

IEEJ e-NEWSLETTER

No. 12

(Based on Japanese No. 114)

Published: March 15, 2013

The Institute of Energy Economics, Japan

IEEJ e-Newsletter Editor: Yukari Yamashita, Director

IEEJ Newsletter Editor: Ken Koyama, Managing Director

Inui Bldg. Kachidoki, 13-1 Kachidoki 1-chome, Chuo-ku, Tokyo 104-0054

Tel: +81-3-5547-0211 Fax: +81-3-5547-0223

Contents

Summary

Energy Policy in Japan

- 1. Developments in the Reforms of the Electric Power System
- 2. Developments in the Discussions on Nuclear Policy

Our View of the Global Situation

- 3. European Parliament Environment Committee Adopts Proposal to Revise EUETS
- 4. Consumer Burden of Renewable Surcharge Approaching the Limit in Germany
- 5. Recent Developments in the International Coal Market
- 6. China Watching: Great Efforts to Improve Quality of Car Fuels
- 7. ME Watching: Forefront of the Intensifying Political Confrontation
- 8. U.S. Watching: Expected U.S. LNG Exports and the Strengthening of the U.S.-Japan Alliance



Summary

1. Developments in the Reforms of the Electric Power System

On February 8, the Expert Committee on Electric Power System Reforms held its 12th meeting and approved the final report. The reforms will now be implemented in accordance with a three-stage schedule, but the government will face some difficult maneuvering as problems such as the financial woes of electric power companies and tight supply and demand for electricity remain unsolved.

2. Developments in the Discussions on Nuclear Policy

On February 6, the Nuclear Regulation Authority opened for public comment a rough outline of the new safety standards. These focus on defense in depth through multiple layers of accident prevention measures, multiple layers of independent safety facilities, and countermeasures for severe accidents. The new safety standards are due to be finalized in July, after which the review of individual nuclear power plants will begin.

3. European Parliament Environment Committee Adopts Proposal to Revise EUETS

On February 19, the Environment Committee of the European Parliament adopted the draft revision to EUETS. While views on the revision are split, the price of EUA (carbon price) plummeted 20% immediately after the proposal was passed, indicating that the market players doubt the effectiveness of the revision and whether the proposal will be enacted at all.

4. Consumer Burden of Renewable Surcharge Approaching the Limit in Germany

In February, the Environment Minister of Germany announced measures to control the soaring surcharge of the FIT system, which has been criticized. Desperate efforts to reduce the cost include lowering both future and past purchase prices and partial abolishment of the surcharge reduction. With the cost burden rising toward the limit of what society will accept, the very future of the system itself is in question.

5. Recent Developments in the International Coal Market

Coal prices are continuing to fall in the Japanese market, mainly in reaction to prices that had risen too high following the floods and a production slump in Australia in 2011. Nevertheless, the weakening supply of coal in the U.S. due to the shale gas revolution and its impact on the global market cannot be ignored.

6. China Watching: Great Efforts to Improve Quality of Car Fuels

Air pollution by PM2.5 particles is worsening in China, raising concerns even in Japan. As part of a comprehensive countermeasure, in February, the State Council decided to impose a new quality standard for car fuels as stringent as EURO5 starting from 2018, launching full-scale efforts for improving fuel quality and controlling waste gases.

7. ME Watching: Forefront of the Intensifying Political Confrontation

With parliamentary elections due in April, domestic strife continues in Egypt. In Iraq, various political factions are stepping up efforts to overthrow the Maliki administration. The situation in Iran, with its nuclear development program, remains tense, while in Tunisia, the prime minister has been forced to resign following the assassination of a prominent opposition leader.

8. U.S. Watching: Expected U.S. LNG Exports and the Strengthening of the U.S.-Japan Alliance

In Japan, hopes are rising that LNG exports from mainland U.S. will begin. Japan needs to draw up a blueprint jointly with the U.S. on how the expansion of bilateral LNG trade can contribute not only to their respective domestic economies but also to the stability of the entire Asia Pacific region.



1. Developments in the Reforms of the Electric Power System

Junichi Ogasawara, Senior Economist, Manager Electric Power Group, Electric Power & Coal Unit

On February 8, the Expert Committee on Electric Power System Reforms held its 12th meeting. The draft report was presented by the organizer and was approved by the members in general. Based on this approval, the final report was presented on February 15. The report was finalized based on the principles established in July 2012 and the detailed studies that followed. An outline of the report is as follows.

The reforms of the electric power system will be implemented in three stages. Phase 1 (till 2015): (i) Establishing a wide-area grid organization in charge of drafting a wide-area supply and demand plan and grid plan, wide-area grid coordination, and controlling supply and demand in an emergency across the boundaries between power companies. (ii) Revising the administrative organization for electricity power industry to match the system reform (migration to a new regulatory organization system). Phase 2 (till 2016): (i) Liberalizing the choice of electricity suppliers for low-voltage customers including regular households (the so-called "full liberalization of electricity retail"). (ii) Newly establishing a framework for securing supply capacity, including capacity security obligations, capacity market and a bidding system for power sources. (iii) Newly establishing an hour-ahead market. Phase 3 (2018 to 2020): (i) Legal unbundling of the electricity transmission and distribution department of general electric utilities. (ii) As a transition measure, abolishing in principle the remaining restrictions on retail price (excluding the minimum restrictions such as final assurance service that are necessary for protecting users).

As all three phases will require a major business reorganization, the report clearly states that: (A) Each phase will be implemented in parallel with verifications, (B) it will be ensured that legal unbundling of the transmission and distribution department will not cause problems in the funding needed for maintaining a stable supply of electricity, and (C) the timing for implementation may be revised depending on the business and competition environment.

The fact that the Committee chose full liberalization of retail electricity and legal unbundling of the transmission and distribution department means that, starting from Phase 3, the responsibility for supply security, so far borne singly by the general electric utilities, must be shared fairly by all participants in the electricity business based on certain rules. Such arrangements are already in place in Europe and the U.S., and tend to involve innumerable technical and other rules which the market participants must understand. Discussions on the technical rules have been ongoing in Europe since the revised EU Electricity Directive was released in 2009. Noting that much of the discussion on emergency operation rules and capacity market is still unfinished in other countries, Japan has little time left for detailed design.

Many of the general electric utilities are facing major financial difficulties as the timing of restarting the nuclear power plants remains uncertain and the review for revising the electricity tariffs has become stricter. Further, the reforms described in the final report could cause further deterioration of the finances of the power companies. The supply and demand situation remains tight without nuclear power; an accident at a power station in Hokkaido this winter could directly cause power cuts. The government will struggle to deal with the management risks of the power companies including financial problems and supply shortage on the one hand, while achieving supply stability and improving efficiency on the other.



2. Developments in the Discussions on Nuclear Policy

Tomoko Murakami, Group Manager Nuclear Energy Group, Strategic Research Unit

On February 6, the Nuclear Regulation Authority (NRA) released for public comment the "Outline of the New Safety Standards Concerning Light-water Nuclear Power Reactors". The new standards focus on defense in depth through multiple layers of accident prevention measures, multiple layers of independent safety facilities, and countermeasures for severe accidents. The measures tend toward regulating behavior rather than regulating performance for ensuring safety, as shown by the requirement to install certain facilities such as a filtered ventilation system to diversify the final heat sink.

According to the minutes of the meeting of the "Study team for the new safety standards for light-water nuclear reactors used for power generation", after the period for accepting comments ends on February 28, the standards will be discussed further based on the opinions of experts and the electric power companies, the wording will be finalized, and will then be opened for further public comment, aiming at the development of the new safety standards in July. Only after the new standards are established will the review of individual nuclear power stations based on these standards begin. As the NRA has stated that it will not accept preliminary applications from the power companies before the new standards are finalized and that the reviews will take time, the nuclear power plants are not likely to be restarted soon.

On February 8, after opening for public comments, the "Study team on the new standards for light-water nuclear reactors" held its first meeting, the second, after almost three months. The meeting discussed introducing a type authentication system rather than authentication of individual products, and making the electric power companies' efforts to improve safety a permanent activity.

The team held its third and fourth meetings on February 15 and 21, and the opinions of the power companies were presented as part of the fourth meeting. Regarding the type approval system, the power companies commented in the "opinions of electric power companies regarding the establishment of the system" that the target equipment for severe accident countermeasures prescribed by the draft standards is limited in effect, and that the target should be expanded to include other equipment with the same performance, including fuel assemblies, in order to make the review more efficient. However, the NRA has no plans to change the draft standards.

In the opinion statement, the electric power companies cite "efficiency", which is one of the policies of the regulatory activities of the NRC in the United States, and suggest that regulatory activities should match the degree of risk reduction that they can achieve, that the alternative requiring the least amount of resources should be selected, and that there should be no unnecessary delay in making regulatory decisions. They have also repeatedly requested "continuous communication with the power companies".

As the true goal of regulatory activities is to facilitate business while securing safety, the importance of communication between the power companies and regulatory authorities is self-evident. Mr. Lacoste, former director of the French Nuclear Safety Authority (ASN), stated "it is dangerous for power companies to think that they are doing enough by merely following the rules", and that even with regulatory reform, the power companies should take initiatives for improving safety. The direction of the new safety standards and the process of restarting the nuclear power plants are attracting much international attention, and the regulatory authority should take these perspectives into consideration in their future activities.



3. European Parliament Environment Committee Adopts Proposal to Revise EUETS

Hiroki Kudo, Assistant to Managing Director Global Environment and Sustainable Development Unit

On February 19, the Environment Committee of the European Parliament adopted the draft revision to EUETS. This revision is designed to implement measures to correct the slumping EUA (emission allowances of EUETS) prices to appropriate levels. In terms of procedure, the adoption by the Committee is certainly a step forward towards its eventual enactment, but many players are still not sure whether the proposal will be enacted.

The draft revision, called "backloading", postpones the introduction of 900 million tonnes of EUA into the EUETS market, originally scheduled for 2013 to 2015, to 2019 to 2020. This is expected to restore the EUA price level, which has dropped from 30 Euros/t-CO₂ a few years back to as low as around 5 Euros, to a sufficient level to boost investment in CO₂ reduction in the short term. There is a serious conflict in views over the draft revision between the supporters, who emphasize the need to restore a market environment to encourage global warming countermeasures (through higher carbon prices), and those against it, who think that limiting the auctions will have little effect on the market and that in the current economic situation, additional costs should be avoided. With strong opposition from the highly coal-dependent Poland and no clear position from Germany which holds the key to enactment of the revision, it is not clear whether the system will be revised.

Nevertheless, the Environment Committee passed the draft revision by a vote of 38 to 25 with 2 abstentions. Those who support the revision, such as Shell and the environmental NGOs, positively viewed the result as a step forward (or a starting point) toward building a better system. On the other hand, the European Steel Association (EUROFER) and BUSINESSEUROPE, an industrial association, expressed clear opposition to the revision, highlighting the sharp difference in views. The response of the EUETS market was a 20% drop in EUA prices immediately after the revision was adopted, indicating that the market players are not optimistic about the outcome of the current process.

Going forward, the focus of attention is whether the European Parliament will hold a preliminary three-way meeting with the European Commission and the European Council to make sure that the revision is adopted smoothly by the European Parliament in April. The current confrontation, however, suggests that this might be postponed. The view of EUROFER that the revision will incur additional costs and erode the industry's international competitiveness in exchange for a minor gain in emissions reduction for the entire EU by 2020 is persuasive, considering that Europe's economic recovery remains uncertain. It might be too early to say that the revision has passed a major milestone toward enactment by being adopted by the Environment Committee.



4. Consumer Burden of Renewable Surcharge Approaching the Limit in Germany

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

Germany is about to revise its Feed-in Tariff (FIT) system for renewable energies once again. While a downward revision of the tariff (preferential purchase price) is no longer surprising, the draft revision proposed jointly by the Minister of the Environment and the Minister of the Economy on February 14 focuses more than ever on reducing the surcharge.

The surcharge is an amount paid for by consumers to compensate for the difference between the market price of electricity and its purchase price, and it has been soaring due to the rapid introduction of renewables. The surcharge has now reached around 2,000 yen/month this year for regular households, and is reportedly testing the patience of even the environmentally-aware German consumers. With a general election due in September, the government has clearly decided that they must deal with the situation.

In the draft revision, minor changes are made to the purchase price. For example, wind and biomass electricity will be purchased at the market price which is lower than the FIT purchase price for five months after the start of plant operation. The purchase price for land-based wind power will also be reduced by approx. 9% for the first six months, and the purchase price for other new power will be lowered by 4% across the board. Further, in 2014, the price will be lowered by 1.5% for facilities already in operation, the first retroactive reduction of prices.

The revision also targets the exemption scheme for electricity-intensive businesses. Similar to the Japanese system, the German system reduces the surcharges to users based on their annual electricity consumption and the proportion of electricity costs to the total added value. For example, if electricity consumption equals 100 GWh or more and the proportion of electricity costs exceeds 20%, a reduced surcharge of 0.05 euro cents/kWh is applied to the entire electricity consumption, which is significantly lower than the regular surcharge of 5.3 euro cents/kWh. The gap is naturally paid for by regular households and non-exempt businesses, to their dissatisfaction. The proposed revision will raise the burden of the businesses currently paying reduced surcharges, and remove from the reduction scheme those businesses that are not exposed to international competition. Ministers estimate that these measures will save 1.86 billion Euros annually in total, and thus will allow the surcharge to remain unchanged from this year in 2014 and to also keep the rise within 2.5% in subsequent years.

The revisions so far aimed mainly at keeping the FIT system in balance by revising the current tariff system, but failed to control the increase in consumer burden. The latest proposal appears to be a desperate effort to mobilize all measures available to control the surcharge, such as retroactively reducing the purchase price which could even be unconstitutional and tinkering with the reduced surcharge, in addition to making inconsistent surcharge adjustments. It would appear that the conventional means of maintaining the system are approaching their limits.

One of the core purposes of a preferential pricing system such as FIT is to develop and protect the target industry. However, if "preferential costs" rise above what is acceptable to society and yet the industry still cannot support itself, what can be done? The latest proposal is a short-term action. The subsequent "comprehensive measures" currently being prepared separately must be closely monitored.



5. Recent Developments in the International Coal Market

Koji Morita, Board Member, Director, Electric Power & Coal Unit

The price of imported coal is continuing to fall in Japan. Prices peaked in June 2011 for coking coal at a monthly average of 261.28 USD/tonne and in November 2011 for steam coal at 148.44 USD/tonne, but then started to fall, dropping to as low as 151.80 USD/tonne and 119.85 USD/tonne in December 2012, respectively (Trade Statistics of Japan, Ministry of Finance). This drop is mainly a reaction to the prices that had risen too high due to the floods and production slump in Australia in early 2011. Nevertheless, the easing supply of coal in the U.S. due to the shale gas revolution and its impact on the global market cannot be ignored.

In the United States, coal-fired thermal power has been losing share since the 2000s, due to environmental regulations and the shale gas revolution. The fall after 2008 when natural gas prices plummeted has been particularly sharp. The share of coal-fired power generation, which was 48.4% in 2008, dropped to as low as 36.5% for the January to September period of 2012. The gap between coal and the fast-growing natural gas has shrunk and is now just 5 points.

Similarly, U.S. consumption of coal for power generation has dropped from 1.05 billion short tonnes¹ (ST) before gas prices plunged in 2007 to 0.93 billion ST in 2011, and further, to 0.61 billion ST for the January to September period, 2012 (or approx. 0.81 billion ST for the entire year), thus falling 0.24 billion ST in total in five years. Meanwhile, exports are growing, increasing by 48.1 million ST from 2007 to 2011. Imports have started to fall after peaking in 2007 at 36.3 million ST, reaching as low as 13.1 million ST in 2011 and 6.7 million ST for the January to September period, 2012. Consequently, exports from the country's largest supplier, Columbia, have shrunk from the peak of 26.9 million ST in 2007 to 3.3 million ST for the January to September period, 2012.

In 2012, a total of 70 million ST of American and Columbian coal (approx. 48 million tonnes from U.S. and 23 million tonnes from Columbia) compared to 2007 were displaced from the U.S. market by the shale gas revolution, and crossed the oceans in search of new markets, with a large part of it heading for the EU.

However, in the EU, coal consumption dropped 10% in 2009 year-on-year due to the serious economic recession. Imports were affected even more, dropping to 155 million tonnes in 2010 from 200 million tonnes the year before. Though the figure recovered somewhat in 2011, it is still 20% lower than before the recession. As a result, due to the increase in American and Columbian coal, exports from Australia, Indonesia and Russia to the EU were hit hard, with South Africa losing as much as 70% of its EU exports. This coal eventually found its way to the Asia Pacific, and the increased volume has affected the supply and demand for coal and caused coal prices in the region to fall.

Meanwhile, China was the country to expand its imports in 2012, to as much as 235 million tonnes in total, up 52.5 million tonnes from the previous year (China Coal Report). Under these circumstances, coal prices dropped also in Japan, but might not have dropped as much without the knock-on effect of the shale gas revolution.

¹ A unit of weight conversion equivalent to US (907.18474 kg, 2,000 lbs) ton. ST for short.



6. China Watching: Great Efforts to Improve Quality of Car Fuels

Li Zhidong, Visiting Researcher Professor at Nagaoka University of Technology

Since the beginning of this year, the view of Beijing's Tiananmen Square covered in a brownish fog has frequently been shown on TV. Air pollution caused by particulate matter, known as PM2.5, occurred five times in January alone, striking central and eastern parts of the country including Beijing for 21 days, and is feared to affect not only China but also Japan.

The daily average environmental limit for PM2.5 in China is 70 μ g (1 millionth of a gram) per 1 m³, which is twice as high as in Japan. According to the Ministry of Environmental Protection, on January 29, PM2.5 pollution spread over 1.43 million km², equal to about four times the total area of Japan, and the average concentration reached 354 μ g, five times the environmental limit of China and ten times that of Japan. With a diameter of less than 2.5 μ m (1 millionth of a meter), the particles easily enter the lungs and are believed to have a high risk of causing respiratory and circulatory diseases. According to the China Meteorological Administration, patients with respiratory diseases have risen by 10 to 40% compared to normal times. Immediate measures are required.

Experts say that one of the causes of the pollution is the cold winter air which forms a "cap" over the land and stops the contaminants from escaping into the air above, but the root cause is the SOx and NOx contained in emissions from coal combustion and automobiles. For Beijing, automobiles are the largest source of pollution, generating 58% of NOx, 40% of volatile organic compounds and 22% of PM2.5.

In 2006, China introduced a total volume control of SOx and reduced its emissions by 14.3% to 22.68 million tonnes in 2010 from 26.46 million tonnes in 2005. A total volume control was also imposed on NOx from 2011. However, effective measures have not been taken against vehicle exhaust emissions which are increasing rapidly. The national standards for car exhaust revised in 2005 and 2008 state that Level IV (50 ppm or lower sulfur content for gasoline and diesel oil) and Level V (10 ppm or lower sulfur content, equivalent of EURO5) regulations will be implemented in 2010 and 2012, respectively, but aside from implementing Level V in Beijing from February this year, most areas are still under Level III for diesel cars and Level IV for gasoline cars. While the Ministry of Environmental Protection states that the delay in supplying high quality fuels is the cause of the situation, the oil industry is not the only one to blame, as there are institutional issues such as the absence of a pricing mechanism for appropriately adding to fuel prices the investment cost required to improve quality.

Prime Minister Wen Jiabao, who is approaching retirement, summoned a standing committee meeting of the State Council, which decided to apply Level IV to diesel oil and Level V to gasoline and diesel oil from 2015 and 2018, respectively, and required the oil industry and auto industry to supply suitable fuels and cars. As safeguards, the Council decided that it will set fuel prices rationally, appropriately adding the cost of investment and based on the "high quality, high price" and the "polluter-pays" principles. Though belatedly, the serious air pollution has finally forced the government to begin to tackle the issue of fuel quality.



7. ME Watching: Forefront of the Intensifying Political Confrontation

Koichiro Tanaka, Managing Director & Head of JIME Center

After the approval of the constitution last December, opposition forces consisting of secular citizens and liberals became overtly distrustful of the Islamist forces in Egypt. This turned into violent confrontation over the new constitution, resulting in bloody clashes and the consequent proclamation of a state of emergency in Port Said and many other cities. The popularity of President Morsi quickly deteriorated due to the heavy-handed crackdown of the security authorities on the anti-government rallies and the slumping economy, making it difficult to run the government. The military, which so far has focused on protecting its own interests, retains influence by sticking to a policy of non-intervention, which has been its pattern since the final days of the Mubarak era, and making sure not to provoke the public. Neither the Muslim Brotherhood-based government, nor the opposition forces or the military, has captured the high ground so far, and the political confusion is expected to continue amid parliamentary elections in April.

Domestic politics also pose a risk in Iraq. The conflict is intensifying between various political forces and Prime Minister Maliki, who ignored the 2010 agreement to form a unity government and continues to strengthen his power. The confusion is deepening by the day, plagued by problems such as the discord between the Prime Minister and the parliament speaker (a Sunni) over the removal of the former members of the Ba'ath Party from public positions, criticism from the Sadr Movement (a fellow Shi'ite) regarding the handling of the government, and confrontation with the Kurdistan Regional Government (KRG) over the disputed region and resource development. Under such circumstances, KRG President Massoud Barzani called a meeting of political leaders to build consensus among forces to overthrow the government. A coalition is being formed to drive Prime Minister Maliki from power.

In the nuclear talks between Iran and the P5+1 held in Almaty after an eight-month break, the parties agreed at another meeting in Almaty in April to negotiate after holding a working level meeting in Istanbul. There is growing optimism on a possible change in Iran's attitude, as the country continues to strengthen its uranium enrichment capability. Meanwhile, inside the country, there was a fracas in which President Mahmoud Ahmadinejad and Ali Larijani, parliament speaker and the president's political rival, publicly threatened each other in parliament with scandals about the other. While this surprise incident resulted from mounting criticism of the government's economic policies amid the economic sanctions that are starting to bite, it is also an early skirmish in the run-up to the presidential election in June. After the incident, in an effort to end diplomatic isolation, President Ahmadinejad visited Egypt for the first time after the Islamic Revolution to participate in the OIC (Organisation of Islamic Cooperation) Summit. The president has also flown to Venezuela to condole the demise of Hugo Chavez.

As the intensifying civil war in Syria looks set to continue, Israel carried out another airstrike on Syrian territory. Many are wondering why Israel, which has just come out of a general election, intervened in the civil war in the neighboring country even before its cabinet members were appointed. In Tunisia, Prime Minister Hamadi Jebali, who promised reforms after the murder of an opposition leader, resigned, adding to uncertainty about the near future. The Japanese government has set up a committee to investigate the terrorist incident in Algeria, and has launched public-private efforts to consider ways to prevent recurrence. As an overview, the confusion in the Middle East and North Africa and the political confrontations in each country are still worsening.



8. U.S. Watching: Expected U.S. LNG Exports and the Strengthening of the U.S.-Japan Alliance

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

On February 22, Prime Minister Shinzo Abe, having returned to power last December, visited the U.S. for the first summit meeting with U.S. President Barack Obama. The two leaders announced a joint statement agreeing to continue the talks on Japan's participation in the Trans-Pacific Partnership (TPP) while acknowledging that "bilateral trade sensitivities" will be given consideration. In the meeting, Japan once again requested the U.S. to promptly give permission for LNG exports from mainland U.S.

This is because Japanese trading firms, gas companies and power companies are already participating in LNG export projects in Louisiana, Texas and Maryland, while waiting for the U.S. government to give the green light. For Japan, which is currently importing LNG at five times the price of natural gas in the U.S., it is important to achieve LNG imports from the U.S. to diversify its import sources and lower the price.

According to the Annual Energy Outlook 2013 (Early Release) published by the U.S. Energy Information Administration (EIA) last December, natural gas production in the U.S. including shale gas will grow to 28.7 trillion cf in 2025 from 23 trillion cf in 2011, with LNG exports reaching approx. 1.6 trillion cf in 2027 (revised upward to twice the level in last year's issue). However, there is concern among some parties over exporting LNG, such as the chemical industry which is wary of a tightening supply-demand balance of the domestic natural gas market due to the LNG exports and the resulting higher price of domestic LNG, while some NGOs are voicing concern over environmental pollution, including contamination of water, caused by hydraulic fracking in the process of shale gas production. Meanwhile, given the increasing support for LNG exports with an anticipation that it will boost the national economy, the outcome of the national debate should be closely monitored.

To expand LNG trade with the U.S., Japan must not overlook the following two points: (1) As the U.S. moves towards energy self-sufficiency, discussions are becoming active regarding the direction of new energy diplomacy. (2) Taking into account the rise of China, the Obama administration is strengthening its commitment to the Asia-Pacific region. There is, however, no blueprint at this stage that organically links these two points.

One thing to note in this regard is that the top two people in the U.S. Senate Committee on Energy and Natural Resources, Senator Ron Wyden (Democrat) and Senator Lisa Murkowski (Republican), both represent constituencies that have deep ties with the Asia-Pacific region. Senator Wyden is elected from the environment-conscious state of Oregon and is reportedly cautious regarding LNG exports. Senator Murkowski is elected from Alaska which needs new export destinations for the growing shale gas production in mainland U.S., and is actively supporting LNG exports to Japan. She recently visited the areas affected by the Great East Japan Earthquake.

Tokyo and Washington D.C. need to jointly draw up a roadmap based on how the expansion of bilateral LNG trade can contribute not only to their respective domestic economies but also, from a broader perspective, to ensuring the common interests of the two countries in the Asia-Pacific region.





More information on IEEJ can be found by clicking below.

IEEJ Calendar of Events

Energy Indicators of Japan

IEEJ Homepage Top

Back Numbers of *IEEJ e-Newsletter*