

IEEJ e-NEWSLETTER

No. 6

(Based on Japanese No. 108)

Published: September 20, 2012

The Institute of Energy Economics, Japan

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Summary

1. Great East Japan Earthquake and the Domestic and Overseas Energy Trends: Discussions on the Optimum Energy Mix

While the “zero scenario” is regarded as the preferred choice among the three energy mix options in terms of public opinion, the latest opinion poll shows that more people are opting for the continuation of nuclear power generation (sum of “15” + “20–25” scenarios). A new policy on energy and the environment is to be determined in a few days taking into account public sentiment, although the decision-making process remains ambiguous.

2. Recent Overseas Trends on Nuclear Power Generation

Stakeholders were gripped by a comment from General Electric CEO Jeff Immelt that “nuclear has become hard to justify (economically)” and the decision to freeze the licensing of new nuclear power plants and the renewal of seasonal operating licenses until the NRC draws up a new policy for disposing of spent fuel. However, the outlook for continued growth of nuclear power generation remains unchanged in view of major nuclear plant construction projects in China and India.

3. Recent Developments in the LNG Markets

The rapid expansion of the global LNG business observed in the last three years finally came to an end in the second quarter of 2012. Although Europe experiences a major slump in gas demand, Asian LNG importers continue to absorb incremental LNG. Long-term procurement activities focus on stabilizing procurement costs through liquefaction tolling arrangements and upstream equity participation and lifting.

4. CO₂ Emissions of the US for Q1 of 2012 Mark the Lowest since 1992

Energy-derived CO₂ emissions of the United States for the first quarter of 2012 marked the lowest level since 1992 due to the rapid shift from coal to gas. In the long term, options such as renewable energies and CCS will become necessary in addition to gas, although the direction of the policy depends on the outcome of the upcoming Presidential election.

5. Accelerated Expansion of Photovoltaic Power Generation Market in China

China, which has been reluctant to introduce photovoltaic power because of high costs, is now shifting its policy and has introduced the Feed-in Tariff system. Introducing photovoltaic power now that panel prices have dropped will not only ease the cost burden but also alleviate the recent oversupply of photovoltaic panels.

6. China Watching: The 12th Five-Year Plan for the Development of Renewable Energy

The National Energy Administration released the “12th Five-Year Plan for the Development of Renewable Energy” and set an overall goal of increasing the ratio of renewable energy to at least 9.5% of primary energy and at least 20% of total electricity generation by 2015. The total investment of 1.8 trillion yuan (approx. 22.9 trillion yen) is expected to boost the renewable energy industry.

7. ME Watching: Worsening Situation in Syria

With the situation continuing to deteriorate in Syria, the outcome of the battle in the country’s second largest city, Aleppo, may determine the fate of the Assad Administration. The sanctions against Iran are being tightened as President Obama of the United States signed into law the Iran Sanctions, Accountability, and Human Rights Act of 2012.

8. Russia Watching: Resource Development in Russia and Regional Cooperation in Northeast Asia

Issues concerning oil and gas development in Eastern Russia once again attracted attention at an international conference held in Irkutsk. Many pointed out that not only bilateral but also multilateral cooperation is essential to develop the rich potential resources of Russia; this point must be considered in Northeast Asia where political tensions are rising.

1. Great East Japan Earthquake and the Domestic and Overseas Energy Trends: Discussions on the Optimum Energy Mix

Shigeru Suehiro, Manager, Senior Economist
Energy Demand Supply and Forecast Analysis Group

Discussions on reviewing the energy and environmental strategy of Japan, including the nuclear policy, are continuing. In early July, the Japanese government presented three energy mix options in order to facilitate national debate: the zero scenario (nuclear power 0% and renewable energies 35%), the 15 scenario (15% and 30%) and the 20–25 scenario (20–25% and 30–25%).

From mid-July to early August, the government invited the public to send in comments. About 89,000 comments were received in total, of which 20,000 have already been published. While the other comments are also due to be published, they have not been analyzed in terms of which option was most popular. In parallel with the public comment procedure, public hearings were held in eleven cities nationwide, attracting about 1,000 people. According to a survey of the participants run by the Nikkei Shimbun, the zero nuclear power option gathered the most support with an overwhelming 76%. Further, in early August, a debate-type public opinion survey was held, targeting about 300 people. According to the survey report, a comparison of the participants' answers at the start of the survey with those after the debate showed that support for the zero scenario increased from 33% to 47%, while that for the 15 scenario decreased somewhat from 17% to 15% and that for the 20–25 scenario remained unchanged at 13%.

According to media reports, most of the public opinions gathered by the government are in favor of the zero scenario. However, the latest random opinion surveys by the media show that the largest group of polled people is in support of maintaining nuclear power (the Asahi Shimbun states that the zero scenario has the strongest support at 43%, while the Mainichi Shimbun, Yomiuri Shimbun, NHK and Nikkei Shimbun show that the largest group support the continuation of nuclear power at 64%, 55%, 54% and 50%, respectively). Thus, the “popular will” must be properly assessed in the near future.

Meanwhile, industry groups are highly concerned over the impact on production and employment. The Japan Federation of Economic Organizations and the Japan Chamber of Commerce and Industry agree that all three scenarios have problems in terms of feasibility and economic impact, and that a new and more realistic scenario should be developed by reconstructing the 20-25 scenario. The Japan Association of Corporate Executives has renounced the zero scenario completely as it would make it impossible to maintain the nuclear technology and secure the necessary human resources.

Taking into consideration the national debate as described above, the Energy and Environment Council is due to formulate the “Innovative Strategy for Energy and the Environment”. It is not clear how the government will evaluate the public opinion, the impact on society and the economy, and feasibility, and there seem to be various views even within the government. With the end of the current Diet session (September 8) approaching and judging from the events on the political agenda and other issues that require consideration, the Strategy for Energy and Environment is expected to be decided within a few days. Not only the Japanese but also people worldwide await the decision with keen interest.

2. Recent Overseas Trends on Nuclear Power Generation

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

On July 30, Jeff Immelt, CEO of General Electric, caused an international stir when he commented that “nuclear has become hard to justify (economically).” He then backed up his comment by citing the Shale Gas Revolution and the Fukushima Daiichi accident, and named gas, wind and photovoltaic power as the three energies that firms should focus on. Although this view may be specific to the situation in the US and GE’s nuclear business is relatively small, the comment received much attention, coming from the head of one of the world’s leading nuclear firms.

On August 7, the US government decided to suspend granting operating licenses to new nuclear power plants or renewing seasonal operating licenses of existing nuclear power stations until the NRC has drawn up a new policy for disposing of spent fuel. The industry in general is reacting calmly, expecting that the NRC will eventually take appropriate action and that a lengthy licensing freeze will be avoided. However, if environmental groups demand Congress to legislate the clarification of the storage period of spent fuel into law and file an action for an injunctive order to stop any environmental impact assessment until the target period is fixed, the licensing freeze could continue for years.

Germany shut down eight of its nuclear reactors in March 2011 immediately after the Fukushima Daiichi accident, and in June 2011, decided to stop all its nuclear power plants including the remaining nine reactors by 2022. Recently, the electric utilities filed lawsuits with the German Federal Constitutional Court against the government for compensatory damages. The lawsuits demand the government to compensate them for unrecovered investments in existing power stations resulting from their immediate stoppage and for the lost revenues that the utilities would have earned had the reactors not been stopped. Such events in Germany provide important lessons on the economic impact that hasty abolishment could inflict on the electric utilities and the public.

Korea started up new nuclear reactors even after the Fukushima Daiichi accident, namely Shin Kori Unit 2 (started operation on July 20, 2012, the 22nd commercial nuclear power plant in Korea) and the Shin Wolsong Unit 1 (started on July 31, the 23rd). Meanwhile, Kori Unit 1, which was stopped in February 2012 due to an accident, had been shut down for almost six months due to severe public criticism. Public criticism is also mounting regarding the unusually high rate of forced outages this year at plants such as Shin Wolsong Unit 1 (August 19) and Ulchin Unit 1 (August 23), bringing the total to four times since the beginning of the year.

The drive to expand nuclear power remains high also in China and India, where many new construction projects are in progress. China is not only actively developing nuclear power within the country but is also exporting the technology to other countries. In June 2012, Prime Minister Wen Jiabao visited Argentina and signed a bilateral agreement which includes a nuclear agreement with President Cristina Fernandez. China also strengthened its nuclear agreement with Canada in July, paving the way to import uranium from the country. Even though there are individual issues, nuclear power is on the increase overall, particularly in China and India.

3. Recent Developments in the LNG Markets

Hiroshi Hashimoto, Senior Researcher, Oil and Gas Unit

The global LNG markets in the first half of 2012 saw the first year-on-year decline in three years in internationally traded volumes - 117 million tonnes, a 3% decrease compared to the first six months in 2011 - according to preliminary data from customs statistics and other organizations. In the period of April-June 2012, in particular, traded volumes declined by 6.5%, representing the first significant quarterly decline in three years, too. The spectacular volumetric growth of the global LNG industry - by more than 30% from 2009 to 2011 - apparently has come to a halt.

It was only Europe and the United States, however, that significantly reduced regional LNG imports in the April-June period, as the sluggish economy drags down the overall gas demand in Europe and few signs of gas production decline have been observed in the United States. Markets in Asia, the Middle East and South America continue steady LNG imports. In particular, each market in the Asia Pacific region, including Japan, Korea and China, increased LNG imports in the period.

On the supply side, although the largest exporter Qatar again increased its LNG exports, many other exporting countries reduced production due to unforeseen plant outages or depressed gas demand in their original market destinations. In the meantime, the third LNG producing project in Australia, Pluto LNG, finally started LNG exports to Japan in May. Angola is also expected to start exporting LNG in 2012.

Amid ample LNG production capacity compared to slower market demand, spot LNG prices have been in downward trends since May. Although Japan has increased LNG imports, the country's LNG buyers have shifted focus of their incremental LNG procurement from spot purchases to short- to medium-term contracts, reducing spot market activities and stabilizing spot LNG prices.

In Asia, in addition to Thailand that started LNG imports in 2011, Indonesia and Malaysia plan to start commercial operation at their respective LNG receiving terminals in their gas consuming areas in 2012. The floating receiving terminal in West Java in Indonesia received a cool down cargo in April. As both Indonesia and Malaysia have been major LNG exporting countries, they are expected to utilize their own LNG production for their planned LNG receiving terminals, as well as imported LNG from other countries.

One of the major contributing factors that have driven the rapid expansion of LNG imports around the globe in recent years is wide-spread applications of floating regasification and storage. Their advantages include relatively shorter lead time to construct necessary infrastructure for LNG receiving. South America and the Middle East have already been operating several such terminals for a few years now and several more projects are on the horizon.

Japanese companies have accelerated long-term LNG procurement activities especially in North America and Australia. As the preceding issue of this Newsletter outlined projects in North America, liquefaction tolling arrangements that Japanese companies are discussing at several LNG exporting projects in the United States are likely to provide a new model of LNG procurement - talks focus on gas procurement in North America, rather than traditional LNG sales into the Asian markets, effectively avoiding discussions of oil-linked LNG pricing.

Another model was presented in June at the Wheatstone LNG project in Australia, where a Japanese consortium including Tokyo Electric Power Company (Tepco) acquired an 8% equity of the project and secured 700,000 tonnes per year of LNG supply for Tepco as the consortium's equity lifting. The arrangement sets a precedent of equity LNG acquisition as a Japanese consortium to keep escalation of LNG procurement costs in check.

4. CO₂ Emissions of the United States for Q1 of 2012 Mark the Lowest since 1992

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

On August 1, the United States Energy Information Administration (EIA) announced that CO₂ emissions derived from energy for Q1 of 2012 decreased by 8% from the same period last year to 1.34 billion carbon tonnes, marking the lowest level since 1992.

The main contributor to this achievement was the reduction in coal-fired thermal power triggered by the historical drop in natural gas prices, which is attracting widespread attention. The IEA expects that this trend will lower the ratio of energy-derived CO₂ emissions of the US to 16% of the global total, which is remarkably better than China's 29%, and could affect the claims and negotiating position of the US at international negotiations such as UNFCCC.

The expansion of shale gas production in the US, or the Shale Gas Revolution, has had a dramatic impact on the supply and demand of energy in the country. The rapid easing of the supply-demand balance caused gas prices to plunge to two dollars per 1 million BTU, triggering a rapid shift in energy mix from coal to natural gas power (including cogeneration). According to the EIA, the share of gas power in total electricity generation for June 2012 rose 7 points from the same month last year to approximately 32%, while the share of coal dropped 8 points in one year, from 43% to 35%.

The recent announcement from the EIA reflects the effect of the Shale Gas Revolution on the battle against global warming, and provides hints for the future. Specifically, shifting the fuel used to generate power to gas is likely to reduce global warming gas emissions even further, which would be welcome to keep the efficient use of energy resources compatible with the environmental measures of the country. In the long run however, the reduction by shifting to gas alone may not be sufficient to achieve the ambitious target for global warming gas reduction which the US has submitted to the UNFCCC. It is crucial to take additional measures, including expanding the use of renewable energies, CCS and overseas credit. The future course of CO₂ emissions reduction in the US will depend on which policy it selects.

There has been much criticism of the outcome of the Obama administration's clean energy policy, and in fact, the share of renewable energies among all electricity sources (excluding hydraulic power) is only 5%. While some say that low gas prices could hamper the expansion of renewable energies if it continues, the difference between the energy policies of the two presidential candidates, namely President Obama, who advocates the continued expansion of clean energies, and Mitt Romney, who claims that the US should stop subsidizing renewable energies and develop coal and gas energies, is receiving increased attention. After the race, this difference could affect the mid to long-term global gas emissions of the US and its position in international negotiations.

5. Accelerated Expansion of Photovoltaic Power Generation Market in China

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

The introduction of photovoltaic power generation in China has accelerated. China introduced the photovoltaic feed-in tariff system in July last year. The feed-in tariff price of 1 yuan/kWh (12.5 yen) is lower than that in Germany, which was considerably reduced to 13.5 euro (13.2 yen) this year. Nevertheless, the newly installed photovoltaic power generation capacity amounted to 2 GW and the total installed capacity jumped to 3 GW in China. Photovoltaic power generation systems continue to be installed at a rapid pace, and according to one research institute, new capacity in 2012 is estimated to be 5–7 GW.

The determination of the Chinese government is reflected in its “12th Five-Year Plan (2011–2015) for the Development of Renewable Energy” released in August (see “6. China Watching” for details). The average annual growth of photovoltaic power generation capacity from the latest results (2011) required to achieve the target capacity of 21 GW in the Plan by 2015 exceeds 60%, while the required annual growth of wind power generation capacity, which has also continued to surge, remains at 20%.

The Chinese government has been supporting the solar panel industry as an export industry while limiting deployment in the domestic market to an experimental scale. Why did they suddenly change tack in the second half of last year?

One reason why the Chinese government had been cautious about introducing photovoltaic power generation in the domestic market is the significant cost involved. Around 2006, when the Chinese government introduced the Renewable Energy Law, the FIT price of photovoltaic power in Germany was more than 50 euro cents (49 yen)/kWh. It was the right business strategy for the Chinese government to designate cheap wind power as the core of renewable energy development, while starting to export the expensive photovoltaic power generation systems to foreign markets. European countries, which had offered high FIT prices (sometimes ridiculed as the “clean energy bubble”), were an ideal incubator for the Chinese solar panel industry to grow. Market advances and sales expansion in Europe improved the quality and cost competitiveness of solar panels, and as a result, Chinese products swept the world market. Meanwhile, the strategy of cutting prices caused the world solar panel market to shrink and finally, it was provisionally decided in the US to impose an antidumping tax of more than 30% on Chinese products, and some European countries are considering similar measures.

The lower cost of photovoltaic power generation, mainly led by Chinese solar panels, is now enabling the photovoltaic power market to expand in China. The country may thus be able to introduce photovoltaic power at much lower cost than leading European countries.

In addition, the expansion of the domestic market is greatly assisting Chinese manufacturers while the state of oversupply in the solar panel market continues. Photovoltaic power generation in China is still at the initial stage of introduction and will continue to attract investors as a new market for the time being, with great potential including much sunshine and vast land areas, although there is room for institutional and technological improvements in the future.

The Chinese photovoltaic power industry is trying to survive the winter by expanding the domestic market after having grown in the European market during the clean energy bubble. We must continue to monitor the photovoltaic power industry in China which continues to influence that of the world photovoltaic power.

6. China Watching: The 12th Five-Year Plan for the Development of Renewable Energy

Li Zhidong, Visiting Researcher
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The National Energy Administration of China announced its “12th Five-Year Plan for the Development of Renewable Energy” on August 6. The Plan sets the target of expanding renewable energy from 255 million tonnes of coal equivalent (TCE) in 2010 to 400 million TCE in 2015 and raising its ratio in primary energy from 7.9% to more than 9.5%.

Concerning renewable energy sources, the following targets were set: hydro power will be increased from 216GW (of which pumped storage generation accounts for 17 GW) in 2010 to 290 GW (pumped storage generation: 30 GW) in 2015, wind power through interconnection of power systems will be raised from 31 GW to 100 GW (of which offshore power generation accounts for 5 GW), photovoltaic power will be increased from 800 MW to 21 GW (of which 10 GW will come from distributed photovoltaic power and 1 GW from solar thermal power), and biomass power generation will be expanded from 5.5 GW to 13 GW, and consequently, the total electricity output will be increased to 1,200 TW while the ratio of renewable energy sources in the total electricity output will be raised to more than 20%. In addition, it was decided to increase the use of bioethanol from 1.8 million tonnes in 2010 to 4 million tonnes in 2015, and the use of biodiesel from 0.5 million tonnes to 1 million tonnes.

The Plan also sets policies for expanding hydro power to 420 GW (of which pumped storage power accounts for 70 GW), wind power to 200 GW (of which offshore power accounts for 30 GW), and photovoltaic power to 50 GW (of which distributed photovoltaic power accounts for 27 GW and solar thermal power for 3 GW) as power source development targets to be achieved by 2020. These are extremely aggressive overall targets.

In January 2010, the Chinese government announced the target of increasing the non-fossil energy ratio in the primary energy supply to 15%. Later, it was decided to raise this ratio to 11.4% by 2015 in the “12th Five-Year Plan for the Development of Economy and Society” issued in March 2011 as a binding target in order to be able to achieve the target for 2020.

However, the Fukushima nuclear disaster then struck, causing nuclear development in China to slow down compared to the original plan, even though it continues to be promoted. As a result, it will be difficult to achieve the plan of starting the construction of new nuclear power plants with a total output of 40 GW in 5 years. Although the target non-fossil energy ratio for 2015 may be achieved by starting up those nuclear power plants now being built, the Chinese government must accelerate the development of renewable energy in order to achieve the target for 2020. In addition, as many domestic solar battery companies are facing financial difficulties due to the slump in exports, there are high expectations for the expansion of photovoltaic power in the domestic market. These drastic changes in circumstances both domestic and overseas surely led to the recently announced aggressive development targets. Nevertheless, there are technological, financial and social challenges and restrictions, which must be overcome if the target is to be attained.

The Plan stated that the following policy measures will be taken to achieve the target: the assignment of renewable energy targets by area and major energy companies, introduction of a censure system to impose a responsibility to achieve the targets, reinforcement of financial and monetary assistance by providing subsidies or preferential treatment in terms of tax and financing, restoration of a sound FIT and the development fund management system, and reforms to the power generation industry and electricity prices. The investment made during the Five-Year Plan period is estimated to be 800 billion yuan for hydropower, 530 billion yuan for wind power, 250 billion yuan for photovoltaic power, and 220 billion yuan for other sources, amounting to 1.8 trillion yuan (approximately 22.9 trillion yen). This is expected to boost the renewable energy industry.

7. ME Watching: Worsening Situation in Syria

Koichiro Tanaka, Managing Director &
Head of JIME Center

As the civil war in Syria intensifies, countries such as the US, Saudi Arabia, Qatar and Turkey are beginning to openly support the rebel forces. The days left for President Basshar al-Assad's government will be numbered when Aleppo, which is an important border region for Syria with Turkey, falls into rebel hands. As the number of defectors from the government continues to increase and the situation in the capital Damascus worsens, the outcome of the battle in Aleppo will provide an indication as to when the Assad regime may collapse.

The Assad regime, now generally on the defensive, has warned that it may use chemical weapons against "foreign powers". This has not only deepened the isolation of Syria with its ensuing suspension from the Organization of Islamic Cooperation (OIC) but also could trigger military intervention by countries such as the US. However, US President Obama's warning against the use of chemical weapons reflects the fact that it is difficult to counter massacres by conventional arms, and that the mediation efforts by Ambassador Lakhdar Brahimi, a former Algerian foreign minister who was recently appointed as a joint UN-Arab League Special Envoy, are likely to flounder.

Turkey continues to support the rebel forces in Syria in cooperation with the US and to discuss the transition of power while also dealing with the threat posed by the Kurdish dissidents in the country. As Syria helped to reactivate the PKK to counter the Turkish government's support for the anti-Assad camp, there is increasing criticism in Turkey about the Erdogan government's policy toward Syria. Moreover, as the relationship between Turkey and Iran has worsened, it is casting a shadow over the diplomatic policy of "zero problem" that Turkey has promoted in order to foster good relations with neighboring countries.

The US continues to step up its sanctions against Iran which was reported by the IAEA to be expanding its uranium enrichment facility. President Obama issued an executive order on July 31 to eradicate the loopholes of sanctions against foreign banks involved in the Iranian crude oil business based on the National Defense Authority Act and on August 10 signed into law the "Iran Threat Reduction and Syria Human Rights Act of 2012" which was drawn up by the House of Representatives of the US congress.

In addition, there are rumors that several foreign banks may have violated the US Treasury Department Notification of 2008 which prohibits "U-turn transactions" to be used to bypass sanctions on their US dollar based transactions with Iranian banks. European and Asian financial firms are carefully watching the outcome of the investigations being carried out by the US authorities. However, in spite of these tightened sanctions, Iran hosted the summit meeting of the Non-Aligned Movement (NAM) as scheduled, and garnered support from leaders of member states that their nuclear development is legitimate.

In Egypt, the stand-off between President Mursi and the Supreme Council of the Armed Forces (SCAF) has intensified. The President rescinded the legislative power which SCAF has held by issuing a review of the Constitutional Declaration and dismissed the Defense Minister Tantawi who had played the core role, and thus is seeking to gain public support by making swift decisions. However, there may be political fallout from the military who consider that their vested rights were infringed.

8. Russia Watching: Resource Development in Russia and Regional Cooperation in Northeast Asia

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

The 8th International Conference of “Energy Cooperation in Asia” was held in Irkutsk in East Siberia on August 21 and 22. Approximately 100 people from Japan, China, Korea Mongolia and Russia, including government officials as well as representatives of energy companies and specialist organizations participated in the conference, which was organized by the Energy Systems Institute of the Siberian Branch of the Russian Academy of Sciences. The meeting highlighted four problems for Russia at present.

Firstly, the impacts of the shale gas revolution received special attention. Most participants agreed that large-scale production of shale gas would be unlikely anywhere other than the US in the near future in view of the availability of pipelines and water, environmental restrictions, etc. Additionally, there has gradually emerged concern that the projected looser supply-demand balance of the international gas market in the latter half of the decade with North America’s LNG exports coming online may badly affect the development of gas fields in East Siberia.

Secondly, they shed light on the uniqueness and geographical constraints of the major gas fields such as the Kovykta gas deposit in the Irkutsk Region and the Chayanda deposit in Sakha Republic, whose development is expected in the future. Faced with the above-mentioned first challenge, it is recognized that they are starting to lose momentum for business to export raw natural gas from East Siberia, but they should pave the way for these gas fields by making the best of the comparatively rich volumes of chemical components, including ethane and butane, etc. Accordingly, they hope to build a new base for the gas chemical industry and to export value-added gas products. However, the lack of developed transportation infrastructure to connect the inland gas production areas, 3,000–4,000 km away from the Pacific coast, with export bases to overseas, has remained a serious bottleneck

Thirdly, the debate was centered on the trajectory of Sino-Russian partnership, attracting worldwide attention. As has been reported, there remains a huge gap concerning the gas prices proposed by China and Russia. I was once again struck by finding that they were yet to come up with any solution in sight.

Fourthly, as expressed by a Russian expert, it is high time that they had to find out concrete methods to realize projects, while they used merely to list their hopes for potential resources in the eastern regions.

One consensus that emerged during this conference is that Russia’s conventional approach of using bilateral arrangements with neighboring countries to overcome the enormous investment cost and risk of developing the eastern Russia is limited. Today political tension within Northeast Asia, including worsening territorial disputes over Takeshima and the Senkaku Islands is on the increase. Notwithstanding effort to avoid conflicts among the parties, international relations sometimes entail possibility of precipitating into contingencies. However, it is a wisdom of diplomacy to find “common ground” for mutual interests. Japan should take the initiative to build multinational cooperation by way of systematically exploiting Russia’s resource potential for the overall advantage of Northeast Asian energy market.

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