## Summarizing Comments

MOTOMURA, Masumi Chief Researcher, Japan Oil, Gas and Metals National Corporation (JOGMEC)

Today, starting with the Governor of Niigata Prefecture, Hirohiko Izumida, six keynote addresses and 16 presentations were made, and it has been a greatly successful symposium. Concerning resources Japan and Russia have a complementary relationship, and at this Japan–Russia Energy and Environment Dialogue in Niigata also I feel that on each occasion relations have steadily been deepening.

## Keynote Addresses

First, from Masaki Ishikawa, Director, Japan-Russia Economic Affairs Division, European Affairs Bureau, Ministry of Foreign Affairs, we received an exposition summarizing the most recent political and economic situation for Russia, and it was shown that while the monetary amount is decreasing with the low price of crude oil, Japan-Russia business cooperation is on an upbeat note.

From Andrey Zagmennov, Deputy Trade Representative of the Russian Federation in Japan, we received an introduction of the Japan–Russia cooperation projects in the Far Eastern region of Russia. Furthermore, there was also the introduction of ideas for mutually beneficial cooperative relations with Japan regarding energy other than the traditional oil and gas, such as the energy bridge and hydrogen.

Yuki Sadamitsu, Director, Petroleum and Natural Gas Division, Agency for Natural Resources and Energy, spoke to us about current Japanese energy policy, in particular policies to encourage market competition. Then, within a policy line of the diversification of Japan's procurement of oil and gas, there was explanation of the situation wherein last year oil imports from Russia increased to 8.2% of Japan's total imports, and LNG to 9.5 %, and that its importance is increasing year by year. There was a sensing of the realization of the reducing of the degree of dependence on the Middle East via the strengthening of relations with Russia.

Dzhambulat Tekiev, Vice Chairman, Primorsky Territory Legislative Assembly, gave a report on the severe power generation situation, including obsolescence, and on subsequent measures. For Japanese firms also, I consider sectors to continue strengthening long-term relationships in the future, including wind power, solar power, and cogeneration, and not stopping at oil and gas to date

Taisuke Abiru, Research Fellow, The Tokyo Foundation, considered that, in relation to the China factor, which is strengthening its influence in Russia, the Russian side actually wants to maintain independence from China as much as possible, and made the point of the great vitality shown in the gradual increase in the strategic importance of strengthening relations with Japan.

Tetsuji Uemura, Senior Researcher, Nomura Research

Institute, made the profoundly interesting points that Russia differs greatly from China: household consumption accounts for approximately two-thirds of Russia's GDP, and there is a downward rigidity of GDP that is robust toward economic fluctuations.

Session A: Japan's Power Supply Configuration and Japan–Russia Cooperation: Conventional Energy

Dr. Tatiana Mitrova, Head, Oil and Gas Department, Energy Research Institute of the Russian Academy of Sciences, spoke to us about the competitiveness of Russian-produced gas, focusing on Japan–Russia cooperation in the gas sector. In particular, it is considered that the pointing out that it costs US\$6.7 per million British thermal units (MBTU) via the Sakhalin II third train, and furthermore US\$7 via the Sakhalin–Japan pipeline, hold great interest in all related quarters.

Takashi Komura, Deputy General Manager, Fuels Department, Tohoku Electric Power Co., Inc., reported that since the 2011 earthquake imports from Russia of LNG have been constantly increasing, and regarding Russian LNG, because of the viewpoint of diversification, the closeness in distance, and in particular the closeness of Niigata, it is rated as an important supply source into the future also.

Toshihisa Sato, Deputy Director, Joetsu Thermal Power Station, Chubu Electric Power Co., Inc., introduced the gas turbine and steam turbine, and the combined cycle generator of the Joetsu Thermal Power Station. In particular, he made the extremely important point that LNG from Sakhalin arrives in a mere three days.

Kazumasa Miyazawa, General Manager, Natural Gas Division IV, Mitsui & Co., Ltd., gave a detailed report on the history of the Sakhalin II project, and it was greatly beneficial. The volume of resources in the Russian Far East, and its value as a supply region close in distance to Japan were discovered early on, in the period of low LNG prices in the 1990s business building efforts were persistently continued, and I think the process in which final investment decisions were reached has been filled with very good lessons in every related direction.

From Sergey Kovalev, Director, Department of Industry, Administration of Primorsky Territory, progress was reported for the growth in the volume of consumption of gas in Primorsky Krai, and for the connecting up to the gas supply. The Sakhalin–Khabarovsk–Vladivostok (SKV) pipeline opened in September 2011, and the Eastern Siberia–Pacific Ocean (ESPO) pipeline opened in its entirety in December 2012. Subsequently, the impression was that smooth development is coming about.

From Seita Shimizu, Chief Manager, Corporate Planning Department, Tokyo Gas Co., Ltd., came an extremely plentiful report from the aspect of the enhancement of the "LNG value chain". Furthermore, there was an introduction to the electricity generation projects based on the complete liberalization of retail electric power from 2016, and a sense could be had of vitality in this sphere.

From Nobuaki Aoyama, Chairman, Natural Gas Infrastructure Development and Utilization Committee, Japan Project-Industry Council (JAPIC) came the important points that there is sufficient cost competitiveness in the gas supply by pipeline from Russia to Japan, and further, other than price also, there is value from the perspective of energy security, via connecting up to the onshore gas pipeline network.

From Masanori Suzuki, Director and Executive Officer, JGC Corporation, the expectation was mentioned of an increase in demand for LNG via the fall in LNG prices. In addition new possibilities were sensed, touching on utilization in broad-ranging sectors, including greenhouse cultivation using low-price gas from the Far East.

From Kazuya Hamazaki, General Manager, LNG Project Group, Mitsui O.S.K. Lines, Ltd., we were told about "LNG Transportation through the Northern Sea Route", which is now drawing the most attention. In particular, the value was pointed out that there is the possibility to access the energy resources with which the Arctic is endowed, that is to say the Arctic is not only a "transit" region, but is a region endowed with natural resources, and is a "destination" region for the development of resources via the establishment of navigation routes.

From Viktor Pokotilov, General Director, Berkut Group, we were told of the plans for the construction of an LPG terminal, as in the future the deep-level development of gas in Western Siberia will increase. Within the policy of the Russian government making the utilization rate of associated gas over 95%, we heard about the movement of the rapidly expanding LPG market, and it is considered a profoundly interesting plan.

Session B: Japan's Power Supply Configuration and Japan–Russia Cooperation: New Energy and Electricity

From Alexey Kolodeznikov, Minister, Housing and Utilities and Energy, Sakha Republic (Yakutia), we heard that, amid the difficult conditions of population location dispersed over a vast land area, they are realizing the distributed power model of localized consumption, carrying out renewable-energy electricity generation by solar power in each area. It is considered this will in the future become a model case for areas with little population on the Eurasian landmass

From Ryozo Miura, Associate Director, Energy Solution Division, Kawasaki Heavy Industries, Ltd., there was an introduction of small and medium-sized gas turbines, with the phenomenal energy efficiency of 80%, being put to use

in Vladivostok on the occasion of the APEC summit, and the further advancing of the changeover to cogeneration in the permafrost areas of the Republic of Sakha. It was greatly heartening as an example of Japanese technology being effectively utilized in Russia.

From Emi Komai, Director, Chief of Infrastructure Development Department, Komaihaltec Inc., we heard that aiming at cost reduction in the electricity supply in Sakhalin and Kamchatka, initiatives are being made for the introduction of micro-grid systems by wind power generation with a cold region specification. The impression was of activity to ascertain clearly the characteristics of the regions, including consideration toward local residents.

From Aleksandr Gulkov, Head, Department of Oil, Gas and Petrochemical Industry, School of Engineering, Far Eastern Federal University, an example of the practical utilization of forest resources as bioenergy by pellets and charcoal, etc., was introduced. It is considered a highly convincing method as an alternative energy which makes use of the special character of the Eurasian taiga.

From Irina Ivanova, Head of Laboratory for Energy Supply to Remote Areas, Energy Systems Institute, Siberian Branch of the Russian Academy of Sciences, there was an explanation of the overall situation of the utilization of renewable energy in Eastern Russia which is far removed from the center, and specifically an introduction of the attempts at environmental protection of the shores of Lake Baikal. I think it is a field in which Japan could naturally cooperate.

From Professor Ryosuke Fukuda of Chubu University we heard about the very broad and grandiose concept of connecting Korsakov in Sakhalin to Kashiwazaki on the Japan Sea coast with an international electricity interconnection cable. In the case of a gas supply line, for example, there has been the political supply via the transit country of Ukraine, but not one going to a final destination country or region. As I think this section of the discussion, namely the discussion of trustworthiness, will be necessary in the future, I think the discussion should be moved further forward.

This "Japan-Russia Energy and Environment Dialogue in Niigata", reaching its eighth occasion, was greatly successful, and today there were 150 participants. Experts in the fields of Japan-Russia energy and the environment came together, there has been the constant providing of an arena which enables such exchange of opinions, and that it has evolved yearly is greatly important. I would like to express again my gratitude for the great efforts of the concerned persons, the organizers, Niigata Prefecture, the City of Niigata, and ERINA, and to all those participants from the Russian side.

[Translated by ERINA]