INDOPIPE 2010
The 3rd International Indonesia Pipeline Conference & Exhibition
Theme: Accelerating Indonesia’s Pipeline Infrastructure Development

“IGU – World Gas Pipeline Scenario”

By:
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9 – 10 June 2010
Jakarta, Indonesia
1. Introduction
2. World Gas Pipeline Sector
3. IGU - World Gas Pipeline Scenario
4. Key Challenges and Opportunities
5. Concluding Remarks
IGU as **THE** spokesman for the gas industry

- Worldwide and non-profit organisation established in 1931
- Promotes technical and economic progress of the gas industry
- Emphasising sound environmental performance
- Increased focus on strategic and policy issues
- Cooperation with IEA, United Nations, World Bank, IEF and others
1. Introduction – Brief on IGU

IGU Members responsible for 95% of Global Gas Sales

74 Charter members
33 Associate members
11 Affiliated members

*N.B.: As of April 2010*
1. Introduction – Brief on IGU

IGU Organisation Chart
for the 2009 – 2012 Malaysian Triennium

IGU MANAGEMENT TEAM
President, Vice President
Immediate Past President
CC Chairman, CC Vice Chairman
Secretary General

President
Datuk (Dr) Abdul Rahim Hashim
MALAYSIA

Secretary General
Mr Torstein Indrebo
NORWAY

Executive Committee

Vice President
Mr Jérôme Ferrier
FRANCE

Immediate Past President
Mr Ernesto López Anadón
ARGENTINA

Vice Chairman
Mr Georges Liens
FRANCE

COORDINATION COMMITTEE

Chairman
Mr Ho Sook Wah
MALAYSIA

IGU SECRETARIAT

Senior Advisor
Mr Hans Riddevold
NORWAY

Advisor
Mr Erik Gonder
NORWAY

Secretary
Ms Ungku Ainon Ungku Tahir
MALAYSIA
Despite variations in length, both transport natural gas from suppliers to customers

- **Short-to-medium**: efficient delivery systems
- **Long**: enhance the integration of various gas markets
IGU Messages on Natural Gas

- Clean, efficient, versatile and environmental friendly fuel
- Available and abundant
- Continue to play a substantial role in global energy demand
- Basis for sustainable economic growth

Natural gas — major part of the long term energy solution
Varying levels of gas markets across regions provide impacts on the pipeline sector

Major gas trade movements worldwide (billion cubic metres)

North America

Europe

ASEAN region

4 Strategic Guidelines (SG)

1. Enhance the role of gas for sustainable development and balancing the needs of all stakeholders

2. Improve availability of gas and access to markets

3. Maximise efficiency throughout the expanding gas value chain

4. Ensure adequate human capability to enable growth and integrity of the industry
High energy prices

Rising gas infrastructure costs

Project deferrals

Low energy prices

Uneconomical project

Low profit margin

- Natural gas rallies in an intensely competitive global energy market
Rapid growth in the role of natural gas

- Offers practical immediate solution in climate change mitigations
- Provides long term flexibility for a sustainable energy future
- Piped gas and/or LNG contribute to supply security
The world’s proven natural gas is amounted to 185 Tcm

Proven gas reserves at end 2008
Trillion cubic metres (Tcm)

3 key gas producing countries:
- Russia = 43.30 Tcm
- Iran = 29.61 Tcm
- Qatar = 25.46 Tcm

Total volume represents more than 60 years of consumption at today’s rate

Two authoritative reports highlight the robustness of future global pipeline industry

Over the period 2009 - 2013

**Offshore pipeline by Infield Systems**
- Over 80,000 km to be built
- Estimated Capex = ~ USD 269 bn

**Onshore pipeline by Douglas Westwood**
- Around 139,000 km to be built
- Estimated Capex = over USD 144 bn

- Total investments = over a staggering USD 413 billion
### SG 3: Maximising efficiency

#### Choices for wider utilisation of natural gas

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<th><strong>Gas District Cooling</strong></th>
<th><strong>Fuel for Industrial</strong></th>
<th><strong>NGV in Transport</strong></th>
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<td><img src="image1" alt="Gas District Cooling" /></td>
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SG 4 : Ensuring adequate human resource capability

- Significant technical skills shortage within the gas industry over recent years
- IGU’s Task Force 1 “Building Strategic Human Capital” will recommend way forward
3. World Gas Pipeline Scenario – IGU Perspective

The IGU Working Committee on gas transmission (WOC-3)

**Natural gas value chain**

- **Exploration & Production**
- **Storage**
- **Transmission**
- **Distribution**
- **Utilisation**

**Working Committee 3 (WOC-3) : Gas Transmission**

- **Chairman:** Mr. Erik Dam, The Netherlands
- **Vice Chairman:** Mr. Jorge Bonetto, Argentina

**Subgroup 3.1 : Strategic gas infrastructure projects**

- **Leader:** Enno Freese, The Netherlands

**Subgroup 3.2 : Integrity of gas transmission systems footprint reduction**

- **Leader:** Mohd Nazmi, Malaysia

**Subgroup 3.3 : Securing sufficient expertise to operate safely and adequately gas transmission systems**

- **Leader:** Barbara Jinks, Australia
4. Key Challenges & Harnessing Opportunities

**Issues relating to world gas pipeline sector**

- **Key challenges**
  - Variation of economic conditions between countries
  - Geo-politics issues
  - Substantial upfront investments are required
  - Building Strategic Human Capital
  - Multi-lateral vs. Bilateral
    - Harmonisation
    - overall integration

**Key deliverables at the 25th World Gas Conference (WGC), Kuala Lumpur in 2012**
Key Challenges & Harnessing Opportunities

**Issues relating to world gas pipeline sector**

- Reduced costs for transportation component
- Government involvement to expedite the process
- The advent of technology & innovation
- Investor friendly regulatory systems in-place
- Potential arrangements for unconventional gas
Gas is the cleanest of the fossil fuels
5. Concluding remarks

25th World Gas Conference

“GAS : SUSTAINING FUTURE GLOBAL GROWTH”

Kuala Lumpur Convention Centre
4 to 8 June, 2012

CHARMING COUNTRY, COLOURFUL CITY
5. Concluding remarks

Should not miss our Malaysian Hospitality
Welcome to
25th World Gas Conference and Exhibition
4-8 June 2012
Kuala Lumpur, Malaysia
http://www.igu.org/
http://wgc2012.com/