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Summary

1. US Watching: Factors Affecting Short-term and Medium- to Long-term US Oil Output

With the fall in oil prices, US oil production has started to decrease since April. The number of operating rigs, investments by oil companies and flow of supporting funds must be closely monitored.

2. EU Watching: German Cabinet Approves Bill Regulating Hydraulic Fracking

The Merkel Cabinet has approved a bill that bans commercial hydraulic fracking in strata less than 3,000 meters underground. The bill will now be deliberated in parliament while its effects continue to be examined.

3. China Watching: Trends in Energy Mix and Its Medium- to Long-term Outlook

In 2014, the percentage of non-fossil electricity in the generation mix reached 26%, the highest since the birth of the country in 1949. Ambitious goals include raising the percentage to as high as 50% by 2050.

4. ME Watching: Both Good News and Bad News in MENA

The nuclear deal with Iran is stuck with problems concerning the easing of sanctions which the US Congress remains strongly opposed to. Military operations against ISIS/ISIL in Iraq are yielding mixed results while the radicals are extending their influence in Syria.

5. Russia Watching: Can the President Withstand the Economic Stagnation?

Russia's economic indexes continue to worsen. President Putin is maintaining his hardline stance, but the West's sanctions following the crisis in Ukraine are biting harder.

1. US Watching: Factors Affecting Short-term and Medium- to Long-term US Oil Output

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The fall in oil prices since last summer has focused attention on the relatively high cost of US tight oil production, and whether the dramatic growth in US oil production will finally slow down. The situation remains steady, with both good and bad signs.

One key short-term index is the number of operating rigs, which only began to drop on December 5 last year. The number fell from 1575 on that date to less than 1500 by the end of the year, plunging to 703 rigs by April 24. However, despite the fall in oil prices and decline in the number of rigs, oil output continued to rise until recently, hitting a record 9.422 million B/D on March 20, but then began to fall, dropping 0.6% to 9.366 million B/D in the month to April 17. The media also reported, citing the data for each shale layer, that output could drop by a further 80,000 B/D (0.9%) in May. For tight oil that has been drilled from wells and awaits "completion" to be put into production, an oil price of around 65 dollars is required. The focus is now on when the number of rigs will bottom out, and for how long the declining tight oil production will be able to remain at the current level.

Medium-term indexes include investment cuts, lay-offs and bankruptcies of upstream oil companies and oil well service firms. Many of the small- to medium-size shale developers finance their operations with borrowings, which have been classified as junk bonds since the end of last year due to the oil price drop. As the value of assets is reviewed by investment institutions every April and October, there was a risk of mass bankruptcies in April due to cutbacks in lending. In March alone, oil producer Quicksilver Resources and oil well service firm Cal Dive International filed for Chapter 11 citing the inability to pay interest on debt. In April, it was reported that lending to low-rated oil-related companies will be cut by up to 30%. In order to pay the interest and avoid bankruptcy, it is vital for production and sales to grow, but this would cause a further easing of supply and demand. However, production will have to be cut if operating funds run low, eventually resulting in default.

Meanwhile, many firms have prepared for lending cuts by financing through issuing corporate bonds and new stocks, and long-term borrowing. One company announced that it had agreed on a deal to avoid default by issuing stocks to creditors in lieu of interest payments, and in parallel, by increasing the credit line. Funds are also being obtained from private bond funds buying the assets given up by oil producers to avoid default. Regarding this accelerating supply of funds to small- and medium-size oil businesses, one investment fund analyst at the CERA Week in Houston reckoned that investors are anticipating higher oil prices, and while fully aware of the investment risk, fear missing the chance to make a buck when oil prices eventually rise. Summing up all these factors, one of the best scenarios for US oil production is that oil prices will gradually recover from the current 55-56 dollars to enable oil-related companies to obtain financing, while leveling off not far above 65 dollars so that the recent explosive growth in production can ease to cruising speed.

2. EU Watching: German Cabinet Approves Bill Regulating Hydraulic Fracking

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On April 1, the Merkel Cabinet approved a bill that bans hydraulic fracking in Germany in any strata less than 3,000 meters underground. The country had announced in July 2014 basic policies restricting hydraulic fracking due to fears of groundwater pollution. In principle, the policies ban hydraulic fracking for drilling for shale gas and in water resource protection areas, and require the regulation to be reviewed in 2021. The recently approved bill sets specific legal requirements based on these policies.

The bill requires revision of the Water Resources Act and the Nature Conservation Act, expanding the scope of responsibility for environmental damage caused by drilling under the Mining Act, and assessing environmental impact. A depth of less than 3,000 meters underground would include, in addition to the shale layer, clay, peat and coal layers, and the bill bans "commercial" hydraulic fracking of these layers. However, hydraulic fracking will be permitted for research provided that the fracking fluid does not affect water quality, as there are still not enough findings and experience to determine the effects of hydraulic fracking on drinking water. The bill requires the government to establish an independent expert committee to conduct an assessment of hydraulic fracking till 2018. The bill further provides for an existing hydraulic fracking technology that has been used for developing conventional resources. In Germany, hydraulic fracking has been used since the 1960s for gas field development, but with the bill, the technology will be banned in certain regions (areas protected for water resources or medicinal spas, catchment areas that feed public water systems, and natural lakes). Regarding the bill, Environment and Building Minister Barbara Hendricks commented that "the ban on hydraulic fracking will continue until the risks are explained or a final evaluation can be made", re-emphasizing concern that the technology may pollute groundwater resources.

Many remember the legalization of hydraulic fracking for domestic shale gas development in the UK. For the EU, which has a policy goal of raising the energy self-sufficiency, shale gas development by a member country could greatly reduce dependence on Russian gas. Naturally, some cases such as the project in Poland have shown the difficulty of shale gas development outside the US. Reliant on Russia for roughly 40% of its oil and natural gas imports, Germany's approach to shale gas development as a new domestic energy resource deserves close attention.

Having been approved by the cabinet, the bill will be deliberated first in the Bundesrat, the upper house of the German parliament, which will release its opinion on May 8. The bill will then be discussed in the Bundestag, the lower house, where the Green Party is expected to oppose the bill. Also, some in the ruling CDU consider the regulation to be insufficient and demand tougher rules. The future of the bill is unclear as it leaves open the possibility of permitting commercial drilling beyond 2018; the upcoming deliberation must be closely monitored.

3. China Watching: Trends in Energy Mix and Its Medium- to Long-term Outlook

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China's National Bureau of Statistics announced that the percentage of non-fossil energies in primary energy consumption increased by 1.1 points year-on-year to 11.2% in 2014. This comes close to the binding target of the current 5-year plan of 11.4% in 2015. This achievement is backed by efforts to decarbonize the power generation mix. According to the China Electricity Council (CEC), the country's electricity output increased by 3.6% in 2014 to 5,546 TWh, of which non-fossil electricity accounted for as much as 1,420 TWh, up 19.6%. As a result, the percentage of non-fossil electricity in total electricity output increased by 3.4 points to 25.6% (19.2% for hydropower, 2.3% for nuclear, 4.1% for wind plus solar PV and others), the highest since the country's birth in 1949.

Why did the decarbonization of electricity sources make such progress in 2014? One main reason is the comprehensive program for the development and prioritized purchase of non-fossil electricity, as well as energy conservation. As much as 57.02 GW of new non-fossil power sources were developed, far exceeding new fossil power sources at 46.48 GW. On the demand side, electricity demand grew only 3.8%, the lowest since 1999, due to the slower economic growth and further transformation of industry structure to a high value-added economy, and greater use of more efficient home appliances, office equipment, lighting and other electric machinery. Furthermore, the weather factor cannot be ignored: CEC estimates that the cool summer of 2014 reduced power demand by more than 1 point. Additionally, thanks to heavy rainfall, the operating hours of the country's 300 GW of hydropower facilities increased by 293 hours from the previous year to 3,664 hours. On the other hand, thermal power plants, which account for 67.3% of total power generation capacity, were operated for 314 hours less than in 2013 as more renewable energies with unstable output were introduced. In conclusion, the great progress made in decarbonizing electricity sources was achieved by a combination of government policy, the weather, and the support of thermal power.

Moving forward, China has announced a target to raise the percentage of non-fossil energies in primary consumption to 15% by 2020, and to 20% by 2030. Regarding the power generation mix, in March, CEC announced a medium- to long-term forecast that non-fossil electricity will account for 39% by 2020, 49% by 2030, and 62% by 2050 in terms of capacity, or 29%, 37% and 50% in terms of power generation. In April, the achievements of the "China 2050 High Renewable Energy Penetration Scenario and Roadmap Study", a three-year project involving more than ten organizations including the Energy Research Institute of China, were announced. The study estimates that non-fossil electricity could account for up to 91% by 2050. Thus, the long-term direction is towards a massive expansion of non-fossil electricity.

Though a simple comparison is not possible due to the differences in circumstances, China's target for decarbonization of the energy mix is an ambitious one which rivals that of Germany, which aims to raise the share of renewable energies in primary energy consumption to 60% in 2050. To achieve this target, it is urgently necessary to establish a system for coordinating non-fossil power with thermal power, in addition to conventional measures such as promoting the development of non-fossil power sources and building transmission infrastructure, and preferential, full-amount purchase of renewable energies. The medium- to long-term issues include developing and spreading technologies for bulk storage of electricity and hydrogen production by water electrolysis, and building a system for leveling the power load considering the increase of electric vehicles.

4. ME Watching: Both Good News and Bad News in MENA

Koichiro Tanaka, Managing Director &
President of JIME Center

Although there are some positive signs, the Middle East and North Africa (MENA) region remains plagued by turmoil and the overall situation is becoming more unstable.

Regarding the nuclear negotiations with Iran over the "framework agreement" due at the end of March, on April 2, the foreign affairs ministers of Iran and the EU announced a joint statement on the various issues they had agreed upon as a common understanding. The parties are due to finalize the details of the agreement to produce and sign a "Joint Comprehensive Plan of Action (JCPOA)" by June 30. However, there have been differences between the parties, with the US distributing to the press a paper outlining the details of the agreement, which Iran took offense at and so held a separate press briefing at home. Similar problems occurred when the interim agreement was established in November 2013, but this time it is extremely difficult to judge the veracity of respective claims as there is no official document on the common understandings. However, it is clear that the main cause of the discrepancy lies in the process, scope, and timing of easing the sanctions which Iran has been demanding throughout the negotiations.

Criticizing the Obama administration for its stance in the negotiations, both Houses of the US Congress passed a legislation that will give a say to the Congress to limit the president's authority over easing of sanctions against Iran. However, Iran considers this hardline intervention as merely a US domestic issue, and is demanding that the US faithfully fulfill its commitment to the agreements, including the interim agreement. However, due to the partisanship in the US, there is a real fear that the JCPOA, even if signed by the parties, may not be fully implemented.

Iraq's much-troubled operation to recapture Tikrit aided by US air strikes ended in mid-April for the time being. However, to capture the areas inhabited by Sunni Muslims, inter alia Anbar Province, Iraq will have to depend on Shi'ite militants at the risk of fueling sectarian strife. During the battle over and the subsequent defeat in Ramadi, the Iraqi forces once again displayed its insufficient counter-insurgency capability, and so the prospects of military action against ISIS/ISIL, including recapturing the strategic northern city of Mosul, do not look good.

Meanwhile, in Syria, the government forces which have been fighting the insurgents have been losing ground since spring, not only losing the strategic city of Idlib that leads to Aleppo, but also allowing ISIS/ISIL to capture the town of Tadmur in Hums Province, renowned for its historical and archeological Roman-era ruins of Palmyra. This situation is the result of a weakening of Syrian forces now in the fifth year of civil war and a serious deterioration of the ability to provide critical intelligence on enemy movements that could be attributed to a 2012 terrorist attack which killed high-ranking security officials.

The air strikes on Yemen led by Saudi Arabia fell short of achieving its initial goal, which was to secure the control of Aden, and President Hadi fled to Saudi Arabia.. King Salman dismissed Prince Muqrin bin Abdulaziz in just three months, and installed Prince Muhammad bin Nayef, Minister of Interior, as the new Crown Prince. Foreign Minister Saud al-Faisal, elderly and in poor health, was also swept aside by the change in generations and replaced by his ambassador to the US, Adel al-Jubeir.

5. Russia Watching: Can the President Withstand the Economic Stagnation?

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On April 16, in an annual live broadcast to the Russian people, President Putin said that the darkest days are over for the Russian economy, and the situation could reverse within two years. While admitting that the West's economic sanctions against Russia could continue, the President put on a brave face and said that the sanctions are an opportunity for the domestic economic system to grow stronger through self-help, including bolstering import substitution industrialization. However, the President again did not indicate any specific measures for fundamental reforms to deal with the weakness of Russia's economic structure, such as overdependence on oil and gas revenues, even though the President has admitted this problem.

According to figures issued by the Federal State Statistics Service on April 17, mining and manufacturing production and fixed asset investment dropped by 0.4% and 6%, respectively, in the first quarter of 2015. Further, inflation rose by more than 16% year-on-year (up 6.4% year-on-year for 2014) while real disposable incomes and real average wages dropped by 1.4% and 8.3%, respectively, showing the growing impact on people's lives, particularly the low income bracket. Former Finance Minister Kudrin commented that annual domestic investment and real incomes could fall by as much as 12% and 6%, respectively.

On April 21, in a government report for the Russian parliament, Prime Minister Medvedev noted that the GDP growth rate for the first quarter of 2015 was -2% year-on-year, recording negative growth for a whole quarter (to be announced officially in mid-May) for the first time since the collapse of Lehman Brothers in 2009, and warned that if oil prices fall further or sanctions are strengthened, the Russian economy could face even greater difficulties.

A report published by the World Bank on April 1 puts Russia's GDP growth rate (0.6% for 2014) at -3.8% for 2015 and -0.3% for 2016, a significant downward revision from the estimates released last December of -0.7% and +0.3%. The IMF's forecast as of April 16 is similar to the World Bank's for 2015, but is more pessimistic for 2016 at -1.1%.

On April 19, at the World Economic Forum on East Asia in Jakarta, Deputy Prime Minister Dvorkovich admitted that the most serious problem for the Russian economy is raising new funds. Regarding oil prices, there is almost nothing that Russia can do alone to reverse them. In this regard, from an economic standpoint, it is of all the more importance for Russia to find a compromise with the West, regarding the Ukrainian crisis..

Although the armed conflict between the government forces and the pro-Russian militants in eastern Ukraine eased following "Minsk II" in February, conflict, including the use of heavy artillery, has returned since the beginning of April. On April 18, President Putin mentioned on Russian TV the possibility of recognizing the regions under pro-Russian rule as an "independent nation", like Crimea. He should not take the risk of spurring patriotism to strengthen the basis of his power with an aim to distract domestic public attention from the Russian economy's downturn.

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