

## IEEJ e-NEWSLETTER

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#### **Contents**

## **Summary**

[Energy Market and Policy Trends]

- 1. Tokyo Gubernatorial Election and the Future Energy Policy
- 2. US's Stance toward the Paris Agreement on Climate Change

#### [Global Watch]

- 3. ME Watching: Lingering Concern over the Spread of Terrorism
- 4. Russia Watching: Draft Long-term Energy Strategy and Strengthening Presence in Asia
- 5. US Watching: New GHG Emissions Regulation for Coal Thermal Plants



## **Summary**

#### **Energy Market and Policy Trends**

#### 1. Tokyo Gubernatorial Election and the Future Energy Policy

With the end of the Tokyo gubernatorial election, discussions on the Basic Energy Policy will resume. The government's draft of the Plan was released at a meeting of nuclear power-related Cabinet members at the end of February. The Plan is due to be approved by the Cabinet in March following adjustments within the ruling party.

#### 2. US's Stance toward the Paris Agreement on Climate Change

Heading toward agreeing on the international framework for climate change countermeasures beyond 2020 at COP21 in Paris, the US submitted an opinion statement. The statement is significant as it proposes revising a current UNFCCC principle.

#### [Global Watch]

#### 3. ME Watching: Lingering Concern over the Spread of Terrorism

As the Syria peace talks ended without success, a restructuring of the Shi'ite political group began in Iraq. There are concerns over a major shift in Iran's nuclear negotiations. The Crown Prince of Saudi Arabia and the Crown Prince of Abu Dhabi visited Japan in quick succession.

#### 4. Russia Watching: Draft Long-term Energy Strategy and Strengthening Presence in Asia

The government's draft "Energy Strategy of Russia toward 2035" aims to boost LNG exports to the Asian market. Japan must closely monitor the LNG situation of Asia and the changing international setting in implementing its strategy toward Russia.

#### 5. US Watching: New GHG Emissions Regulation for Coal Thermal Plants

Policy developments in the US such as the EPA's moves to require CCS and GHG emissions reductions by coal thermal plants require close attention in view of the impact on the stable supply and demand of electricity.



## 1. Tokyo Gubernatorial Election and the Future Energy Policy

Akira Yanagisawa, Senior Economist, Manager Energy Demand, Supply and Forecast Analysis Group Energy Data and Modelling Center

On February 9, the Tokyo gubernatorial election was held following the resignation of the former governor Naoki Inose. From among 16 candidates, former Health, Labour and Welfare Minister Yoichi Masuzoe was elected as the 19th Governor of Tokyo. The Governor is expected to immediately start tackling the many urgent issues facing the metropolitan government, including the FY2014 budget.

Among the candidates of the gubernatorial race was former Prime Minister Morihiro Hosokawa, who campaigned on the top issue of immediately closing all nuclear power plants. His candidacy may have affected the process of finalizing Japan's new Basic Energy Plan and delayed Cabinet approval beyond the original schedule. Eventually, however, Masuzoe topped both Kenji Utsunomiya, another candidate advocating the immediate elimination of nuclear, and Hosokawa, with more than twice the number of votes as either of them.

This electoral count may work in favor of the "Opinions on the Basic Energy Plan" which aims to include nuclear among diverse energy sources, leading the Cabinet to approve the Plan as early as in February. However, this appears unlikely considering possible objections to the role of nuclear even within the ruling coalition of the Liberal Democratic Party and New Komeito, as well as the complicated dynamics within the government and political groups.

How will the election result affect energy policy? From a neutral standpoint regarding nuclear, the will of voters concerning nuclear is difficult to read. Heavy snowfall the day before the election led to an extremely low turnout of only 46%, down 16 points from the previous election. Further, media exit polls showed that the energy policy might not have been the deciding factor. Accordingly, Masuzoe's win does not signify complete endorsement of the policy proposal of the Advisory Committee for Natural Resources and Energy for the new Basic Energy Plan.

According to exit polls, the percentage of people who selected "immediate elimination of nuclear", "gradual elimination of nuclear" and "no elimination of nuclear" were roughly 20%, 60% and 15%, respectively, thus the immediate elimination of nuclear was a minority. This result suggests some level of approval for restarting those nuclear power plants that have been proven to be safe.

Subsequently, at a meeting of nuclear-related Cabinet members on February 25, the government's draft of the Basic Energy Plan was released. The proposal positioned nuclear as an "important base load power source", although the wording was changed slightly from the original draft. Cabinet approval of the Basic Energy Plan was postponed till March for adjustments within the ruling party. As the next step, it is crucial to start discussions on setting the energy mix and quantitative targets. It is hoped that the upcoming energy policy discussions will be substantive.



### 2. US's Stance toward the Paris Agreement on Climate Change

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

The 19th annual session of the UNFCCC Conference of the Parties (COP 19) held at the end of 2013 adopted the work plan toward the "Paris Agreement", or the adoption of the international framework on climate change countermeasures beyond 2020, at COP21 scheduled to be held in Paris in 2015. Further, the detailed structure of the Paris Agreement is planned to be discussed at the ADP (The Ad Hoc Working Group on the Durban Platform for Enhanced Action) scheduled for March 10 to 14. Accordingly, on February 12, the US submitted to the UN Secretariat an opinion statement on the components of the Paris Agreement ahead of the other COP member countries. The framework beyond 2020 is important in order to encourage a larger group of countries to tackle climate change than for the Kyoto Protocol, and so it is essential to build a framework that is acceptable to the major GHG emitters such as the US and China in particular. The statement submitted by the US includes important clues as to which elements would make the framework acceptable.

In its statement, the US suggests three principles for approaching the Paris Agreement. First, the agreement must urge a wide range of countries to make serious efforts, considering the scientific importance of climate change countermeasures. Second, the principle of common but differentiated responsibilities and respective capabilities (CBDR/RC) shall be interpreted based on the current international situation. Third, the newly agreed framework, including the process for revision, should be able to stand for a long time.

Among these proposals, the most likely to attract controversy is the second policy on the CBDR/RC principle. The submission suggests that the developed/developing categorization of countries established by the UNFCCC should be abandoned, and that countries should be classified considering the degree of change in economic and environmental influence after the UNFCCC agreement, and not the conventional categorization of developed and developing countries. This suggests that the interpretation of CBDR/RC should be revised, as the conventional framework for international negotiations based on the current interpretation of CBDR/RC and the resulting assignment of roles between developed and developing countries does not encourage efforts by emerging countries, such as China, which are major contributors to GHG emissions.

So far, CBDR/RC has been regarded by developing countries as the most important principle for receiving funds and technological aid from developed countries, and has thus served as a basis for emerging countries such as China and India to avoid making a binding commitment on their reduction efforts. The US proposal is a major shift which aims to review the definition of a "developing country" and to reallocate responsibilities based on the current international situation. In the upcoming negotiations, it will be interesting to see whether the countries can overhaul the current structure built upon the interests of the member countries, and reach the "Paris Agreement" based on new perspectives.



## 3. ME Watching: Lingering Concern over the Spread of Terrorism

**Koichiro Tanaka**, Managing Director & President of JIME Center

Continuing intermittently since late January, the Geneva II peace talks on Syria ended without achieving tangible results and without even plans for the next meeting. The likelihood of the negotiations ending the civil war in Syria is becoming even more remote as the West shifts its attention to the Ukraine. The "Islamic State of Iraq and al-Sham (ISIS)," which aimed to topple the Assad administration, was disavowed by Ayman al-Zawahiri, the leader of al-Qaeda. The group has apparently lost its rule over eastern Syria after being defeated by its enemy and fellow jihadist group, the "Islamic Front". The situation in Syria is also casting shadows over terrorism in Lebanon, where a cabinet has just been formed after a ten-month vacancy. Lebanon has been hit by a series of explosions apparently targeting the Hezbollah, which is siding with the Assad administration.

After fleeing from Syria, the ISIS is thought to be concentrating its terrorist activities in the Sunnah regions of western Iraq, causing concern over the situation in Iraq where sectarian tension is rising in the run-up to the parliamentary election in April. The terrorist attacks in January claimed over 1,000 lives, and the deteriorating situation could prevent the election from being held safely. Before the election begins, Muqtada al-Sadr abruptly announced his retirement from politics and cutting off ties with the Sadrist political group. This will inevitably affect the political actions of the lower class Shi'ite residents who have supported Sadr, and will trigger a restructuring of political groups as Prime Minister Maliki moves to capture Sadr's votes.

While the negotiations on a comprehensive long-term agreement on Iran's nuclear development have stalled over the question of whether to dismantle the enrichment facilities, the parties agreed on a framework for negotiations for setting the agenda and timeframe for subsequent negotiations. Iran's actions and response are gathering attention, including steadily proceeding with the dilution of enriched uranium required under the provisional agreement for verification by the IAEA, and providing an explanation on the experiment on exploding bridge wire detonators as required by the IAEA, which Iran has agreed to do. However, Iran could become difficult again as Ayatollah Khamenei has begun to change his supportive stance by publicly commenting that he has never been optimistic about the nuclear negotiations.

Crown Prince Salman of Saudi Arabia visited Japan as an official guest, and expressed his hopes for closer ties with Japan during a meeting with Prime Minister Abe. The two countries agreed to advance the negotiations on the nuclear cooperation agreement, to cooperate in the area of security, and to strengthen security and counter-terrorism for sea lanes. The visit was followed by a visit by Crown Prince Sheikh Mohammed of Abu Dhabi who is keen to strengthen bilateral ties with Japan, as part of his tour of various countries in East Asia.

Despite the Erdogan administration's hard-line stance against the growing criticism of corruption, Turkey's strong economic policies are starting to prove less effective due partly to its plummeting currency. In Egypt, the entire provisional cabinet resigned at once, and Defense Minister Sisi's movements are being monitored closely in the run-up to the presidential election.



# 4. Russia Watching: Draft Long-term Energy Strategy and Strengthening Presence in Asia

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

On January 23, the Russian Energy Ministry released the draft "Energy Strategy of Russia toward 2035" ("the Draft New Strategy"). The Strategy is revised by the Russian government every five years, and the latest plan is scheduled to be finalized within this year. The highlight of the Draft New Strategy is Russia's first evaluation of the impact of the Shale Gas Revolution on itself, which has gripped the world since the government finalized its previous Energy Strategy (toward 2030, "the Old Strategy") in November 2009.

The Old Strategy estimates the production from 2013 to 2015 at a maximum of 495 million tonnes for oil and between 685 to 745 billion m³ for natural gas. As of 2013, oil production has far exceeded the initial estimate at 523 million tonnes, already reaching the target for beyond 2020. For natural gas, however, the output is below even the lower limit of the original target at 668 billion m³ (494.32 million tonnes in LNG-equivalent). Unlike oil in the international market, natural gas exports cannot be increased simply by producing more. Due to the drop in demand for Russian gas in the European gas market resulting from the US shale gas revolution and the efforts of EU countries to lower their dependence on Russia, Russia's position in the European market has decreased over the past 2 decades, that is, since even before the outbreak of the current Ukrainian crisis.

The Draft New Strategy aims to raise the ratio of the Asia Pacific market from the current 6% to 31% by 2035. Considering that the target was 20% by 2030 in the Old Strategy, Russia is exceptionally keen to expand its presence in Asia. The greatest bottleneck, however, is the lack of infrastructure for exporting natural gas from the Far East. Although the 10 million tonnes/year from Sakhalin-2 is Russia's only LNG exports as of 2013, the Draft New Strategy sets too ambitious a target of increasing it to 30 million tonnes/year by 2020 and 100 million tonnes/year by 2035, while admitting that the competition between gas producers in the international gas market is intensifying.

Toward 2020, the Asian gas market expects a boost in LNG supply from North America, Australia and East Africa. A number of projects are under way in Far East Russia, including the construction of new LNG terminals in Vladivostok and Sakhalin-1 and the expansion of Sakhalin-2, in addition to the Yamal LNG Project (FID in December 2013), and uncertainties have increased as regards which of these will materialize. The Russian projects will inevitably be exposed to harsh competition for securing buyers. In autumn this year, President Putin is scheduled to visit Japan. In proceeding with its energy strategy toward Russia, Japan needs to objectively analyze the impact and outlook of the dynamism of the international gas market, Russia's active development of the Far East, the aftermath of the Ukranian crisis, and so on.



## 5. US Watching: New GHG Emissions Regulation for Coal Thermal Plants

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

"The mandatory requirement of CCS (carbon capture and storage) for coal thermal plants will drive up wholesale electricity prices by 70 to 80%," testified an Assistant Secretary of Energy in charge of developing, demonstrating and commercializing CCS at a Congressional hearing on the coal technology program of the Department of Energy (DOE) on February 11. The DOE has been allocated a total budget of 7.6 billion dollars for CCS for FY 2005 to 2014, and is running eight demonstration projects.

The testimony was made in response to the greenhouse gas (GHG) emissions regulation on new thermal power plants, which the Environmental Protection Agency (EPA) is about to announce, and assumes that CCS will cost 70 to 90 dollars per CO2-tonne. The Assistant Secretary added that it would take at least two years to lower the cost to around 40 to 50 dollars.

The electric power and coal industries are opposing the EPA regulation, claiming that CCS is still far from reaching commercialization, and it is unfair to make it a requirement. In addition to the cost issue, the requirement involves product liability risks as it is currently not possible to guarantee that the CO2 stored underground will stay there indefinitely. In response, the EPA argues that GHG emissions regulation is not unjustified as the construction of any new coal thermal plants is unlikely even without the regulation due to economic factors such as low natural gas prices. It is true that coal thermal plants have become less competitive against natural gas even without the CCS regulation, due to the stricter regulations on SOx and NOx emissions and coal ash treatment under the Obama administration.

Meanwhile, the rise in the spot price of natural gas caused by the big freeze since the beginning of the year has highlighted the risk of depending excessively on natural gas among the energy mix, and thus the importance of diverse power sources and the role of coal. Nevertheless, the EPA has already begun drafting the GHG emissions regulation on existing thermal power plants, aiming to announce the final version within 2016.

The regulations on existing plants are not expected to require the introduction of CCS and allow various means of reducing emissions. One likely means is the incentive system, through which power companies urge their customers to cut back on electricity consumption. Since the start of the Obama administration, the RPS system, which requires power companies to fill a certain proportion of their electricity sales with "renewable electricity or electricity demand reduction" have been proposed. The system is already running in several states, and the power companies themselves appreciate the lower plant investment resulting from the reduction in peak electricity consumption, and are actively investing in insulating the homes of their residential sector customers and assistance for improving the energy efficiency of their industrial sector customers.

As the power companies themselves strive to save electricity, the growth in electricity demand is likely to slow down. Nevertheless, coal will remain an important base load power source. With no prospects for constructing new coal thermal plants, the key is investing in the environmental aspects of existing plants and improving their availability ratio. Canada also has a regulation requiring the GHG emissions of coal thermal plants to be lowered to those of natural gas, but the country allows existing plants to operate for fifty years with higher GHG emissions than the standard. We must closely monitor whether the US EPA can take progressive and flexible measures like these, to predict the direction of measures for ensuring the supply and demand stability of electricity.



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