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# 1. Notable Domestic and Overseas Oil Issues

**Yoshikazu Kobayashi,** Senior Economist, Manager
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On February 28, the Natural Resources and Fuel Committee of the Advisory Committee for Natural Resources and Energy launched last November set up a separate Petroleum and Natural Gas Subcommittee to discuss the future petroleum policy. The March-end deadline for domestic petroleum refining and marketing companies to introduce a certain ratio of heavy oil cracking units in compliance with the Act on Sophisticated Methods of Energy Supply Structures is approaching. The Subcommittee will discuss the future direction of Japan's petroleum industry after the deadline of the "post-Sophistication Act."

The specific agenda of the Subcommittee will include making the domestic refineries and supply chain more resilient based on the experience of the Great East Japan Earthquake, making the refineries more competitive by strengthening the links between the complexes, and introducing a fair and transparent wholesale pricing system in the domestic oil market. The discussions are due to be finalized this summer.

Perhaps even more urgent than these issues is for the Subcommittee to discuss how to redesign the domestic oil industry as domestic demand shrinks, and how the government should respond. Needless to say, a competitive petroleum industry within Japan is essential to ensure a stable supply of oil. While each company must set its own priorities in its growth strategy, including strengthening the upstream business, entering the downstream businesses overseas, or aiming to transform into a comprehensive energy company in the domestic market, the Subcommittee is expected to discuss a range of policies to support the growth strategies selected by the oil companies.

Looking overseas, discussions on lifting the ban on oil exports have accelerated in the US since the beginning of the year. As American oil production continues to grow dramatically, the US Congress, particularly Senator Murkowski (R-Alas.), senior government officials, and industry are stressing that the current law created in the 1970s is obsolete and should be revised.

However, the existing export regulation, which is based on export control laws, is extremely complex and intricately intertwined with various laws on mineral leasing and Alaskan oil, and thus immense effort will be required to revise it. Further, in Congress, some prominent lawmakers are opposed to the lifting of the ban, arguing against "giving in to the oil giants seeking to make big money from exports". Under such circumstances, the pro-export group is apparently seeking ways to lift the ban by presidential decree, instead of the orthodox method of law amendment. However, as this approach would also take time, it is important to simplify the procedure. With the mid-term election due in November this year, the Obama administration is unlikely to dare to lift the ban immediately as it could push up gasoline prices in the country, and so it will take time for realistic discussions on lifting the ban to begin. Nevertheless, when the ban on US oil exports is lifted, it will greatly affect the international oil situation, and so developments must be closely monitored.

## 2. Discussions at Multilateral Joint Study Group on LNG

**Tetsuo Morikawa**, Manager
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At the Second LNG Producer-Consumer Conference in September 2013, the IEEJ announced the launch of the Multilateral Joint Study Group on LNG which aims to achieve an in-depth understanding of the natural gas market and contribute to the sound development of the LNG market. The first meeting of the Study Group was held on February 13 at the IEEJ, attended by fifteen members mainly from the research institutions of LNG-related countries and the IEA, and fifteen observers from the governments of LNG exporting and importing countries/regions. The key points of the discussions are summarized below.

First, the discussions reconfirmed that importing countries increasingly need flexible LNG supply, due to the large fluctuations in gas demand especially for electricity generation, the Asia Premium on LNG and the rising need to address such premium. The large fluctuations in demand are attributed to , for example, demand seasonality and the timing and extent of nuclear restart and development in Japan. The discussions revealed that many participants consider that the destination clause of LNG contracts impedes supply flexibility. Thus, there are high expectations for American LNG, which has no destination clause.

Second, in relation to the Asia Premium, the participants share the notion that the price level and the rationality of the pricing system are separate issues. Importers hope American LNG to lower the price level and improve supply flexibility. However, since the actual purchase price of the US LNG and its competitiveness against the oil-linked LNG import prices will depend on the market situation at a given time, and there is a growing sense of realism that a particular pricing system will not necessarily lead to lower prices.

Third, the importance of policies was highlighted particularly in relation to natural gas development. Specifically, it was recognized that Australia's measures for easing the high-cost structure of LNG projects and the rationalization of regulations such as infrastructure-sharing, and the US's policy of permitting hydraulic fracturing and exports to non-FTA countries significantly affect not only the supply and demand of natural gas in those countries but also the LNG market. Further, as policies are important such as regulatory price reforms for reflecting the import cost on domestic prices, deregulation policy for improving the liquidity of the domestic gas market, and dealing with the destination clause, policies are just as important for importing countries too.

The second meeting of the Study Group is scheduled in July 2014, and its results are due to be reported at the LNG Producer-Consumer Conference this autumn. It is hoped that the Study Group will continue to host constructive discussions for building mutually beneficial relationships between exporters and importers, and for the sound development of the LNG market.

## 3. Results of the Survey on Solar Power Capacity Licensing

**Hisashi Hoshi**, Board Member, Director
New and Renewable Energy & International Cooperation Unit

The news had been expected, but still came as a surprise. In mid-February, METI announced the results of its survey on the capacity of solar power licensed under the Renewable Energy Act, and the amount of capacity actually put into operation. The increase in operating capacity has long lagged far behind the soaring licensed capacity, leading to criticism of electricity producers for holding their projects until panel costs drop further, thus maximizing profits. In addition to the paucity of projects that have actually begun operating (only 8% of the licensed capacity surveyed), the survey revealed that substantial number of projects have failed to secure land and/or solar equipments . Among the 13 GW of capacity covered by the survey (more than 400 kW, licensed in FY 2012), excluding those projects that have already begun operation, only 30% had secured both land and equipment, with 22% of the projects having neither.

The delay in launch is not without reason; it is due to the limit on the maximum installability of solar power facilities in Japan. Solar power capacity took many years to reach 5.6 GW before the Renewable Energies Act came into effect, yet as much as 1.7 GW were introduced in only nine months from when the FIT system was introduced in July 2012 to the end of the fiscal year. In retrospect, this must have been the maximum installable capacity of Japan at that point. Therefore it is unavoidable that the licensed 20 GW of capacity has not fully been put into operation. There is a limit on the speed with which the inverters and racks that support the panels can be supplied, not to mention the panels themselves, and skilled workers cannot be recruited so easily.

However, there is little sympathy for those electricity producers who still had not secured sites or fixed equipments, or both, by the time the survey was conducted several months after licensing. They have clearly taken the easy approach of taking advantage of the generous licensing requirements and securing high purchase prices without solid business prospects.

For those projects without land and equipment, METI plans to conduct hearings in March, and depending on the results, to cancel licenses. Hearings will also be conducted by August for the projects without either the land or the equipment, and licenses will be cancelled as appropriate. Unsurprisingly, METI plans to set up a working group to review licensing processes.

What will happen now? As a result of the hearings, about 5 GW of licensed capacity could be cancelled, though more than 10 GW will still remain. Meanwhile, currently, about 500 MW is being put into operation each month. As major investments for expanding the supply capacity are unlikely due to uncertainty over renewables policy, the pace of launch is likely to remain as it is, in which case it will take about two years until the existing current licensed projects (over 10 GW) are put into operation.

As the discussions on the energy mix advance, the direction of introduction of renewable energies, including solar power, should become clearer. Only then will it become necessary to maintain and encourage investment. The evolution in system design and predictable policies are keenly awaited to gain a clearer image of the introduction of new capacity.

# 4. China Watching: Will 2014 be the Year that Kick-starts New Energy Vehicles?

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

According to the China Association of Automobile Manufacturers, in 2013, China produced 22.17 million cars and sold 21.98 million, up 14.8% and 13.9% from the previous year, respectively, ranking the largest in the world for the fifth consecutive year. The production and sale of new energy vehicles (NEVs), including electric vehicles (pure EVs) which run only on electricity, plug-in hybrid vehicles (PHEV) which run mostly on electricity, and fuel cell vehicles (FCVs), were 17,533 units and 17,642 units, respectively, up 39.7% and 37.9% from the previous year. Cumulative sales of these cars up to 2013, however, remain at 45,400 units, far behind the government's target of 500 thousand units by 2015 and 5 million units by 2020.

Under these circumstances, in January, Prime Minister Li Keqiang and Vice Premier Ma Kai made back-to-back visits to NEVs production facilities, and announced that the government will not change its target or relax its support measures. Accordingly, in February, the Ministry of Finance and the National Development and Reform Commission (NDRC) released the "Notification on the Further Promotion and Application of New Energy Vehicles". The reduction in subsidies for NEVs, which were set at minus 10% for 2014 and minus 20% for 2015 from 2013 levels by the policy "Regarding the Continuous Promotion and Application of New Energy Vehicles" released last September, were eased to minus 5% in 2014 and minus 10% in 2015. For a pure EV, this is equivalent to a subsidy of 57,000 yuan for 2014 and 54,000 yuan for 2015, from 60,000 yuan (1.02 million yen: 1 yuan = approx. 17 yen) for 2013. At the same time, it was also decided to continue the subsidy policy after 2015. The government is committed to develop the new energy vehicle industry and expand its market.

The selection of model regions for the NEV promotion project is also in progress. At the end of January, the Ministry of Finance and the NDRC newly selected 8 cities and 4 urban areas, including Shenyang City, as model areas. Combined with the first group of 23 cities and 5 urban areas selected in November last year, including Beijing and Shanghai, as many as 86 cities have now been selected. The government has imposed a target of introducing at least 10,000 units in each metropolis and focus region by 2015, and at least 5,000 units each in other cities and regions. As 84 of the 86 model regions have a population of more than 1 million, the target, if achieved, will mean the introduction of 850 thousand units by 2015 in the model regions alone. Further, the PM2.5 problem, which is an urgent issue in most model regions, could also accelerate the introduction of new energy vehicles. For example, Beijing City is offering NEV buyers the same amount of subsidies as the government, and helping to build charging stations at least every 5 kilometers by bearing 30% of the investment cost by charging station construction companies, aiming to introduce 40,000 units by 2015 and 170,000 units by 2017.

Going forward, the demand for new energy vehicles in the public sector is likely to grow steadily, as the government has obliged the purchase of NEVs for at least 30% of all new and replaced vehicles for public transportation, official services, postal services and city cleaning. Meanwhile, for general users, NEVs have become less expensive thanks to the central and local government subsidies, but the greatest concern is the lack of charging infrastructure. The government plans to address this issue by offering incentives to the model regions, and so the amount and conditions will be fixed shortly, which should accelerate the construction of infrastructure, particularly by municipalities. If this happens, annual sales of new energy vehicles could break through the 100 thousand unit mark. For China, 2014 could be the year that kick-starts the expansion of NEVs.

## 5. EU Watching: Challenges Faced by German Energy Suppliers

**Wataru Fujisaki**, Senior Researcher
Global Energy Group 1
Strategy Research Unit

As the soaring residential electricity tariffs caused by the increase in renewable energies become a problem in Germany, the energy suppliers are also facing various challenges. The key points of the discussion with the German utility E.ON last month are summarized below.

First is the handling of the nuclear fuel tax. In 2010, Germany introduced a nuclear fuel tax in exchange for extending the operating periods of existing nuclear power plants. However, in the following year, 2011, Germany passed revisions to the nuclear power law for shutting down the nuclear power plants by 2022 in stages. In response to this turnaround in policy, energy suppliers including E.ON and RWE are demanding that the authorities abolish the nuclear fuel tax as it is no longer rational following the change in policy to abandon nuclear power. However, the government has no intention of doing so, claiming that "the tax is not directly linked with the operation periods of nuclear plants". The energy suppliers are now suffering from the double burden of worsening finances due to the shutdown of their nuclear power plants, and the new nuclear fuel tax. Sharing of the cost of decommissioning nuclear plants by utilities, which could significantly worsen their finances, is also being discussed with the government.

Second is the issue of securing adjustment power sources. Renewable energies such as solar and wind power require adjustment power sources to compensate for the drastic output fluctuations caused by wind and sunlight conditions, to ensure a stable supply of electricity. However, the availability ratio of adjustment power sources such as natural gas thermal has dropped significantly due to the increase in coal thermal and the rapid growth of renewable energies. It is becoming difficult for energy suppliers to maintain reserve capacity which may need to be used for only a few dozen hours per year, and E.ON has been forced to shut down its latest gas turbine combined cycle plant which was launched just two years ago.

Third is the issue of passing on the costs of the renewable energy surcharge. In Germany, construction of the transmission network is lagging far behind the rapid growth of renewable energies, and thus the electricity produced in the north cannot be sent to the industrial south. Hence, the electricity that has been purchased must be sold cheaply in the electricity market, sometimes at a loss. These costs are ultimately passed on to consumers through the renewable energies surcharge, but recently, the government may ask the suppliers to reduce or defer imposing the surcharge in order to control the residential electricity tariffs.

Due to such circumstances, the share price of E.ON, one of the world's top utilities, tumbled from more than 40 euros in 2007 to below 15 euros in 2013, losing more than 60% of its value. Aware of this situation, the new coalition government unified the departments in charge of energy policies, which had been divided between the Federal Ministry of Economics and Technology and the Federal Environment Ministry, and launched the Federal Ministry of Economics and Energy. The transfer in leadership for formulating the energy policies from the Environment Ministry, which is leading the battle against global warming and promoting the nuclear-free policy, to the Ministry of Economics and Energy, which considers the domestic industries of Germany, is a sign of possible change in Germany's energy policy, and must be observed closely.

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