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Summary

Energy Market and Policy Trends

1. European Commission Announces 30% Energy Saving Target for 2030

On July 23, the European Commission announced a target to reduce energy consumption by 30% from the BAU case by 2030. This target consists of the energy saving effect associated with reduced GHG emissions, topped up with the energy security effect.

2. Balancing the Burden of Renewables with Their Benefits: New and Renewable Energy Subcommittee

The discussions for reviewing the renewable energies policy have begun at the New and Renewable Energy Subcommittee. Further discussions are needed to determine how to balance the inherent benefits of renewable energies with their comprehensive costs.

[Global Watch]

3. China Watching: Strengthening the Environmental improvement for Using New Energy Vehicles

The government and the municipalities are jointly taking the lead in resolving the relatively high cost of NEVs and accelerating efforts to improve the necessary infrastructure. The cumulative production and sales target of 500,000 vehicles is likely to be achieved by 2016 at the latest.

4. US Watching: Domestic and International Discussions on Financing Coal Projects

The strict restrictions on loans by US governmental financial institutions to coal projects (introduction of carbon capture technologies) are causing controversy. The progress and results of both international and domestic discussions must be closely monitored.

5. EU Watching: A View on the Slow Deregulation of France's Energy Market

Even after full deregulation, the French market is still controlled by a few players. Different countries have differing views on the market mechanism, and the battle continues between the European Commission and the governments over the liberalization of the energy market.

1. European Commission Announces 30% Energy Saving Target for 2030

Hiroki Kudo, Senior Research Fellow Global Environment and Sustainable Development Unit

In the Energy Efficiency Communication 2014 (COM(2014) 520) released on July 23, the European Commission proposed a target to reduce energy consumption by 30% from the Business-As-Usual (BAU) case by 2030. This target will undergo further reviews before officially becoming part of the "2030 framework for climate and energy policies", which the European Council released in January and agreed to finalize by October.

When the policy proposal was first announced in January, the energy saving target was not clearly set and was postponed for further discussion due mainly to the strong opposition of the UK. However, the Russia-Ukraine crisis precipitated by the annexation of Crimea in March made it urgent for the EU to implement energy security measures, and eventually led to the formulation of the draft energy saving target, which was expected to contribute to the policy target. This means that the EU has chosen to maintain a policy framework structure similar to its 2020 target.

The new target of 30% consists of the energy saving effect of 25% resulting from the 40% GHG emissions reduction announced in January, combined with an additional 5% energy saving to enhance energy security by reducing the dependency on external energy more quickly. However, as the higher target involves additional costs, some aspects, such as the specific method for target-setting and the legal force of the target, remain uncertain and open to discussion.

Similarly, in Japan, future energy saving policies are being discussed in the Energy Efficiency and Conservation Subcommittee of the Committee on Energy Efficiency and Renewable Energy, Advisory Committee for Natural Resources and Energy, in a bid to determine the future energy mix and the GHG emissions target beyond 2020. At the third meeting held on July 24, the energy saving measures for the industrial and consumer (residential and business) areas were clarified and discussed. For the industrial sector, various issues were raised in considering the measures further, such as assessing the spread of energy-saving equipment, as well as institutional issues such as the energy manager certification system and formulating energy saving plans.

For the consumer sector, IEEJ CEO and Chairman Masakazu Toyoda provided information on "the international comparison of specific energy consumption, issues in saving energy in the consumer sector, and overseas cases", and highlighted the need for a system that promotes energy saving by linking the value of properties, such as houses and buildings, with their energy saving performance.

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2. Balancing the Burden of Renewables with Their Benefits: New and Renewable Energy Subcommittee

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

On June 17, the New and Renewable Energy Subcommittee (hereafter, "Subcommittee") of the Advisory Committee for Natural Resources and Energy met to determine the renewable energies policy set out in the Basic Energy Plan approved by the Cabinet in April, and identify necessary measures.

At the first meeting, the members appointed from various areas, including academia, the financial industry, NPOs and other private organizations, and the relevant industry organizations (observer) presented their views, which covered an extremely broad range, indicating the complexity of the renewable energy issue.

As a result, the first meeting did not decide on a clear direction for the future. Naturally, the industry organization for renewable energy strongly demanded that the FIT program be continued. On the other hand, economic groups expressed concern about the rise in electricity tariffs. Meanwhile, the academic experts stated that it was important to balance the social burden of renewable energies with their benefits, but did not suggest how to set the balance. Thus, the direction of the discussions remains unclear.

Fortunately, the Basic Energy Plan gives a target volume for renewable energies, which is "even higher" than that given in the previous Basic Energy Plan (formulated in June 2010) of approximately 20% of overall electricity output by 2030. The government has also referred to this target during the meetings as the "pillar of the discussions". It is an important "reference index" that cannot be avoided in planning the introduction of renewables.

However, it will not be easy to achieve this target. The share of renewable electricity is just under 11% (including hydropower at 8.5%) for FY 2013. This figure must be doubled to achieve the target, but with large-scale hydropower approaching its limit, it would be necessary to increase other renewables by seven times to achieve the target. This involves the issue of cost burden, which was repeatedly pointed out during the meeting, in addition to technical issues such as grid connection and measures for ensuring stability. It would be unreasonable to ignore the cost burden just because the target is stated in the Basic Energy Plan.

Further, how should this independent target for renewable energy be handled in the context of the "energy mix" relative to other energy sources? This is another reason why it is hard to treat this target as an absolute goal.

The discussions should clarify the principles, as well as the numerical approaches, for comprehensively identifying the cost of renewables, including measures for stabilizing the grid. We should also not only discuss the costs but also remember to evaluate using indices the intrinsic benefits of renewables such as environmental-friendliness and energy security.

3. China Watching: Strengthening the Environmental improvement for Using New Energy Vehicles

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

According to the China Association of Automobile Manufacturers, China produced 20,692 new energy vehicles (NEVs)¹ in the first half of 2014, and sold 20, 477 units, up 18% and 16%, respectively, from the annual figures for the previous year. Meanwhile, the government and the municipalities are jointly taking the lead to resolve the relatively high cost of NEVs and improve the electricity and hydrogen charging infrastructure for such vehicles, thus boosting the environmental improvement for their use.

Since 2009, the government has been subsidizing the purchase of NEVs. The maximum subsidy per passenger car is 57,000 yuan (1 yuan = 16.6 yen) for pure EVs, 33,000 yuan for PHEVs, and 190,000 yuan for FCVs for this year, although the amount per unit is decreasing over time. Further, on July 9, the State Council decided to exempt the 10% purchase tax from September 1 this year to December 31, 2017.

The delayed construction of infrastructure is also picking up. On July 8, with the attendance of Prime Minister Merkel visiting from Germany, the countries launched a joint project for setting a unified standard for rapid EV chargers. On July 13, six ministries and agencies including the National Development and Reform Commission released a plan encouraging government and public organs to buy more new energy vehicles. The plan requires the central government ministries and the public organizations of the 86 cities selected as NEV promotion models, including public offices, public universities and hospitals of the cities, to purchase or replace vehicles such that at least 30% are new energy cars between 2014–2016, and to raise the ratio annually thereafter. It also requires the number of installed regular chargers to remain sufficient for the number of NEVs introduced. Further, on July 21, the State Council released the "Guiding Opinions on Accelerating the Expansion of New Energy Vehicles Use", which requires municipalities to introduce rapid chargers and the grid companies to construct relevant facilities such as the electricity grid for chargers.

The municipalities and industry have also started to move. For example, Beijing released an action plan on July 3 for expanding the use of NEVs between 2014 and 2017, and announced that it will establish the Beijing model as a national model, and aim to achieve the world's largest number in use. The city will purchase and replace all of its public vehicles and urban taxis with NEVs, and purchase at least 4,500 new energy buses by 2017. It will also increase the number of NEVs for general users to 170,000 units by requiring regular chargers to be installed in at least 18% of all parking lots as a condition for licensing new construction and refurbishment, and by installing 10,000 rapid chargers by 2017. As assistance, the city will subsidize the same amount to the buyer as does the government, as well as paying for 30% of the investment made by those who install a charger. Meanwhile, the State Grid Corporation of China set up a plan to construct, by 2015, rapid charger stations at every 38 km on the 2,285 km of highways that connect Beijing with Hong Kong and Macau.

While providing generous subsidies and tax exemptions to buyers, the government seems too dependent on regulations, municipalities and companies in building the infrastructure. In the "Opinions", the State Council ordered the relevant ministries to create within this year an incentive system for building infrastructure. Meanwhile, regarding future market trends, Professor Minggao Ouyang of Tsinghua University, who leads the national project on NEV development, estimated that production and sales will top 100,000 units this year, and the target of the Twelfth 5-year Plan to reach cumulative production and sales of 500,000 units will be reached in 2015 as planned, or by 2016 at the latest.

¹ In China, New Energy Vehicles include electric vehicles that run only on electricity (pure EVs), plug-in hybrids (PHEV) that run mainly on electricity, and fuel cell vehicles (FCVs). Hybrid vehicles (HVs) are categorized as an energy-saving vehicle.

4. US Watching: Domestic and International Discussions on Financing Coal Projects

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

In his "Climate Action Plan" Speech of June 2013, President Obama declared that US government financial institutions in principle will not finance overseas coal projects, and called on international financial institutions to do the same. In response, in July, the Export-Import Bank of the United States (Ex-Im Bank) rejected a loan for a Vietnamese coal thermal power project, which was under review. In October, the Treasury Department released guidance instructing international financial institutions to advise countries which receive assistance to opt for low-carbon power sources, and to require the introduction of carbon capture technologies as a condition for introducing coal thermal power. In line with the guidance, the US government financial institutions, the Ex-Im Bank and the Overseas Private Investment Corporation (OPIC) updated their review procedure and added the requirement of carbon capture technologies as a condition for approving loans for coal projects.

The discontinuation of loans for coal has had an impact both within the US and overseas. By the end of 2013, the World Bank, the European Investment Bank and the European Bank for Reconstruction and Development all decided not to finance coal projects, with the UK, Holland and Scandinavian countries announcing similar policies. Having announced strategies to limit loans for coal projects already in 2011, the World Bank's decision would have been irrelevant to President Obama's efforts; however, the change in policy by the number-one donor and host country of the organization must have put pressure on the World Bank.

The loans by institutions which have pledged to decarbonize account for 37% of the total public loans to coal thermal power plants worldwide made since 1994 of 37 billion dollars. The change, if steadily implemented, will significantly affect investments in coal thermal power in emerging and developing countries. Meanwhile, of the 37 billion dollars of loans, Japan (Japan Bank for International Cooperation and Nippon Export and Investment Insurance) accounts for the highest ratio at 28%. This change threatens Japan's potential to sell its high-efficiency coal thermal technologies overseas. Japan must continue to be able to use various technological options other than carbon capture, even if it must apply stricter environmental requirements for its loans to coal projects. Similarly, the Asia Development Bank (11%), Germany (8%) and China (9%) have also not followed suit with this change.

As loans for coal thermal power become an issue in terms of diplomacy and development aid, Obama's coal financing policy is wavering even in the US. The Ex-Im Bank is operating under a five-year authorization from Congress, and the current charter will expire at the end of September 2014. Regarding the reauthorization, which was submitted in December 2013 and is currently under review, the lawmakers from coal-producing states are demanding, as a condition for the Ex-Im Bank to continue, the removal of restrictions on lending to coal projects without carbon capture technologies.

Concerning international financial institutions, some conservative Republican lawmakers view them as "a mechanism for using taxpayer dollars to support big business, and thus should be abolished", while the industrial sector is strongly demanding their renewal. As such, the three-way struggle continues between the Democrat lawmakers who want to continue the institutions in line with the decarbonization policy, the bipartisan lawmakers of coal-producing states, and the conservative Republican lawmakers, as Congress enters the summer recess. As the discussions on the Ex-Im reauthorization heat up, on July 1, 2014, the Bank received loan applications for projects to build a coal thermal plant and to develop a coal mine in India.

Even if the demands of the coal-producing state lawmakers prevail in Congress and the decarbonization policy of the Ex-Im Bank is withdrawn, the Treasury Department guidance will not be withdrawn. The decarbonization policy will continue to affect developing countries' use of coal just as Obama plans provided the World Bank and other international financial institutions stick to their policy, but even then, the damage to President Obama's prestige will be immense.

5. EU Watching: A View on the Slow Deregulation of France's Energy Market

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

Even seven years since full deregulation in 2007, the French electricity and gas market continues to be dominated by the former monopolies EDF and GDF Suez which have an overwhelming share. In response, in April, the third-ranking gas company and a newcomer to the gas market Direct Energie filed an action with the French competition authority against GDF Suez, claiming that the former monopoly is blocking new players from entering the market. GDF Suez was sued also in June by consumer association UFC Que Choisir, which claims that the electricity market remains controlled by a select few and that there is no competition between the companies. All these cases resulted from frustration with the reluctance of the French energy market to open up, but the causes are particular to France.

With the full deregulation of 2007, the French electricity and gas market introduced the "market tariffs system", in which energy suppliers can provide various tariff options such as fixed tariffs and long-term contracts, and the consumers who changed their energy suppliers were automatically transferred to the market tariffs. On the other hand, for those consumers who did not exercise their right associated with the deregulation, such as changing suppliers, the government-authorized "regulated tariffs" which are linked with wholesale electricity and gas prices continued to apply. The market tariffs were initially lower than the regulated tariffs, but later surpassed the regulated tariffs with the change in oil prices, causing the tariffs to be higher for those who changed their energy supplier with the liberalization. Initially, to promote liberalization, the consumers who changed energy suppliers and transferred to the market tariffs could not return to the regulated tariffs. However, consumers were later allowed to do so after a surge in consumer complaints about higher market tariffs. Most consumers now choose the regulated tariffs as they feel safer with these tariffs which are closely monitored by the regulator, consequently slowing the liberalization of the energy market.

The problem is that these regulated tariffs exist at all. Abolishing the regulated tariffs or making them higher than the market tariffs would promote the shift to market tariffs, and hence liberalize the energy market. However, the French government shows no sign of doing so. One of the reasons is to protect consumers, but the root cause is that the government remains wedded to Rhine Capitalism, which is a Continental European attitude that values social solidarity and prefers the market economy to be governed by highly-competent politicians and bureaucrats, as opposed to the Anglo-Saxon Capitalism of the UK and the US which believes that market-led competition results in the most efficient market.

France is actively introducing nuclear power to ensure the country's energy security, and its retail electricity price is among the lowest in the EU. The French government believes that its appropriate intervention is the optimum way to ensure energy security while lowering the price, and has been successful with this approach. The government has a tradition of intervening in the restructuring of the energy companies, going as far back as the privatization of Gaz de France, and more recently the sale of the energy wing of the heavy electrics giant Alstom. While the European Commission wants to introduce British-style market competition throughout Europe, the struggle is likely to continue unless the French government decides to change. Recently, Brussels seems to be gaining the upper hand with the success of the EU's Third Energy Package in isolating the transportation department of vertically-integrated energy companies. We must closely monitor how far the French government can fight back.

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