consumption: The following goals were set: primary energy consumption: approx. 4.36 billion tce (up 1.4%); coal consumption: 2.73 billion tce (down 1.4%); oil and natural gas consumption (output + net imports): approx. 550 million tonnes (up 1.9%) and approx. 205 billion m³ (up 4.6%), respectively; and electricity consumption: approx. 5,700 TWh (up 2.7%). (3) Securing energy supply capability: Primary energy output of approx. 3.6 billion tce (up 0.6%), coal output of approx. 2.55 billion tce (down 0.035 billion tce), oil output of approx. 220 million tonnes (up 10 million tonnes), natural gas output of approx. 140 billion m³ (up 4 billion m³), and non-fossil electricity output of approx. 1,700 TWh. (4) Efficient use of energy: lowering the transmission-end fuel consumption per kWh thermal power by 1 gce to 315 gce (and increasing thermal efficiency by 0.12 point to 39%); significantly reducing the discarded electricity generated by wind and solar power due to insufficient transmission line capacity.

Setting numerical targets will help clarify whether a target has been achieved. The National Energy Administration will be highly praised if the goals are met, but there is a high risk of being held responsible if not. The skills and efforts of the Administration must be closely monitored.

¹ The supply and demand are not an outlook but the annual result released by the National Energy Administration on January 15.

4. ME: New Tensions Emerge as Sanctions Are Lifted

Koichiro Tanaka, Managing Director &
President of JIME Center

On January 16, the International Atomic Energy Agency (IAEA) reported on the measures that Iran promised to take based on the nuclear agreement, and thus the lifting and suspension of economic sanctions against Iran went into effect. With the lifting of the ban based on the UN Security Council Resolutions as well as individual sanctions by the US, Europe, and Japan on nuclear development, all restrictions on oil exports were removed, and assets stalled outside the country have been released to Iranian custody.

At the same time, Iran's frozen assets in the US dating back to the Islamic Revolution were also returned after 35 years of dispute, revealing close communication and collaboration between the two countries. This coordination was further evidenced by the smooth simultaneous release of "prisoners" in both countries.

Meanwhile, incidents such as the firing of rockets at the end of last year by Iran near US aircraft carrier Harry S. Truman in the Strait of Hormuz and the capturing of two US ships in Iranian waters in the Persian Gulf (January 12) heightened tension in the region. Further, the test launch by Iran of an intermediate range ballistic missile last October had triggered additional sanctions by the US government, exacerbating Iran's resentment. Further, Western countries, along with Iran are criticizing the US Congress for cancelling the visa exemption for European and Japanese nationals who have travelled to either Syria, Iraq, Sudan, or Iran in the last five years, as this decision hurts those countries that were preparing for expanded business relation with Iran.

In response to the attack on Saudi diplomatic facilities in Iran triggered by anger over the execution of a Shia rebel leader, Saudi Arabia, together with Bahrain and several other countries, broke off diplomatic relations with Iran. Having steadfastly concerned of Iran's return to the international community, Saudi Arabia is intensifying diplomatic offensives against the country, criticizing Iran for meddling in the affairs of Arab nations. As a result, the UN's Syria peace talks planned for the January 25th were postponed due to the difficulty of selecting participants, and the Yemen peace talks were also called off. Such tension between Saudi and Iran could increase volatility in the region. The recent domestic and foreign policies of Saudi Arabia under King Salman are becoming a key for understanding the developments in the Middle East.

Despite efforts by the international community to step up security against attacks by Islamic State (IS), a series of explosions rocked Istanbul and Jakarta. IS is aggressively carrying out bomb attacks on oil storage facilities in Libya, which is a rising threat to the country's energy infrastructure. In Tunisia, the government imposed a curfew after riots by youths in central Tunisia reminiscent of the Arab Spring five years ago. Chinese President Xi Jinping visited Saudi Arabia, Egypt, and Iran, signing a memorandum with each country on cooperation based on the One Belt, One Road Initiative. Iran's Economy and Finance Minister, Teyyeb Nia, visited Japan in order to ink a bilateral investment agreement that would promote economic relations between the two countries.

5. Russia: Economic Predicament under Falling Oil Prices

Shoichi Itoh, Manager, Senior Analyst
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The Russian economy is worsening. On January 25, the Russian Federal State Statistics Service announced that real GDP for 2015 contracted 3.7% year-on-year. The World Bank projects that Russia's economy will continue to slow down in 2016 with GDP growth of minus 0.7% (announced on December 18, 2015), but the Central Bank of Russia estimates (as of December 2015) that if the average oil price falls to \$35/barrel for 2016, the economic growth rate could fall by as much as 2 to 3% year-on-year.

On January 21, the exchange rate of the Russian ruble against the dollar hit a record low of 84 rubles to the dollar (down 30% year-on-year). The economic sanctions against Turkey since the end of November 2015 in retaliation for the shooting down of Russian military jets by the Turkish military, combined with the plummeting ruble, is causing food and other prices to soar, hurting people's purchasing power and hitting households hard. According to a poll (on 1,600 respondents in 46 regions carried out at the end of last month) announced by the Russian Public Opinion Research Center on January 12, more than half of respondents said that the economy had not yet bottomed out.

Russia's state coffers are in dire straits due to the plummeting oil prices. The average price of Urals crude (Russia's major oil export brand) for 2015 was \$51.23/barrel, but since the beginning of 2016, the oil futures market has dropped to below \$30/barrel for the first time in 12 years as the supply glut continues in the international oil market.

On January 13, Finance Minister Anton Siluanov revealed at an international economic conference that the oil price needed for Russia's fiscal balance is \$82/barrel, and warned that if the full-year oil price is \$40/barrel, the country could face a devastating financial crisis like the one in 1998-99 unless it takes severe austerity measures.

The government plans to spend 2.2 trillion rubles in 2016 (\$27.5 billion at \$1 = 80 rubles) to cover its fiscal deficits, but if the situation remains as it is for 2017 and beyond, the Central Bank of Russia says that the government's rainy-day funds, saved for low oil prices will run out by 2019. This could happen even earlier.

Meanwhile, the threat of Islamic State that is shaking the international community is spreading to Russia. President Putin was skeptical about the possibility as early as spring 2015, but in December 2015, the Federal Security Service of the Russian Federation and the Ministry of Internal Affairs jointly announced that more than 2,800 Russians were already participating in IS activities in Syria and Iraq. The Northern Caucasus, where the influence of IS is most likely to spread, has conventionally received preferential budget from the central government, but Moscow's financial muscle is worsening.

With the collapse of oil prices and the increasing threat of international terrorism, that President Putin can maintain his popularity only by resorting to "patriotism" remains questionable.

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