# The 11th International Conference on Northeast Asian Natural Gas and Pipeline:

- Multilateral Cooperation in Natural Gas and Pipeline in Northeast Asia –

# **Program**



27<sup>th</sup> – 28<sup>th</sup> October, 2009 Shiba Park Hotel Tokyo, Japan

Northeast Asian Gas and Pipeline Forum Asian Pipeline Research Society of Japan

### in collaboration with

Asia Gas and Pipeline Cooperation Research Center of China Asian Pipeline Research Society of the Russian Federation Korea Pan-Asian Natural Gas and Pipeline Association Petroleum Authority of Mongolia

# **Objectives**

It has been ten years since the Northeast Asian Gas and Pipeline Forum (NAGPF) which consists of five member countries including Russia, China, Korea, Mongolia and Japan was established in 1997. At that time, natural gas and its pipeline were so poorly developed in Northeast Asia that NAGPF has organized international conferences and conducted international joint researches in order to popularize the necessity of enhancement of natural gas development and utilization in Northeast Asia. NAGPF has organized ten times international conferences and four times international joint researches and has contributed to the promotion of natural gas and its infrastructure development.

During the last decade, the situation has been changing. In China, the West to East Gas Pipeline with total length 4,000km has been constructed. Now the total length of the pipeline in China is 32,000km. The 2nd West to East Gas Pipeline is being planned. In Korea, domestic pipeline network with total length 2,500km has been developed. Regarding the cross border natural gas trade, Sakhalin-2 project started LNG supplies to Japan and Asia Pacific Region in March 2009. It was announced that Russia and Korea will start the feasibility study on the natural gas transportation from Vladivostok of Russia to Korea. In terms of natural gas trade in Northeast Asia, now the stage is moving from the "primary stage" in which the importance of natural gas to be emphasized to the "growing stage" in which specific projects to be promoted. In the "growing stage", although it is expected there might be conflicts of interests among the related countries, it is important to reconsider the future of multilateral energy cooperation in Northeast Asia.

In the circumstances, the 11th International Conference on Northeast Asian Natural Gas and Pipeline will be held. The main objective of this conference was to discuss multilateral cooperation in natural gas and its infrastructure among interested parties from both supply side and demand side.

We expect positive input and lively discussion from all the participants.

# **Program**

Chairman Mr. Fumio Sato

President, Northeast Asian Gas and Pipeline Forum (NAGPF) President, Asian Pipeline Research Society of Japan (APRSJ)

Co-Chairmen Mr. Shi Xunzhi

President of Asia Gas and Pipeline Cooperation Research Center

of China (AGPRCC) **Mr. Dal Young Park** 

President, Korea Pan-Asian Natural Gas and Pipeline

Association (KPGA)

Prof. Alexder F. Safronov

President, Asian Pipeline Research Society of the Russian

Federation (ROSASIAGAS) **Mr. Amraa Tsengemaa** 

Vice Chairman, Petroleum Authority of Mongolia (PAM)

Conference Director Dr. Kazuhiko O'hashi

Acting Secretary General, Northeast Asian Gas and Pipeline

Forum (NAGPF)

# **Opening Session** (9:00 – 12:00)

### Chaired by APRSJ

Opening Address Mr. Fumio Sato

President, Northeast Asian Gas and Pipeline Forum (NAGPF)

Congratulatory Addresses Prof. Alexander F. Safronov

President, Asian Pipeline Research Society of the Russian

Federation (ROSASIAGAS)

Mr. Shi Xunzhi

President of Asia Gas and Pipeline Cooperation Research Center

of China (AGPRCC)

Mr. Dal-Young Park

Chairman of Korea Pan-Asian natural Gas & Pipeline

Association (KPGA)

Mr. Amraa Tsengemaa

Vice Chairman, Petroleum Authority of Mongolia (PAM)

Mr. Igor D. Ustinov

Counselor, Economic Affairs, Embassy of the Russian

Federation in Japan

**Keynote Speech** "East Asia Community" and Environmental / Energy

Cooperation"

-Construction of Natural Gas Pipeline Networks in

Northeast Asia—"

Dr. Makoto Taniguchi,

President, Northeast Asian Studies & Exchange Network

(NEASE-Net)

# **Special Speech**

Special Speech 1 "The Current Situation and Issues of Energy Security"

Mr. Shuichi Akamatsu

Director, Economic Security Division, Economic Affairs

Bureau, the Ministry of Foreign Affairs

Special Speech 2 "Energy Policy of Japan and the Position of Natural Gas"

Mr. Hirohide Hirai

Director, Petroleum and Natural Gas Division Agency for Natural Resources and Energy The Ministry of Economy, Trade and Industry

# Coffee Break (10:45 - 11:10)

Special Speech 3 "China's Natural Gas and its Infrastructure Current

Status "

Ms. Shen Lian

Deputy Chief Economist, Planning Dept., China National

Petroleum Corporation (CNPC)

Special Speech 4 "FAR EAST in the Gazprom's Coordinate System"

**Prof. Alexey Mastepanov** 

Advisor of Duputy Chairman, JSC Gazprom

# Lunch (12:00 - 13:30)

# ■ Session 1 (13:30 - 15:10)

"How to Promote Cooperation on Development of Oil and Gas Fields"

# 1) Objectives of the Session

- To clarify the expectation from Russia for the upstream development (fund, technology, effective utilization of Helium etc.)
- ➤ To clarify the requests from the perspective of foreign capital in the process of investment to the upstream development.
- To discuss how to cooperate in the upstream development in Russia

### 2) Speakers and discussants

Chair: Mr. Tadashi Sugimoto

Former Secretary-General, Japan-Russia Business Cooperation Committee, Nippon Keidanren

Co-chair: Prof. Boris G. Saneev

Deputy Director, Energy Systems Institute of SB RAS

# **Speakers:**

"Oil and Gas from Russia will be Delivered to the Asian-Pacific Market"

**Prof. Leontiy Eder,** Senior Researcher, Trofimuk Institute of Petroleum Geology and Geophysics, SB RAS

# "Discussion on business co-operation model

- Regarding gas field development in Eastern Russia within the

framework of Northeast Asia multilateral cooperation -"

**Mr. Wang Jingbo,** Director, Planning & Financial Division, China-Russia Cooperation Dept. CNPC

# "Japanese Strategy on Oil and Gas Business in Russia"

#### Mr. Masumi Motomura

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

# "Current State of Play and Development of the Petroleum Sector of Mongolia"

Petroleum Authority of Mongolia (PAM)

# Mr. Tuvshinjargal Avirmed

Officer, Contranct, Exploration & Research Division, Petroleum Authority of Mongolia

#### **Discussants:**

Discussants will be joined in this session. Please refer the discussants' list on page 12 and 13.

# **Coffee Break (15:10 – 15:40)**

### ■ Session 2 (15:40 - 17:30)

# **Cooperation on Natural Gas Infrastructure Development**

# 1) Objectives of the Session

- To clarify the latest trend and tasks on development of natural gas pipeline (plan, finance, technology etc.)
- To clarify the latest trend and tasks on LNG development (plan, technology, finance etc.)
- To introduce the future vision of Natural Gas infrastructure in Northeast Asia
- To discuss how to cooperate on natural gas infrastructure development.

# 2) Speakers and discussants

Chair: Dr. Kim, Myeong-Nam,

Vice President of Russia Project Group, KOGAS

#### Co-chair: Mr. Tadashi Maeda

Head, Corporate Planning Department, Japan Bank for International Cooperation (JBIC)

# **Speakers:**

"Role of Sakha Republic (Yakutia) Gaz Reserves in Program "VOSTOK" "

Prof. Alexander F. Safronov

Chairman of Presidium Yakutia Scientific Center SB RAS

"Japan's Cooperation to Sakhalin-Khabarovsk-Vladivostok (SKV) Gas Pipeline Project"

Mr. Tadashi Maeda

Head, Corporate Planning Department, Japan Bank for International Cooperation (JBIC)

"Characteristics of Korea's Gas Infra-structure and Their Implications" Dr. Gi Chul Jung,

Chief Researcher, KOGAS

"A Long-term Vision of Natural Gas Infrastructure in NEA - 2009 Version -"

Dr. Kazuaki Hiraishi

Secretary, Northeast Asian Gas & Pipeline Forum (NAGPF)

"Pipeline Technologies: New Development in China"

Mr. Zhang Xuezeng

Assistant Chief Engineer, China Petroleum Pipeline Bureau, CNPC

#### **Discussants:**

Discussants will be joined in this session. Please refer the discussants' list on page 12 and 13.

# End of the 1st Day

**Welcome Reception** (18:00 – 19:30)

# **Session 3** (9:00-10:40)

# **Natural Gas Market and Trading**

# 1) Target

- To clarify natural gas position in the energy market in Northeast Asia
- > To discuss the competition and harmonization of PNG and LNG
- > To discuss how to promote the natural gas trade in Northeast Asia

### 2) Speakers and discussants (to be confirmed)

#### Chair: Mr. Koichi Seki

General Manager, Fuel Department, Tokyo Electric Power Company, Incorporated (TEPCO)

# Co-chair: Mr. Tuvshinjargal Avirmed

Officer, Contract, Exploration & Research Division (PAM)

# **Speakers:**

# "The Current State and Forecast of the Natural Gas Market in East Siberia and the Far East"

#### Prof. Boris G. Saneev

Deputy Director, Energy Systems Institute of SB RAS

# "Market Opportunities and Challenges for Northeast Asia Natural Gas Cooperation Projects"

### Mr. Liu Hequn

Deputy Chief Engineer, China-Russia Coopration Dept. China National Petroleum Corporation (CNPC)

# "Present Status of World Gas Market in Northeast Asian Gas Market"

# Dr. Kim Myeong-Nam

Vice President of Russia Project Group, KOGAS

# "Outlook for the Natural Gas Market in Japan and Expectations on Natural Gas"

#### Mr. Kentaro Kimoto

General Manager, Strategy and Planning, Gas Resources Dept. Tokyo Gas Co., Ltd.

## **Discussants:**

Discussants will be joined in this session. Please refer the discussants' list on page 12 and 13.

# **Coffee Break** (10:40 – 11:00)

# ■ Session 4 (part 1) (11:00 -12:15)

# Cooperation on Natural Gas related Technology

# 1) Target

- > To introduce the latest natural gas related technologies
- To discuss how to cooperate in the advanced natural gas related technology

# 2) Speakers and discussants

Chair: Dr. Kazuhiko O'hashi

Acting Secretary General, Northeast Asian Gas and Pipeline Forum (NAGPF)

Vice-Managing Director, Asian Pipeline Research Society of Japan(APRSJ)

Co-chair: Mr. Amraa Tsengemaa

Vice Chairman, Petroleum Authority of Mongolia (PAM)

#### **Speakers:**

"The Trunk Gas Pipeline Integrity and Risk Management based on 4D-GIS"

Mr. Kazuaki Iwamura, Central Research Laboratory, Hitachi, Ltd.

# "FLNG Technology"

**Mr. Duk Jong Yu,** Offshore Sales Engineering Division, STX Offshore & Shipbuilding Co., Ltd.

"Toward Realization of Hydrogen Gas Pipeline NetworksHydrogen Pipeline Technology"

**Prof. Shuji Aihara,** Department of Environmental & Ocean Engineering, School of Engineering, University of Tokyo

# **Lunch** (12:15 - 13:30)

■ Session 4 (part 2) (13:30 -14:45)

# **Cooperation on Natural Gas related Technology**

Chair: Dr. Kazuhiko O'hashi

Acting Secretary General, Northeast Asian Gas and Pipeline Forum (NAGPF) Vice-Managing Director, Asian Pipeline Research Society of Japan(APRSJ)

# Co-chair: Mr. Amraa Tsengemaa

Vice Chairman, Petroleum Authority of Mongolia (PAM)

# **Speakers:**

"New Supply Chain of Natural Gas(GTL & NGH)"

Mr. Hirotaka Shimizu, Japan Oil, Gas and Metals National Corporation (JOGMEC)

# "Mitsubishi Advanced Gas Turbine Technology for Natural Gas Utilization"

**Mr. Toyoaki Komori,** Power Systems Headquarters ,Power Systems Plant Engineering & Construction Division, Power Systems Project Engineering Department Mitsubishi Heavy Industry corporate, Mitsubishi Heavy Industries, LTD. , Japan

# "Residential Fuel Cell Cogeneration System of Toshiba

Mr. Ryo Nakajima, Toshiba Power Systems Company

#### **Discussants:**

Discussants will be joined in this session. Please refer the discussants' list on page 12 and 13.

# **Coffee Break** (14:45 -15:15)

# $\blacksquare$ Session 5 (15: 15 – 17:00)

# The Framework of Stable Gas Supply and Demand in Northeast Asia

#### 1) Target

- > To obtain the lessons from the case study on European natural gas supply and demand structure.
- To discuss how to ensure the stable natural gas supply and demand in Northeast Asia

# 2) Speakers and discussants (to be confirmed)

Chair : Mr. Liu Hegun

Deputy Chief Engineer, China-Russia Coopration Dept. China National Petroleum Corporation (CNPC)

# Co-chair: Mr. Susumu Abe

Managing Director, Asian Pipeline Research Society of Japan (APRSJ)

# **Speakers:**

"Russian Gas Project for Korea: Implementation Issues & Strategy"

Dr. Ji-Chul Ryu,

Senior Fellow, Korea Energy Economic Institute (KEEI)

"Any Lesson Available for North-East Asia from the Europe-Russia Gas Trade?"

Mr. Satoshi Sakai

Senior Manager for Russia, Regional Strategy & Coordination Dept., Mitsubishi Corporation

"The Impact of GHG Mitigation on Natural Gas Demand in Western Pacific"

**Dr. Sergey POPOV** 

Team Leader, Asia-Pacific Energy Research Centre (APERC)

"Regional Development and Multilateral Cooperation in Northeast Asia:The Implications for Gas Sector Cooperation"

Mr. Hirofumi Arai

Deputy Director, Research Division, Economic Research Institute for Northeast Asia

#### **Discussants:**

Discussants will be joined in this session. Please refer the discussants' list on page 12 and 13...

# **Closing Session** (17:05 - 17:35)

**Chaired by APRSJ** 

Wrap up Mr. Makoto Haya

Vice President, Asian Pipeline Research Society of Japan

Representative Director and President, Nippon Steel Engineering

Co., Ltd.

Inaugural Address New President of the NAGPF

**Closing** 

**Farewell Party** (18:00 – 19:30)

# The 3<sup>rd</sup> Day (29<sup>th</sup> October) and The List of Discussants (Tentative)

# **■** Technical Tour (9:30 – 17:00)

# Kimitsu Works of Nippon Steel Corporation and Futtsu Thermal Power Station of TEPCO

On the 3rd day, we will visit "Kimitsu Works of Nippon Steel Corporation" and "Futtsu Thermal Power Station of TEPCO" in Chiba Pref. via Tokyo Bay Aqualine (undersea tunnel). You can enjoy the magnificent view from the artificial island on the middle of the Tokyo Bay.

# **Futtsu Thermal Power Station of TEPCO**

The Futtsu Thermal Power Station, one of the most representative power stations using LNG run by Tokyo Electric, is currently undergoing expansion of facilities. When the facilities are completed, the station will become the world's largest thermal power station with a generating capacity of 5,040MW. The LNG terminal is also undergoing expansion work within the premises of the station. The LNG terminal, scheduled to handle 9 million tons of LNG a year, is expected to play an extremely important role in the future as the fuel supply terminal for approximately 10,000MW power generation, using gas pipelines and station gas pipelines which respectively feed gas at the pressures of 6.3MPa and 1.9MPa.

# Kimitsu Works of Nippon Steel Corporation

At the Kimitsu Works, which is a core steelworks of Nippon Steel, they not only deliver products that satisfy our customers, but also actively carry out environmental preservation activities, energy conservation activities, and recycling of resources, and contribute to the development of the local society.

They efficiently manufacture a wide range of high quality products including bar steel, steel plates, steel sheets, and steel pipes, under coherent management covering the entire process from the raw material to the final product; thus satisfying the needs of the customers. They have produced Linepipe for natural gas Pipeline since 1970.

# The List of Discussants

# Members of Discussants are the following.

#### **♦** Russia

# **Prof. Leontiy Eder**

Senior Researcher, Trofimuk Institute of Petroleum Geology and Geophysics, SB RAS

#### Prof. Alexander F. Safronov

President, Asian Pipeline Research Society of the Russian Federation

#### Prof. Boris G. Saneev

Presidium Chairman, Yakutia Scientific Center of Siberian Branch of Russian Academy of Sciences

# Mr. Alexander Kalmychek

Executive Secretary, ROSASIAGAS

#### ♦ China

#### Mr. Shi Xunzhi

President, Asia Gas and Pipeline Cooperation Research Center of China

#### Mr. Xu Yonga,

CNPC Research Institute of Economics and Technology

#### Mr. Liu Hegun

Deputy Chief Engineer, China-Russia Cooperation Dept.

### Ms. Chen Ying

Secretary General, Asia Gas and Pipeline Cooperation Research Cener of China

#### ◆ Korea

# Dr. Gi Chul Jung

Chief Researcher, Korea Gas Corporation, Korea

#### Dr. Ji Chul Ryu

Senior Fellow, Korea Energy Economics Institute

### Ms. Chung-Ah Moon

Assistant Manager, Korea Gas Corporation, Korea

#### **♦** Japan

### Mr. Tadashi Sugimoto

Former Secretary-General, Japan-Russia Business Cooperation Committee, Nippon Keidanren

### Mr. Masumi Motomura

Japan Oil, Gas and Metals National Corporation (JOGMEC)

### Mr. Tadashi Maeda

Head, Corporate Planning Department, Japan Bank for International Cooperation (JBIC)

# The List of Discussants

#### Mr. Satoshi Sakai

Senior Manager for Russia, Regional Strategy & Coordination Dept., Mitsubishi Corporation

#### Mr. Hirofumi Arai

Deputy Director, Research Division, Economic Research Institute for Northeast Asia

### Mr. Susumu Abe

Managing Director, Asian Pipeline Research Society of Japan

### Dr. Kazuhiko O'hashi

Vice Managing Director, Asian Pipeline Research Society of Japan

# **♦** Mongolia

# Mr. Amraa Tsengemaa

Vice Chairman, Petroleum Authority of Mongolia (PAM)

# Mr. Tuvshinjargal Avirmed

Project Manager, Petroleum Department, Petroleum Authority of Mongolia(PAM)