“The International Buyers and Sellers meet in Asia”

“Changing Market Dynamics – Challenges & Opportunities”

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1. Introduction – Brief on IGU
2. Global Energy Scenario until 2030
3. Changing Market Dynamics
4. Challenges & Opportunities
5. Closing Remarks
Worldwide and non-profit organisation established in 1931
Promotes technical and economic progress of the gas industry
Emphasising sound environmental performance worldwide
Increased focus on strategic and policy issues
Cooperation with IEA, United Nations, World Bank, IEF and others
IGU Members responsible for 95% of Global Gas Sales

- 74 Charter members
- 33 Associate members
- 11 Affiliated members

As of April 2010
IGU Organisation Chart for the 2009 – 2012 Malaysian Triennium

**1. Introduction – Brief on IGU**

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**IGU MANAGEMENT TEAM**

- **President**
  - Datuk (Dr) Abdul Rahim Hashim
  - MALAYSIA

- **Immediate Past President**
  - Mr Ernesto López Anadón
  - ARGENTINA

- **Secretary General**
  - Mr Torstein Indrebø
  - NORWAY

**EXECUTIVE COMMITTEE**

- **President, Vice President**
  - Mr Jerome Ferrier
  - FRANCE

- **Vice President**
  - Mr Georges Liens
  - FRANCE

**COORDINATION COMMITTEE**

- **Chairman**
  - Mr Ho Sook Wah
  - MALAYSIA

- **Secretary**
  - Ms Ungku Ainon
  - Ungku Tahir
  - MALAYSIA

**IGU SECRETARIAT**

- **Senior Advisor**
  - Mr Hans Riddervold
  - NORWAY

- **Advisor**
  - Mr Erik Gonder
  - NORWAY
Energy demand is expected to grow in the foreseeable future.

- **Population**: The world's population is expected to increase from 6.7 billion today to 8.0 billion by 2030. The average growth is 0.9% per annum.
- **GDP**: GDP is expected to expand from USD 20 Trillion in 1980 to USD 80 Trillion by 2030. The average growth is 2.7% per annum.
- **Energy demand**: The world will use 35% more energy by 2030 than in 2005 level. The average growth is 1.2% per annum.

Source(s): ExxonMobil 2009
This is due to a radical shift to use less-carbon-intensive fuels such as natural gas to generate electricity.

By 2030, it will account for 40% of all energy demand, representing 55% of the total growth in energy demand.

Source(s): ExxonMobil 2009, EIA/IEO 2009, PETRONAS 2009
Natural gas is the fastest growing energy source.

By 2030, global natural gas demand will be 55% higher than it was in 2005!
The world’s outlook of natural gas supply - demand balance

2. Global Energy Scenario until 2030

Top 3 gas producing countries:
1) Russia = 43.30 Tcm
2) Iran = 29.61 Tcm
3) Qatar = 25.46 Tcm

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

Middle East  75.91
Russia & CIS  56.78
Asia Pacific  15.39
Africa         14.65
N America      8.87
S&C America    7.31
Europe         6.12

Total 2008 world’s proven natural gas = 185 Tcm (~6,533 Tcf)

Historical growth of LNG Export volumes (billion cubic metres)

- Africa
- Americas
- Asia Pacific
- Europe
- Middle East

Growth of LNG import volumes in 3 key gas markets in 2030
- US 12.0 Bcfd
- EU 12.0 Bcfd
- AP 38.5 Bcfd

Growth of LNG import volumes for 3 key gas markets in 2010
- US 4.0 Bcfd
- EU 7.0 Bcfd
- AP 16.0 Bcfd

The global rise of LNG business is imperative to satisfy the world’s rising energy demand!

Source(s): BP Statistical Review, ExxonMobil 2009, Cedigaz
Modest growth in total LNG imports of 5% was registered in 2009, notably in the Americas and Europe.

The U.S market was seen as a safe anchor for LNG. Despite the robust U.S shale gas production, LNG cargoes still flowing notably in the north east enjoying a significant basis premium.

Middle East has became an LNG demand centre.

Spanish LNG demand has dropped significantly due to reduced consumption.

The relatively strong LNG import growth in China and India (+3.1 MTPA combined) were insufficient to cushion the plunge in Japan, Korea & Taiwan (JKT) LNG imports.
3. Changing Market Dynamics

The outlook of long term LNG supply – demand balance and its potential implications

- Market is soft due to significant new supply and weaker demand
- Some supply may be held back
- Liquid markets likely to absorb the surplus (notably the US)

- Market tightens through 2012/2014 because of limited FIDs in 2006 to 2008

- Long term potential excess capacity
- Significant competition for demand
- More perception of over-supply could adversely impact prices via supply connection
- Development of some capacity will be deferred

The long-term view of the LNG industry especially in the LNG demand side looks more bearish than bullish!
Could the LNG industry be classified as a cyclical business that has a habit of changing?

Source(s): Wood Mackenzie 2010, Cedigaz, BP Statistical Review of World Energy
Emerging Asia is likely to be the main growth market for gas globally, notably India and China with growth rate of 8% and 9% respectively.

Asia is expected to remain the largest LNG consumer while Europe will experience the fastest pace of LNG growth.
The global LNG market is undergoing the transitional state of change

Clear linkage between American, European, Middle East & Asian gas markets.
Starting to open up access to LNG worldwide

Greater overlap between global LNG markets with ample LNG supply
Wider access to gas market through LNG established

Source(s): RWE 2010
Interest of importing LNG has increased significantly. Current regas capacity is about 470 MTPA. To date, a number of 75 projects which are located in 22 countries, exist and are in operation.

If all project proposals come online, the figure could go as high as 780 MTPA by 2020 with an overall import terminals of 176 projects that are located in a total of 36 countries.

Source(s): PETRONAS 2009, LNG Review 2010 – Petroleum Economist, Cedigaz 2010
Key uncertainties that will affect demand – supply balance in the near and medium term

- Unprecedented demand growth and import needs are greater than expected.

- Potential impact from the unconventional gas development in key gas importing countries especially Asia and Europe.

- Unsure on the pace of LNG projects coming online.

- Uncertainty over the supplier’s behaviour in channelling gas/LNG volume to end-customers

Opportunities to become LNG volume offtakers that may bolster supply position.

Enhance capabilities towards unconventional gas sector through selective pursuit of regional opportunities.

Continuously build and enhance technical know-how in stranded gas technologies (particularly FLNG) to broaden global gas portfolio.
5. Closing Remarks

IGU Messages on Natural Gas

- It is abundant, affordable and acceptable
- Clean, efficient, versatile and environmental friendly fuel
- 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
The 25th World Gas Conference

“GAS : SUSTAINING FUTURE GLOBAL GROWTH”

Kuala Lumpur Convention Centre
4 to 8 June, 2012

CHARMING COUNTRY, COLOURFUL CITY

THANK YOU FOR YOUR KIND ATTENTION!