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## Summary

### **【Global Watch】**

#### **1. China Watching: Specific Measures Needed to Promote Growth of the Green Industry**

In August, the State Council announced measures for promoting the growth of the green industry. The measures may be effective for the energy-saving and new energy automobile industry, but need to be more specific for the energy conservation and environmental protection industry.

#### **2. ME Watching: Tensions Rise as a Military Attack on Syria Becomes Imminent**

Claiming that the Syrian regime has used chemical weapons, the US has completed preparations to carry out military attacks on Syria. If a strike is launched, the impact on other countries such as Lebanon and Iran should not be underestimated. Prime Minister Abe visited the Middle East for the second time.

#### **3 Russia Watching: Is There a Way Out for the Deadlocked US-Russia Relations?**

US-Russia relations are deadlocked, due in part to the “Snowden issue”. Considering the economic situation, the need for foreign funds, the impact of the shale gas revolution and the rise of China, however, Russia can no longer afford to take a tough line against the US.

#### **4. US Watching: Impact of the Oil Tanker Train Crash in Canada**

The deadly train accident in Canada highlighted the risk of damage to storage tanks by chemicals used in hydraulic fracking, highlighting the challenges in constructing transportation infrastructure for shale oil and gas.

#### **5. EU Watching: Energy Conservation in the Urban Transportation Sector of Europe**

Various transportation policies to encourage the shift from automobiles to public transportation in large cities are effective for reducing energy consumption and GHG emissions, as well as overcrowding.

## 1. China Watching: Specific Measures Needed to Promote Growth of the Green Industry

**Li Zhidong**, Visiting Researcher  
Professor at Nagaoka University of Technology

In June last year, the State Council issued the “Twelfth 5-Year Development Plan for the Energy Conservation and Environmental Protection Industry” and the “Development Plan for Energy-Saving and New Energy Automobiles 2012-2020”, and fourteen months later, in August this year, issued the “Opinions on Accelerating the Development of the Energy-Saving and Environmental Protection Industry”, clarifying its commitment to accelerating the development of the energy-saving and environmental protection industry and the energy-saving and new energy automobiles industry<sup>1</sup> (“the green industries”).

In the Twelfth 5-Year Plan, the government set a binding target to reduce the energy consumption per unit of GDP by 16% from 2010 levels by 2015. However, the progress of energy conservation has been slower than planned, with the energy-GDP intensity per GDP decreasing by only 5.5% in the two years up to 2012. This is also true for electric vehicles (EVs), with only 39,800 new energy vehicles, mainly EVs, being sold as of March despite the target to produce and sell 500,000 cars by 2015, making it difficult to achieve the target.

Environmental issues are also serious. Air pollution by PM2.5 particles has spread over a quarter of the entire country, threatening the health of 600 million people. Frustration with this delay in achieving the targets and the risks posed by environmental problems surely lie behind the drive to boost the green industry. Such efforts are also essential for maintaining economic growth, which is now clearly slowing, in the high 7% range and achieving sustainable, long-term development.

The “Opinions” of the State Council call for the spread of new energy vehicles by expanding the pilot project for introducing the vehicles in the public transportation sector of cities such as Beijing and Shanghai, purchasing or renewing vehicles of which 60% are new energy cars, and by experimenting with providing subsidies to consumers. Further, the Council decided that a government sector purchasing a common public vehicle must preferentially select vehicles with engines smaller than 1.8 liters which comply with the energy conservation standard or new energy vehicles, especially pure EVs. All of these measures are expected to promote the development of the energy-saving and new energy automobiles industry.

Regarding the energy-saving and environmental protection industry, other than raising the target market share of high-efficiency energy-saving products from 30% to 50%, the “Opinions” merely confirm the existing plan. For example, the overall target to increase the production of the industry to 4.5 trillion yuan (72 trillion yen) in 2015 has not changed. Neither have the areas specified for intensive support, including promoting the development and expanding the use of energy-saving technologies including high-efficiency boilers and electric motors, environmental technologies including air pollution prevention and sewage treatment, and promoting the industrialization of energy service companies (ESCO) and environmental protection service businesses. The “Opinions” also include policy measures such as strengthening financial assistance through subsidies and tax benefits and fund-raising assistance through low-interest loans and encouraging the issuing of bonds and listing of shares, but still lack specific measures. To prevent these plans from not bearing fruit, detailed specific measures must be drawn up immediately.

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<sup>1</sup> In this article, new energy vehicles refer to vehicles powered purely by electricity (pure EVs), plug-in hybrid electric vehicles (PHEVs) which are powered mainly by electricity, and fuel cell vehicles (FCVs). Electric vehicles (EVs) include both pure EVs and PHEVs.

## 2. ME Watching: A Window of Diplomacy Opens amid Rising Tensions

Koichiro Tanaka, Managing Director &  
President of JIME Center

Just as another military operation in the Middle East appeared inevitable, now there are indications that diplomacy may yield more desirable results with regards to Iran and Syria.

With the publication of a UN report on the alleged mass use of chemical weapons (neurotoxic agents) against the residents of a town on the outskirts of Damascus, there is little room to doubt the occurrence of atrocities on August 21st. President Bashar al-Assad, in fear of a punitive military strike by the US and its allies, has displayed his diplomatic skills to avert a foreign intervention by accepting an offer presented jointly by the foreign ministers of the US and Russia that would obligate him to place Syria's stockpile of chemical weapons under the oversight of the OPCW for eventual destruction. There is room for the Japanese Self Defense Forces' experts to assist the inspection and inventory process that will follow Syria's accession to the Chemical Weapons Convention.

The lingering question of who was responsible for the deadly Sarin attacks is yet to be answered. While the US and its allies charge that there is now sufficient circumstantial evidence to prove that the attacks were conducted by the Syrian Army, Russia, an indispensable ally of al-Assad, is refuting such accusations by partially disclosing a Soviet-era document that indicates that the shell casings retrieved at the site suggests the transfer of chemical arsenals from either Egypt, Libya or Yemen, possibly by the rebels. This anomaly may be solved through the sampling procedure following the handover of chemical agents by the Syria Army. Yet, the success of the entire operation lays on the wording of the draft Security Council Resolution which the US and Russia still find discrepancies over their initial understanding.

The new Rouhani administration of Iran has appointed politicians and seasoned technocrats who helped run the practical aspects of politics in the previous governments, and have begun to tackle the most important challenges of improving diplomatic relations with Iran and advancing the nuclear talks. President Rouhani's appearance at the UN General Assembly has provided his country an opportunity to reset Iran's uneasy relationships with the West, in general, and the US, in particular. Like his French counterpart, Japan's Prime Minister Abe also had his first bilateral encounter with the Iranian President in New York.

PM Abe toured the Middle Eastern countries yet again following his visit in May. Aiming to build ties for national security, in addition to secure supplies of hydrocarbon resources, the Prime Minister agreed with the governments of Bahrain, Kuwait and Qatar to hold the so-called "2+2" talks (meeting of foreign and defense ministers of each country) on national security, as well as strategic talks with the Gulf Cooperation Council (GCC), which includes the states visited in this tour, at an early stage.

### 3. Russia Watching: Is There a Way Out for the Deadlocked US-Russia Relations?

**Shoichi Itoh**, Manager, Senior Analyst  
Global Energy Group 2, Strategy Research Unit

On July 31, Russia granted temporary asylum to the former CIA employee Edward Snowden (charged by the US government with violations of the Espionage Act) who had entered Moscow in June from his hide-out in Hong Kong. Angered by this decision, the US initially cancelled the US-Russia summit planned to be held in Moscow immediately before the G20 Summit on September 5-6. The U.S.-Russia relations were already becoming stagnant even before the Snowden issue due to many issues, including the US's strong displeasure with Russia's support for the Assad regime in Syria, and neither country could expect to gain anything from the summit. Although President Obama and President Putin were rushed into the bilateral meeting on September 6 due to the rapidly deteriorating situation with the use of chemical weapons in Syria, Moscow's persistent support for the Assad regime has remained unchanged to date.

Twenty years since the end of the Cold War, mutual distrust between the US and Russia runs deep. Although Russia's former administration under President Medvedev tried to mend relations with the West to prevent foreign funds from fleeing Russia in the wake of the global financial crisis, the then prime minister and de facto leader Putin basically retained his hard-line stance against the US.

The Obama administration, upon coming to office in 2009, initially attempted to repair the relationship with Russia under the catchphrase "reset". However, the efforts yielded little more than the signing of a New Strategic Arms Reduction Treaty and allowing supplies to be delivered to US forces in Afghanistan via Russian territory. Amidst the US-Russia relationship precipitating into a vicious spiral against the backdrop of the crackdown on anti-government activists in Russia, the planned deployment of the Missile Defense (MD) in Europe, etc., Putin returned to the presidency in May 2012.

However, Russia might increasingly find it too costly to keep on taking a tough line against the US. First, today unlike in the 2000s, the high prices of international crude oil have not resurrected the Russian economy. Russia's Ministry of Economic Development has recently revised the GDP growth rate for 2013 downward from 2.4% to 1.7%. Second, in order to solve the problem, Russia needs to diversify its economy which is currently over-dependent on natural resources, but its "iron fist" image deters foreign investment. Third, as it faces headwinds in the international energy market such as the shale gas revolution in the US, Russia needs to reduce its dependence on the European market, where the demand for oil and gas is slow, and to boost its crude oil and natural gas exports to Asian markets. Since the return of President Putin, Russian companies, especially Rosneft, have strengthened ties with foreign companies with an eye on Asia, and in particular, the tie with ExxonMobil is boosting the development of the Russian Far East. Fourth, as Russia becomes increasingly vigilant of the rise of China, it needs to prevent China from taking advantage of the deadlocked US-Russia relations.

US-Russia relations have a major impact on the stability of Northeast Asia, which is becoming increasingly uncertain. Japan must find an appropriate position for Russia in its strategy, while centering on the alliance with the US.

## 4. Impact of the Oil Tanker Train Crash in Canada

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On July 6, a freight train carrying crude oil derailed and exploded in Quebec Province, Canada, killing 47 people, destroying approximately 40 buildings, and polluting the environment as some of the oil reached a river. More than 200 stakeholders including the governments of Canada and Quebec Province claimed damages including clean-up costs against the train operator Montreal, Maine and Atlantic Railway, which filed for Chapter 11 bankruptcy on August 7 in the U.S. Bankruptcy Court in Maine.

While the cause of the accident is still under investigation, it appears that the operating engineer failed to fully apply the brakes when the train parked to allow the night shift engineer to board, or that the train ran away and derailed as firefighters released the brakes when putting out a fire that had broken out in the train.

The investigation revealed another possibility that the accident was due in part to hydrogen sulfide in the shale oil cargo, which damaged the tank, so the Canadian transportation safety authorities are now analyzing the chemical composition of the cargo of the crashed tanker cars. Deeply concerned about this possibility, the Federal Railroad Administration (FRA), which supervises the safety of American railroads, sent a letter to the American Petroleum Institute (API) suggesting that the chemicals used in hydraulic fracturing could mix with the crude oil and increase its hydrogen sulfide content, damaging tanks. So far, crude oil has never been treated as a hazardous substance. But in future, if an operator transporting shale oil does not voluntarily disclose the chemical composition of the cargo, the FRA has indicated that it may apply the existing “chemical composition test for hazardous substances”.

The leakage of fracking chemicals from boreholes and drain systems has been gathering attention. However, due to the difficulty of proving the phenomenon scientifically, the Department of the Interior once withdrew the safety requirements for hydraulic fracking it had drawn up under criticism from both environmental groups and the oil industry. When the requirements were proposed again in May, they had been revised to appease the oil industry, including easing the obligation to disclose the composition of the fracking chemicals and allowing companies not to disclose what they consider are corporate secrets.

The risk of tank corrosion is considered easier to prove scientifically than ground water contamination caused by leakage from oil and gas fields, and thus could result in the imposition of mandatory chemical composition analysis on shale oil transporters, as well as new requirements on the materials and coating of the tanks and on fire prevention procedures for railroad companies. In the US, some analyses have shown that the additional cost of meeting these new requirements, if introduced, would significantly affect profitability if the oil price falls below 75 US dollars.

The use of railroads for transporting shale oil and gas increased quickly as the development of shale oil and gas outran pipeline construction, but it has been pointed out that the railroads and existing domestic pipelines are seriously deteriorating with age. New public spending on transportation infrastructure and the introduction of new regulations on transportation safety all illustrate the broad scale of the shale boom.

## 5. EU Watching: Energy Conservation in the Urban Transportation Sector of Europe

**Wataru Fujisaki**, Senior Researcher  
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In European cities such as London and Paris, city center congestion and associated environmental issues have worsened as the number of cars has increased. As many buildings in European city centers are historic and roads cannot easily be widened to ease congestion, various approaches have been taken.

London, for example, introduced a congestion charge for the first time in 2003. This aims to reduce the number of cars entering the city center by imposing a congestion charge on any car entering the restricted zone between 8 am and 6 pm on business days. Car number plates are read by cameras installed at the edge of the restricted zone, and a tax of ten pounds (about 1500 yen) is charged per day. The tax is not imposed on taxis, vehicles used by the handicapped, and ambulances, and is reduced by 90% for those who live in the restricted zone. These measures have reduced traffic in central London by 20% and the delay of buses due to congestion by 30%. The easing of congestion has also reduced air pollutants such as NO<sub>x</sub> and PM, and contributed to the reduction of CO<sub>2</sub> emissions.

Unlike London, Paris does not limit the entrance of vehicles by regulation, but instead introduced a pay-by-the-hour bicycle rental system called Velib in 2007, to help drivers shift from cars to public transport. The bicycles can be picked up from and returned to any parking point on the street 24 hours a day by users themselves. With 2,000 parking points within Paris spaced roughly 300 meters apart, and with more than 20,000 bicycles, Velib has become popular both with residents and tourists for its convenience. Buoyed by this success, a similar system for renting electric vehicles called Autolib was launched, and parking spots are being built in Paris one after another. One not-so-obvious advantage of Autolib is that there is no need to search for a parking space as vacancies in the parking lots reserved for Autolib are displayed on the car's navigation system. This is a tremendous advantage considering that Paris' parking spaces are quickly being converted to other purposes, making the city's few parking spaces even rarer. Autolib helps discourage drivers from driving their own cars from the suburbs into the city center, encouraging a shift from cars to public transportation.

These measures have helped reduce energy consumption and GHG emissions of the transportation sector by alleviating congestion. While Japan still suffers from inadequate transportation infrastructure such as ring roads in the Tokyo area where the Metropolitan Inter-City Expressway and the Tokyo Gaikan Expressway are due to open this year, the examples of Paris and London could provide a useful reference when considering measures to control car traffic into central Tokyo.

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